State of Ohio, )
County of Cuyahoga. )

Doc 273

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IN THE COURT OF COMMON PLEAS

- - -

DEWEY GLEN JONES, et al., )
Plaintiffs, )
v. ) Case No. **306012**
) Judge Lillian Greene
MERIDIA HURON HOSPITAL, et al., )
Defendants. )

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THE DEPOSITION OF JAMES D. MALONEY, M.D.

FRIDAY, JULY 25, **1997**

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The deposition of JAMES D. MALONEY, M.D., a witness herein, called for examination by the Plaintiffs, under the Ohio Rules of Civil Procedure, taken before me, Lauren I. Zigmont-Miller, Registered Professional Reporter and Notary Public in and for the State of Ohio, pursuant to notice, at the offices of Reminger & Reminger, The **113** St. Clair Building, Cleveland, Ohio, commencing at 1:15 p.m., the day and date above set forth.

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(Thereupon, Plaintiffs' Exhibits 1 and 2 to the deposition of James D. Maloney, M.D., were marked for purposes of identification.)

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JAMES D. *MALONEY*, M.D.,

a Witness herein, called for examination by the Plaintiffs, under the Rules, having been first duly sworn, as hereinafter certified, deposed and said as follows:

CROSS-EXAMINATION

BY MR. ALLEN:

Q. Doctor, could you state your name for the record?

A. James D. Maloney.

Q. And the CV we've marked as Exhibit 1, can you just look and tell me if that s up to d e?

A. It is the most up-to-date one that I have. It's within several months or six months or so.

Q. Do you have any articles outstanding or about to be published?

A. Yes.

Q. Anything that relates to this case?

A. No.

Q. If you could, just sort of describe for me

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your present position, what you do.
A. I'm the director of cardiac electrophysiology and pacing for what's now Columbia Mercy Medical Center and for the NEOUCOM Medical School, and I have a title of professor of medicine with the medical school. Then I am in association with a group of cardiologists referred to as Ohio Heart Care in Canton, Ohio.
Q. On a daily basis where do you spend most of your time, in a hospital setting or in the office setting?
A. I rotate with my other colleague who does cardiac electrophysiology. We rotate every two weeks. For two weeks I would be mainly in the hospital and then the next two weeks mainly in the clinic.
Q. Mainly where?
A. In the clinic, in the outpatient area.
Q. Okay. Cardiac electrophysiology is what?
A. It is a subspecialty area of cardiology that looks after heart rhythm problems, a fast heart beating, slow heart beating, those types of things.
Q. How much of your time is spent in that area, cardiac electrophysiology, is it a hundred percent of your time?
A. No. Every patient that you see, of

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course, has a heart and the heart pumps as well as has electricity, so it's every patient we see has all sorts of cardiologic problems. I would guess 70 to 80 percent of my clinical practice deals with patients that primarily have a rhythm problem associated with their other heart disease.
Q. And out of those patients, how many of them have pacemakers or end up getting a pacemaker?
A. Five percent end up getting a pacemaker. Of all the ones I see, maybe ten percent. Another five or ten percent get implantable defibrillators, another 30 percent get various medications for heart rhythm problems.
Q. Is it strictly a referral practice where doctors refer patients to you?
A. No, no. It's patient referral, physician referral, it is interconsultation between my colleagues and I within the group.
Q. How much time do you spend with residents -- do you teach residents?
A. Certainly less now. Probably --
MR. ALLEN: Any time you need to take a break.
MR. CASEY: we're going to go off the record for a minute so the

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doctor can return a call.
(Thereupon, there was a brief recess.)
BY MR. ALLEN:
Q. I believe the last question I asked about your history with residents and teaching. You explained to me that you haven't done much of it lately, I believe, or less of it.
A. As much. In the area that I am now we don't have cardiology fellows. There are medical residents around and so we do not have a resident or a cardiology fellow on our service. We do all of the care without that kind of support, and we care for all types of cardiologic problems.
Of course, if we have a specialized intervention to be done with an angioplasty-type cardiologist, we call the angioplasty doc to take that over, but we still manage the patient. If he has a problem, an electrical problem, he would ask me to come in and take care of it. I'm basically a cardiologist and a clinician. 85-90 percent of my time is spent as a practicing clinician.
Q. How long has that been the case, the last year, two years?
A. The last three to four years. Prior to that I was in Houston and I had more educational

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responsibilities, but still all of that time I've been a practicing clinician.
Q. So the other 15 percent of your time today is spent doing what?
A. Administration, like that telephone call and writing a paper here and there.
Q. What percentage of your time do you devote to doing medical-legal reviews?
A. One or two percent, three percent.
Q. Now, do you have any plans in the near future to change, professional plans to change, move?
A. I do; I'm contemplating it. I have nothing on paper. I'm being offered what I think is a very nice position managing and clinically directing several EP practices in multiple hospitals, but this is still unofficial.
Q. In the Ohio area?
A. Yes, in the Ohio area, in the Greater Cleveland area.
Q. When were you first contacted to review this case?
A. January, December, six months ago.
Q. Do you know how Mr. Casey got your name?
A. Not for certain. I have a thought process. I guess I didn't ask that. I met a lawyer in

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this firm by the name of Malone. I was a defendant in a case that did not come to trial and I guess that's how they got my name.

Q. Mr. Malone b you?

MR. CASEY: Represented the

Cleveland Clinic.

A. Represented the Cleveland Clinic.

Q. But the case was involving care that you had rendered to a patient, correct?

A. Yes.

Q. How long ago was that?

A. Eight months ago.

Q. Did you say that case never came to trial; is that correct?

A. That's correct.

Q. Did it settle?

A. No. They withdrew the complaint as best I know.

Q. Other than that time, have you been sued before?

A. Yes. Another case at the Cleveland Clinic where many of us were listed, and that case also did not come to trial and I'm not -- I think it was settled for something like $10,000.

Q. How long ago was that?

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A. I'm guessing about 1985, '84.

Q. Other than those two instances you've never been sued before?

A. No.

Q. Have you had an occasion to work with anybody else from Mr. Malone's firm or Mr. Casey's firm?

A. I have met another gentleman who has asked me to review a case, and so I guess the answer is yes.

Q. That's since you've reviewed the Dewey Jones case?

A. Yes.

Q. Other than those instances, any other times that you've met with or worked with any of the lawyers from Mr. Casey's firm?

A. Not that I'm aware of.

Q. On your CV is there any literature that you've written that has anything to do with the standard of care as it relates to this case

A. Not directly. Much of the literature deals with treating patients with bad hearts and so indirectly it would relate.

Q. But as far as specific standard of care issues that involve this case, failure to refer a cardiologist, would there be anything in your

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literature that would have anything to do with when to refer or how to refer or get a cardiology consult?

A. For this type of problem, not that I'm aware of.

Q. And as far as your literature set forth in your CV and the issue of causation, is there anything set forth in your literature that could relate to the causation issues surrounding this case?

A. I'm not sure I really understand what you mean by causation.

Q. Well, what happened to Dewey Jones and why it happened when he came out of surgery that left him in the state he's in today.

A. Much of the literature that I've written involves problem-solving for cases for cardiovascular disease processes, and if that's problem-solving it certainly in some way relates to this case, not directly, indirectly. I don't know how to answer that question.

Q. Does anything in the literature set forth talk about pulmonary edema in any way, causes of?

A. Causes of, heart failure in pulmonary edema is one manifestation. Some of the cases, some of the clinical reports relate to the treatment and management of heart failure, particularly associated

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with rhythm disorder.

Q. And if I understand what you said correctly, there are some articles in here that relate to heart failure and the subsequent cause of pulmonary edema, correct?

A. No. They relate to patients that have sick hearts, that have heart failure, and so it's the management of those patients, it's the prognosis of those patients, it's the survival rate looking at a particular group of patients that we have seen at the Cleveland Clinic or elsewhere over a four, five or ten year period.

Q. Can you show me those articles that you believe have outlined in them what you just said, or are all your articles included in that?

A. I can show you some that relate to the heart failure and prognosis, I *guess.*

Q. Just give me the number beside it.

A. There is one article that -- actually, it's listed as publication 166, Long-term follow-up of heart transplant recipients requiring permanent pacemakers. There is an article, 162, Non-thoracotomy versus thoracotomy implantable defibrillators; intention-to-treat comparison of clinical outcomes. There is No. 59, multi-center study.

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Q. No. 159?
A. 159. Sudden death in recipients of first-generation implantable cardioverter defibrillators; analysis of terminal events, Those are a few examples.
Q. Any others that stand out as you just --
A. Not any more so than those.
Q. I assume you've never had your staff privileges suspended or declined?
A. No.
Q. And I assume you've never been treated for mental disorder, alcohol or drug abuse?
A. No.
Q. Have you ever testified or written on tort reform?
A. No.
Q. Now, you belong to the American College of Cardiology?
A. Yes.
Q. Have you held any national offices or committee positions with that group?
A. Yes; committee positions, not national offices.
Q. Tell me which ones.
A. The Cardiac Pacing and Electrophysiology

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Committee for the ACC. The current committees that I'm on relate to the RUK committee, which is an AMA committee, I'm the ACC representative to the American Medical Association committee that assesses physician payment for different procedures and relative value payment system. I am on an economics committee for the ACC.
I think those are my current committee for the ACC at this time.
Q. Any other committees that you've held that you can tell me about?
A. Yes. When the ACC just had a pacemaker committee before it merged with the electrophysiology committee I was on their pacing committee. I was on the committee for directors of cardiac pacing electrophysiology training programs for the ACC. I think that's about it.
Q. What about any regional offices?
A. For the ACC?
Q. For the ACC, yes.
A. No regional offices.
Q. Have you had an opportunity to formulate any guidelines or technical bulletins for the ACC?
A. Yes, but mainly in association with NASPE, which is the North American Society of Pacing and

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Electrophysiology. In one of the manuscripts here for the ACC and the American Heart Association we again developed the training requirements, recommended training requirements for cardiology fellows getting specialized training in heart rhythm management, both pacing and electrophysiology.
Q. Have you ever written on the effects of abdominal surgery and patients with congestive heart failure?
A. No.
Q. Have you ever written on the effects of abdominal surgery with a patient with congestive heart failure and hypertension?
A. No.
Q. What about the same question with a patient with cardiomegaly, morbid obesity or sleep apnea?
A. No.
Q. Have you ever written an article on the use of Swan-Ganz catheters inpatient intraoperatively?
A. Several abstracts. We never published that. That came from the Mayo Clinic, my experience back in 1974 or '75 when we actually participated in the early introduction of Swan-Ganz catheter utilization.

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Q. But nothing has been published, correct?
A. Only in abstract form.
Q. Is there any that I could find?
A. I may have it listed in the abstracts here. I'll have to look.
Q. Would you do that real quick?
A. Indirectly there's one article when I was director of the CCU or associate director of the CCU at the Mayo Clinic. Prognostic factors in post-myocardial infarction with ventricular septal defects, 56, but that's the incorrect use of Swan.
Q. [illegible] was that?
A. No. 20.
Here we go. No. 11, abstract beginning with Radtke Rutherford, et al, with Maloney in there
Hemodynamic profiles in unstable angina pectoris, a prospective study, presented at the Sixth Asian-Pacific Congress of Cardiology in 1976. That was all using our Swan-Ganz data.
Q. You're working out of Columbia Mercy Medical Center, correct?
A. Yes.
Q. How big is that hospital, how many beds do you have?
A. I believe about 430 beds at the moment.

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Q. How many cardiologists on staff there?
A. Thirty, 35.
Q. Have you ever been head of cardiology or chief of staff at that hospital?
A. No, not those positions.
Q. In 1994 do you know how many beds Meridia Huron had?
A. I believe I read it somewhere, 200, 225. I believe that number comes to mind.
Q. Do you know how many cardiologists they had on staff there?
A. No, I don't.
Q. Do you know the number of residents they had on staff?
A. I recall reading that they had internal medicine residents, anesthesia residents and general surgical residents. Numbers I don't know.
Q. But you know they had those three areas. They didn't have any --
A. To my recollection, those were the three I remember.
Q. Do you know the number of general surgeons they had on staff at Meridia Huron in '94?
A. I remember reading that question being posed in probably a deposition. I don't have firsthand

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lawyers?
A. Only informally.
Q. In what manner was that?
A. As of today.
Q. Have you ever given a speech to a group of insurance adjustors or people?
A. Actually, yes.
Q. When was that?
A. Probably four or five years ago. There were also physicians there and the presentation was published and it was published as an insurance -- your term, what was it, insurance something or other?
Q. Adjustor.
A. Adjustors, I don't know. Insurance people, that's all I know who they were.
Q. What were you speaking of?
A. Heart rhythm management, supraventricular tachycardiac, tachycardia and bradycardia. I gave an overview of all aspects of heart rhythm management and kind of the state-of-the-art talk.
Q. What insurance group was that?
A. I have no idea.
Q. Was it in the State of Ohio?
A. The talk was given in Florida, I believe, or somewhere down south as I recall.

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knowledge of knowing how many, no.
Q. Do you know the availability of echocardiograms at that hospital in 1994?
A. My understanding is that they had ready availability of echos.
Q. Meaning at any time?
A. During working hours presumably, unless you call an emergency, yes.
Q. To run an echocardiogram you need a technician, correct?
A. That's correct.
Q. You wouldn't need a cardiologist to run the test, correct?
A. A cardiologist who is expert in echos can also do it without the tech, so, yes, you can do it either by a cardiologist or a tech or both.
Q. But normally then it's read afterwards by a cardiologist, correct?
A. That's correct.
Q. Did you know the availability of cardiologists to read the echos in October of 1994, what the availability was at Meridia Huron?
A. Specifically, no, I don't know how many cardiologists were credentialed to read echos.
Q. Have you ever spoken to a group of

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Q. Is that published on your CV?
A. Probably not.
Q. You spoke for what, an hour, something like that?
A. Hour and 15 minutes,
Q. Now, did you ever have an opportunity to read materials on how you give a deposition for a medical-legal case?
A. No, I've never done that. I probably should.
Q. Likewise, you haven't seen any videos?
A. No, I have not.
Q. You haven't gone to any conferences or seminars relating to that?
A. No, I have not.
Do they have seminars like that, I *guess?*
Q. They have seminars for everything, right?
Have you ever reviewed or testified on medical-legal cases in the State of Ohio other than this case?
A. Yes.
Q. You told me about the case that we'll soon be reviewing. Excluding that case, how many times have you reviewed medical-legal cases in the State of Ohio?

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A. Probably about four. Two of them are just beginning and one was about three years ago.
Q. The one three years ago was where?
A. Cincinnati.
Q. Did that have to do with electrophysiology?
A. With cardiology. With that particular patient it dealt with a pacemaker problem.
Q. Then the two that are beginning besides this one, where are those?
A. There is a case that I was asked to review in Youngstown related to a patient that had a sudden death, acute sudden death episode, survived, got an implantable defibrillator and then had an infection.
Q. You're giving testimony for the doctor?
A. In that case, yes.
Q. In the other case are you giving testimony for the doctor?
A. Which other case, the one in Cincinnati?
Q. You said two that you're beginning, one in Youngstown.
A. And the one we mentioned with this firm.
Q. With this firm?
A. With this firm.
Q. So we have the one with this firm, the

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other one with th firm we have t one you re here for today, correct?
A. Correct.
Q. You have one out of Youngstown, that's three. And then one in Cincinnati about three or four year ago?
A. That's correct.
Q. So that's a total of four?
A. That's correct.
Q. You've never given testimony on the part of a plaintiff?
A. Yes.
Q. Was it a case that involved something that the doctor had done wrong, standard of care violation on the part of a doctor?
A. Yes.
Q. Tell me about that case.
A. Well, there are two cases. The one case in Cincinnati is that particular case, and it also involves a manufacturer. The patient got a pacemaker, the pacemaker malfunctioned and there was a lawsuit developed from that.
The other case took place in Seattle, Washington and it related to a patient with cardiomyopathy, heart failure, an episode of near

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sudden death treated with medication and then a subsequent episode of near sudden death with brain damage.
Q. Who was the plaintiff lawyer that hired you?
A. Where?
Q. In Seattle.
A. Lou Gilligan, I guess, would be the name.
Q. Just so I make sure I got the numbers -- I don't mean to be repetitive -- I count two for the plaintiff, two for the defendant, and then one other one for the defendant, is that correct, so I got five?
A. I was coming to four, but -- in Ohio or Seattle?
Q. In Ohio.
A. There are two for the plaintiff, I guess, Seattle and Ohio one, and three -- that's correct, four in Ohio. A total of about five, that's about right.
Q. Total of five overall?
A. Five that we've talked about.
Q. Other than the State of Ohio, have you testified in other places?
A. Yes.
Q. What other states have you testified in?
A. New Mexico and in Maryland, Baltimore,

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Maryland.
Q. How many cases in New Mexico?
A. One.
Q. Maryland?
A. One.
Q. Plaintiff, defendant?
A. Those were both defendants.
Q. Would those also have to do with pacemakers?
A. No. It had to do with sudden death in one, and that's in New Mexico; and the other one dealt with an extraction of a pacing device which resulted in a surgical complication.
Q. How long ago was the one in New Mexico?
A. About 1993.
Q. Who was the lawyer that hired you in that case?
A. I don't know.
Q. Do you know the name of any of the defendants or the plaintiff, do you recall any of that?
A. I believe the physician's name was Baddi in New Mexico.
Q. Other than Mr. Casey's firm, have you worked for the other firm involved in this case before?
A. No, not that I'm aware of.

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Q. Do you know Susan Reinker who is on the phone?
A. I do not.
Q. And the other firm would be Reminger firm.
MR. GRIECO: Jacobson.
Q. I'm sorry.
A. I didn't know they were here.
Q. Jacobson, Maynard, Tuschman.
A. I don't know. I've had no association.
Q. Do you know any of the following doctors, Dr. David Rapkin, R-A-P-K-I-N?
A. Not to my knowledge. I can't put a name with a face.
Q. Dr. John Conomy?
A. Yes, I do know him. He and I were colleagues at the Cleveland Clinic.
Q. When did you first meet Dr. Conomy?
A. Well, I first went to the Cleveland Clinic in 1981 and he was there. I probably really didn't meet him until about 1984 or '85.
Q. When is the last time you've seen him?
A. 1993 probably.
Q. Dr. Cascorbi?
MR. CASEY: Yes, Helmet Cascorbi.

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A. The name is not familiar to me.
Q. How about Dr. Howard Nearman?
Q. H[illegible]ichar[illegible]r?
Q. Dr. John Downs?
A. I do not know him.
Q. How about Dr. Joe Bussey?
A. The name is familiar, but I know a Bussey family.
Q. Dr. Joel Kaplan?
A. No.
Q. Dr. Marc Semigran?
A. No.
Q. Dr. Alvin Kahn?
A. No.
Q. Dr. Francis Barnes?
A. No.
Q. Dr. Robert Greendyke?
A. No.
Q. Dr. Charles Greenhouse?
A. No.
Q. Dr. Marshall Orloff?
A. No.
Q. Dr. Paul Thompson, cardiologist?

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A. No.
Q. Dr. Terry Winkler?
A. That name is familiar.
Q. Now, when is the last time you've given a deposition?
A. I'm scheduled to give a deposition in Youngstown. I guess the last time I gave a deposition was in Maryland about 1995 or so.
Q. When was the last time you appeared in trial?
A. Maryland, 1995.
Q. How many trial appearances do you have total for medical malpractice cases?
A. I want to say three. It could be four, I guess.
Q. The number of depositions you've given, in all the cases we just talked about you've given depositions for those, five total?
A. I believe so.
Q. Plus the two out of state, New Mexico and --
A. Yes.
Q. Have you reserved a date for this trial to testify in this trial?
A. I haven't. My secretary may have, but I haven't.

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Q. Have you ever been retained by an expert witness finder group?
A. I'm aware of.
Q. How much is it an hour for deposition time?
A. $450.
Q. To review a case?
A. The paperwork review?
Q. Yes.
A. $300.
Q. Trial testimony, how much?
A. $450.
Q. When was the last time that changed, did that just recently change?
A. Actually, yes. Compared to the Maryland case, it's been decreased by $150.
Q. All across the board?
A. No. My past experience was that we just charged one fee.
Q. $400 an hour was your past history, right?
A. Yes.
Q. Now, what percentage of income went in your pocket last year for medical-legal cases?
A. Five percent, three percent, two percent.

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Q. How many hours have you spent reviewing this case?
A. I haven't tabulated it here. Counting some review yesterday and today, I don't know, 10, 12, 15 hours.
Q. How many hours did it take you to come up with your opinion for you wrote your letter which we'll get to in a minute?
A. Seven or eight.
Q. And you have yet to bill anybody to date; is that correct?
A. I believe that's correct.
Q. And you have all the information you need obviously to form your opinions today, correct?
A. Yes.
Q. Have you ever testified that the standard of care required a medical doctor to get a cardiology consult?
A. No.
Q. Have you ever given opinions as to the standard of care required of an internal medicine doctor, a surgeon or an anesthesiologist to delay surgery because of the patient's medical condition?
A. Could you restate that, the beginning?
Q. Have you ever given opinions that the

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standard of care required that a doctor, either an internist, a surgeon or an anesthesiologist, delay surgery based upon the medical condition of the patient?
A. In a legal situation?
Q. Right.
A. No, not that I'm aware of.
Q. Have you ever testified that the standard of care required the use of a Swan-Ganz catheter during an operation?
A. No.
Q. Have you ever testified that the standard of care required a physician not to operate on a patient because his medical condition was unstable?
A. No.
Q. Is there any specific authoritative literature upon which you base your opinion on the standard of care in this case?
A. No.
Q. Is there any authoritative literature on which you base your opinion as to causation in this case?
A. No.
Q. When you reviewed this case you assumed that the records were entirely correct?

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A. As a physician you never make that assumption, and entirely, no, no, I would not make that assumption.
Q. So you take into effect that some things that you read in the medical records could be incorrect?
A. It could be incorrect; it could be misstated; it could be misinterpreted; it could be absent.
Q. But as far as the medical records, have you ever written a record to a medical record, something that was incorrect?
A. Have I?
Q. Yes.
A. Absolutely.
Q. When was the last time you did that?
A. I don't recall.
Q. Would that be a breach of the standard of care to write --
A. No.
Q. Have you ever seen the standard of care breached by a doctor?
A. I believe so.
Q. Have you ever reported it that the doctor breached the standard of care?

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MR. WALTERS: Reported it to whom?
MR. ALLEN Anybody.
MR. WALTERS: In regards to what?
MR. ALLEN: That the standard of care was breached.
MR. WALTERS: I want to clarify. Are you talking about his testimony, previous experience or with regard --
BY MR. ALLEN
Q. I *think* you understand my question.
MR. WALTERS: I don't.
A. As a practitioner?
Q. As a practitioner. Have you ever seen --
A. Have I *seen* things done or start to be done that I thought should not be done, the answer is yes.
Q. That would be a breach of the standard of care?
A. Those are not terms that I use in medical practice.
Q. So you've seen things done that you thought should not be done?

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A. I've seen that.
Q. When you've seen that, have you told the doctor not to do that or have you gone up the chain and told his superiors that he was doing something that you felt was incorrect?
A. We would discuss it generally with the physician. It's in a teaching teamwork environment. You bounce each other's ideas off one another and come out with what you consider is the most appropriate thing.
Q. So you've never had to rise to the level in which you felt you had to get another doctor or somebody else to intervene?
A. I haven't that I can recall.
Q. Doctor, what does within a reasonable degree of medical certainty mean to you?
A. I'm led to believe that in legal terminology it means 51 percent likelihood or more. That's my understanding.
Q. So when we talk about that, we're not talking about possibilities or likelihood or speculation or guess, we're talking 51 percent?
A. That's my understanding.
Q. Within a reasonable degree of medical certainty, what was the cause of Dewey Jones'

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postoperative arrest in your opinion?
A. One, a cardiac arrest; number two, the cause of his cardiopulmonary collapse was multi-factorial.
Q. Explain to me what multi-factorial means.
A. More than one factor played a role.
Q. In Dewey Jones' case, *thank* you.
And in this situation the cardiopulmonary collapse was multi-factorial as it related to Dewey Jones. What came into play that led to his cardiopulmonary collapse?
A. Hypoxia, an underlying cardiomyopathy that was relatively mild to moderate as a structural abnormality, pulmonary hypertension and cor pulmonale aggravated by his obesity. Those are the three major things, and his hypertension.
Q. What is the difference between cardiac collapse and a cardiac arrest?
A. We cardiologists think of a cardiac arrest as being defined as an interruption of effective cardiac output due primarily to the heart, not secondarily to some other factor, and most commonly that is associated with rhythm abnormalities, either ventricular fibrillation or ventricular asystole.
Q. What's pulmonary collapse versus pulmonary

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arrest?
A. Cardiopulmonary collapse is a relatively sudden decrease in his cardiovascular function and his pulmonary function, and they were very much intertwined between each other. Presumably his systemic pressures dropped markedly, his cardiac output dropped, his intravascular pressures equalized at about 40 or 50 millimeters of mercury. That's what I mean by that type of collapse.
Q. 'when did the intravascular pressure equalize at 40 to 50?
A. They were not being measured at the time that this presumably occurred. At that period of time when his heart rate was said to be quite slow, severely bradycardia, when he had markedly decreased oxygenation, we know when there is no cardiac output or essentially no cardiac output in that type of state then the pressures within the lung and within the vascular system go to about 40. It was a transient near death episode. That's when those pressures go down to that level.
Q. So within a reasonable degree of medical certainty you could tell me that it was Within 40 at that time?
A. Well, that's usually what any of us would

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do if we suddenly had a marked diminution of our cardiopulmonary function down to almost a death state and no cardiac output. If I stopped your heart for a minute then the pressures that you would have would equalize out to about 40.
Q. 'what precipitated the cardiopulmonary collapse?
A. I believe it was the hypoxia. Then the question is what precipitated the hypoxia, and I am not sure that I have that answer. It's the hypoxia that we have recorded where his oxygen saturations went from 99 down to 90 and then 89, and at that point there was, if I recall correctly, a 15 or 20 minute gap where we don't know what was happening, but we're told that he had severe bradycardia then and he was getting some cardiopulmonary resuscitation and then he recovered.
Q. So you can't tell me what caused that 15-minute window in which the oxygen sats dropped to 89 oercent: is that correct?
A. I can give you an idea of what happened, but the one very objective piece of information we have is that he developed hypoxia.
Q. Right. But my question, the hypoxia, you can't tell me what created the hypoxia; is that true?
MR. CASEY: objection. Are

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you asking him to a reasonable degree of probability again?

MR. ALLEN: Yes.

MR. CASEY: What does he likely believe was causing the hypoxia?

MR. ALLEN: Sure.

BY MR. ALLEN:

Q. Do you understand that question?

A. Not totally. Why don't you ask it again.

Q. All right. Within a reasonable degree of medical certainty, what caused Dewey Jones to go into that hypoxic state at the time we're talking [illegible] was time they were reversing the anesthesia, and there were comments either in the record or in some depositions that the patient was bucking, coughing with an endotracheal tube in place. That coughing could be caused by the hypoxia and it could also aggravate or cause the hypoxia, but at that point in time he was just not getting enough oxygen into his system to oxygenate the blood.

When that occurs, particularly in somebody with pulmonary hypertension to begin with, you get vasoconstriction in the pulmonary vasculature and even more pulmonary hypertension, and you, in fact, begin to get right heart failure. The hypoxia in an animal or in man will cause a reflex mechanism of paradoxical bradycardia, which actually probably further aggravates the problem, not definitely aggravates the problem.

Q. The pulmonary edema stems from that event, correct?

A. That's my understanding.

Q. As far as this time frame, is it your belief Dewey Jones was intubated or extubated at that time?

A. As best I can tell, he was intubated.

Q. And you base that opinion upon?

A. There is no statement that he was extubated.

Q. In the medical records or in deposition?

A. I'm referring to the medical records. I haven't heard all the depositions, but to my knowledge, both from depositions and from the medical records, they were ready to extubate but the tube was not withdrawn from the patient.

Q. What is your definition of extubation, Doctor

A. Removing the endotracheal tube from the patient.

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Q. Have you reviewed the life care plan in this case?

A. Nu. I don't know what a life care plan is.

Q. Do you plan on offering opinion as to life expectancy of Dewey Jones?

A. Yes.

Q. Give me your opinions as to how long you felt Dewey Jones would have lived had he not had the surgery.

A. Well, I believe that he had, again, several cardiovascular problems that were occurring simultaneously. Number one, he had hypertension that he appeared not to care for when he was out of the hospital, but which came under very rapid control usually when he went into the hospital. So he had severe hypertension when not taking his medicine.

He also has, I believe, an underlying cardiomyopathy that seems to be not classic for that resulting from hypertension but more of a primary muscle abnormality. So that's a second problem he has. If that's indeed the case -- and I believe in the records there was a note that his mother had a similar problem -- but if that's indeed the case, it adds to his poor prognosis.

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The third thing that he has is his marked obesity, pulmonary hypertension and right heart failure. I guess we would call that cor pulmonale or Pickwickian syndrome. All three of those things have significant risk factors if not managed, and even if they are managed.

If you would just take cardiomyopathy alone and look at the prognosis of people with primary cardiomyopathy classified as dilated cardiomyopathy --

Q. Not caused by hypertension?

A. Not caused by hypertension.

If you would put all those people together and go from the point of diagnosis, then there would be probably -- the Mayo Clinic series would say probably about a 30 percent one-year mortality, maybe a 60 or 70 percent five-year mortality, probably a 90 percent ten-year mortality.

Q. So is that 51 percent in life expectancy -- to a reasonable degree of medical certainty, how long would he have lived?

A. Well, he may, in fact, be on borrowed time. If we went from the time of his diagnosis from the old records of 1987 -- and I think that's the date I saw the cardiomyopathy -- he's already ten years, I guess, so he's pushing the envelope now. But three or

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four more years.
Q. So your belief was three or four more years, meaning Mr. Jones would have died in October of 1997; is that correct?
A. Three or four more years, I was thinking of from the ten years we are now, from the '87 to '97.
Q. So you think he would have died at the age of what?
A. 35, 36, 37. Since he's alive now I would think that, and that is assuming that he would take care of these medical problems. Now, I know they're being taken care of now, but --
Q. So within a reasonable degree of medical certainty, you believe Dewey Jones, had the surgery not occurred and he kept on the way he had and his previous history, would have died within three years of October of 1994; is that correct?
A. I think that's about correct. I would think he probably had a 75 to 85 percent chance of dying by this time if we start from 1987, and that's even -- and maybe even earlier, particularly since he had this history of not taking care of his medical problems.
Q. So within a reasonable degree of medical certainty, three more years from the date of the

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surgery is your opinion as to life expectancy?
A. I think that's reasonable, short of a transplant. And the transplant would probably have to be a cardiopulmonary transplant, depending on his lungs.
Q. Is he a candidate for that?
A. At 300 pounds plus you could not -- no, the answer would be no. Certainly not in Houston and not in Cleveland.
Q. If he had lost some weight and become a candidate for it, would that have given him a normal life expectancy?
A. It would have given him -- not normal, not at all. It would have given him an 80 percent survival after one year of transplant, maybe 85 percent, and then probably overall a 70 percent survival at seven to ten years, and then he would probably have to have another one.
Q. At the end of ten years?
A. Ten, 15 years.
Q. And now the state Dewey is in today -- tell me how you understand Dewey to be presently.
A. I don't have very much information on that. I'm just told that he is in a nursing home and he is in a vegetative state.

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Q. Do you have an opinion as to how long he would live in his present state within a reasonable degree of medical certainty?
A. Assuming that he is being given multiple medications, his hypertension should not be a problem, his actual cardiac work will be diminished because he is on a respirator. But he is very vulnerable to the complications of chronic bed rest, Foley catheters, infection, et cetera.
Again, I would think that his prognosis, the likelihood of him dying over the next three to four years is very high, certainly greater than 51 percent, probably greater than 80 percent.
Q. Do you have an opinion within a reasonable degree of medical certainty that Dewey Jones will be alive a year from today?
A. I would think that if you were gambling and he's alive today, particularly if you expend effort -- I don't know his actual condition today, but assuming he doesn't have a malignant type of infection going on, the likelihood of living the next year is probably quite good.
Q. So it's greater than 51 percent?
A. I would think so.
Q. What about two years from today?

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A. Less.
Q. Less than 51 percent?
A. Less than one year. As I said before, probably three to four years in that kind of state is as good as one can get.
Q. So within a reasonable degree of medical certainty, you believe Dewey Jones will live three years from today, is that your --
A. I can accept that statement.
Q. So you agree.
Now, tell me, have you asked that any additional studies or workup be done to evaluate Mr. Jones?
A. No, I have not.
Q. You understand that the standard of care can be breached yet cause no damage; do you understand that concept?
A. Certainly.
Q. Did you identify any breaches of the standard of care in which your opinion caused no damage when you reviewed the records of Dewey Jones' hospitalization of October 17th?
A. Not that I'm aware of.
Q. Upon your initial review, Doctor, were there any areas of the records or depositions which

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caused you concern, that is, you believe there was a problem area that needed further review, even if you later decided a breach did not occur at that point?

MR. CASEY: I don't think I understand that question.

A. Could you rephrase that, please?

Q. Upon your initial review were there any areas of the records or in the depositions which caused you concern, that is, you believe there was a problem area that needed further review, even if later you decided a breach of the standard of care did not occur at that point?

A. I guess the answer would be yes to that. I did review the echocardiogram. That wasn't available in the record as far as I recall. I certainly have looked over the intraoperative course and the anesthesia surgical records carefully, and there are some questions I have about their nomenclature that I need review of that, more clarification, I suppose.

Q. And you further investigated those areas, correct?

A. I have not talked to the anesthesiologist or the surgeon and so I haven't fully investigated those things, no. That's not my job, I don't think.

Q. But intraoperatively what areas are you

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talking about?

A. Intraoperatively, well, when the patient developed the hypoxic episode we need to find out more clearly exactly what medications were given or not given at that time and how far along one was with the reversal of anesthesia.

There was a 15 or 20 minute blank period in the anesthesia record. I can certainly understand that everyone was rushing around trying to take care of the patient, but it was not filled in retrospectively. I'm not sure if that's the right way to do it or not. That needs to be clarified in my mind.

Q. Why does it need to be clarified?

A. So I have a better understanding of how the resuscitative efforts were carried out, I guess.

Q. Why is that important to your opinion?

A. I'm not sure it's important to my opinion. It's important for me to know how fast people responded to this medical emergency and the exact pathophysiology that set it off and, in fact, corrected it.

Q. Do you have an opinion that the people did not respond quick enough to the medical emergency?

A. I'm sure you

There's no question in my mind that if the hypoxia

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could have been reversed within one or two minutes we would not have had the problem.

Q. Do you believe that they should have had the ability to reverse the hypoxia within one or two minutes?

A. Should have, I'm not sure how to interpret that. Yes, I believe that we should certainly have that ability and it would be nice if the ability was available at that time. I'm not sure how you put your emphasis on those words.

Q. Should Meridia Hospital have had the tools and the people available to reverse the hypoxia within a minute or two of this occurring?

MR. CASEY. Objection.

A. I think they did have the people and the tools there, but the hypoxia was not reversed soon enough.

Q. What would have been soon enough to have caused Dewey Jones no subsequent damage?

A. We like to think that if one develops anoxia -- no oxygen circulating in the system, and he had some certainly -- three to four minutes is probably the maximum that you want to go to before you have irreversible damage.

Q. And at what point would the standard of

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care have required Dewey Jones' hypoxia to have been reversed, how many minutes?

MR. CASEY. Objection.

into that. They were trying to reverse it immediately as best I can look at the record.

Ask that question again, please.

Q. So, in your opinion, is there a time in which the standard of care would have required the medical providers to have reversed Dewey Jones' hypoxic event?

MR. CASEY: Objection.

You're assuming that they could.

A. To answer your question from a medical perspective, as we said previously, one needs to reverse the hypoxia within four minutes or so to avoid central nervous system damage. Whether it's a standard of care issue from the medical standpoint is not what I'm addressing right now with you.

Q. So you do not have an opinion as to whether the standard of care required it to be reversed within 10 minutes, within 15 minutes, within any time frame?

A. Well, certainly the standard of *care* is if you are going to have a viable patient you must reverse

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it in a set amount of time, and the general time period for complete anoxia for a cardiac arrest, meaning no blood being circulated with no oxygen, is three to four minutes, and that's in a warm state without pre-treatment with various medications.

In a relative hypoxic state then you have much more time, and it depends -- it depends on how much oxygen is getting to the brain to tell you how much time you have. He had a relative hypoxia, not an absolute hypoxia.

Q. So his relative hypoxia to oxygen levels of 89 percent, how much time did he have for --

A. At 89 percent they could spend all day.

Q. Do you have an opinion as to how far the oxygen saturations dropped on Dewey Jones to cause his brain damage?

A. It had to drop much lower than 89 percent, and the drop -- it's not just the drop that's important, but it's the relative amount of cardiac output and how much of that is being transported to the brain.

Q. So do you have an opinion as to how much time it took for Dewey Jones to develop irreversible damage in the state that he was in?

MR. CASEY: Objection. We

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know exactly. Called the code at 1:14.

BY MR. ALLEN.

Q. To a reasonable degree --

A. I'm not sure how to answer that question.

MR. CASEY: Do you understand it, Doctor?

THE WITNESS: No.

A. Ask it again, please.

Q. You tell me that it took *three* to four minutes to develop brain damage from a complete anoxic event, correct?

A. Yes.

Q. In the state and condition that Dewey Jones was in, how long did it take Dewey Jones to develop irreversible brain damage?

A. In this situation I would speculate, I guess, that it probably took 20 minutes, 25 minutes.

Q. Would you expect the standard of care to be that they should have been able to reverse Dewey Jones' hypoxic state within 25 minutes?

MR. CASEY: Objection.

A. It's not -- I couldn't make that judgment as a standard of care. I would say that in order to have a good result, assuming the hypoxia was that severe, if you don't reverse it in that time or less

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you are going to have a bad outcome.

Q. How long did it take them -- I'm sorry.

A. In medicine we don't like bad outcomes.

Q. Can you tell me how long it took them to reverse Dewey Jones' hypoxic state?

A. I would have to look at the record, I guess.

MR. CASEY The anesthesia record?

THE WITNESS: Yes.

A. The relative hypoxia according to the chart began in the interval time at 12:30, 12:45. I can't tell you which time, which side of that envelope we're in. The hypoxia was essentially the same, slightly worse, 89 percent in the time frame of 12:45 to 1:00, but that is still enough oxygen if his cardiac output is adequate, and we think cardiac output certainly should be adequate because the heart rate and blood pressure were adequate.

Q. What were they at that time, Doctor?

A. It looks like his blood pressure had gone up five or ten points or so. If I try and read this, close to 180 over 85 to 95 or so.

Q. And his cardiac?

A. Heart rate?

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Q. Heart rate, yes.

A. Heart rate, a few points above a hundred. I would judge by the point of 110. So he is developing a little bit of tachycardia response -- looking back a little bit -- tachycardia response and a little bit of epinephrine released, hypertensive response, certainly not bad at all. That's when they're beginning to try and reverse the anesthesia. So we are not even in a jeopardized central nervous system state at that point in time.

Q. At 1:00?

A. At 1:00, according to the record. Then at 1:15, according to the record, from 1:00 to 1:15 we don't have an oxygen saturation, and we have a note slightly to the right of that that he is having bradycardia, and we don't have a blood pressure notation. At about that time I think they are calling for the cardiopulmonary resuscitation team to come in and they may or may not be doing cardiopulmonary massage.

I would have to correlate these two to know at exactly that time, which again can support cerebral circulation to a degree. But basically from 1:00 until 1:15, somewhere in between -- actually, from 1:00 until 1:30 is the critical time. It's 25, 30

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minutes depending on how one looks at that data. That's the time that the cerebral hypoxia presumably is taking its major effect.

After that time it appears from the record that his heart rhythm is restored, he has a sinus rhythm that's restored, he has a blood pressure that's restored, and he should be perfusing his cerebrum as well as other organs.

MS. REINKER: I need to interrupt at this point because I need to leave. I would just like to note a continuing objection on the record to any anesthesia opinion testimony from this witness, who as far as I know does not practice anesthesia. That being said, I need to depart.

MR. ALLEN: okay. Thank you very much.

MS. REINKER: Thank you.

BY MR. ALLEN:

Q. So, Doctor, the record indicates that no central nervous system damage was incurred to Dewey Jones up to 1:00, correct, brain damage?

A. The record doesn't indicate that.

Q. In your opinion?

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A. In my opinion, the supporting data from the record would strongly *suggest* that brain damage was not taking place up until 1:00, if this is 1:00.

Q. Then, in your opinion, brain damage occurred between 1:00 and 1:30, correct?

A. That's correct.

Q. Now, you told me that you didn't have the echo when you first reviewed the case; is that correct? What were your concerns about the echocardiogram?

A. My concern, I guess not concern, I wanted to know what the echocardiogram showed that I believe was taken a day or two before his surgery. I had a chance to review that, and, in fact, from my review the ventricular function is significantly better with that echocardiogram compared to the echocardiogram taken back in [illegible] of the same [illegible].

Q. [illegible] was Dr. Ho aware of the echocardiogram results?

A. I don't know.

Q. Do you know if he knew about it before surgery?

A. I do not know that he did not know or that he did know before surgery.

MR. CASEY which echo are you talking about, the 8-25?

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MR. ALLEN: The echocardiogram of October.

MR. CASEY: 18th?

MR. ALLEN: 18th.

BY MR. ALLEN:

Q. The echocardiogram of October 18th, Dr. Ho, to your knowledge, was unaware of the echo before surgery, correct?

A. I have no knowledge of that one way or the other.

Q. And you have no knowledge as to whether the other physicians, Dr. Adamek or Dr. Badri, were aware of the echocardiogram before surgery?

A. No. I do know it was taken and I also know that it really confirmed their clinical impressions that his cardiovascular function was much better then than it was with his previous one or two hospitalizations.

Q. Why order the echocardiogram and not read it?

MR. CASEY objection.

Q. What's the m[illegible] of that?

A. By reading it I guess you mean without knowing what the information shows you?

Q. Yes.

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A. Post-procedure, post-surgery the information is still valid and good. Pre-surgery it would be nice to have that piece of information also, and that's what I'm sure it was ordered for, but the information is still valuable afterwards.

Q. But the echocardiogram did not give them any information pre-surgery to support the fact that Dewey Jones was medically cleared for surgery, correct?

MR. [illegible] You're talking about the 10-18 echo?

MR. ALLEN: 10-18.

A. [illegible] not aware [illegible] surgeon or internist knew of the echo results prior to surgery; I'm also not aware that *they* didn't know *of* the [illegible].

Q. [illegible] as far as the previous echo that was done in August, would you have medically cleared this patient based [illegible] that [illegible] than the one in Octo[illegible]

MR. CASEY: Objection.

A. Depends on what it's for, I guess, and based on all of his other clinical data.

MR. CASEY: Are you asking if he would have cleared him for surgery in August?

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MR. ALLEN: Based on the August echocardiogram.
MR. CASEY: I need a clarification before I have him answer. Are you saying whether or not he would have cleared him in August for surgery, or are you saying would he have cleared him for surgery in October based on the August echo?
MR. ALLEN: correct.
MR. CASEY: which one?
MR. ALLEN: The last one.
MR. CASEY: Do you understand what he's asking you, Doctor?
THE WITNESS: I believe so.

A. Ask that again.

Q. I'll start it again. Do you think it was appropriate for Dr. Ho to medically clear Dewey Jones for surgery on October 20th based upon an August echocardiogram that, in your opinion, was worse than the actual echocardiogram performed in October?

A. The basis of whether someone is ready for surgery or not is not dependent and not based solely on an echocardiogram, it's based on the clinical data. So if the clinical data in October permitted the internist

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to assess the cardiovascular function compared to a couple months earlier and say he's ready for surgery -- if indeed I saw that same patient, if I saw that same patient in August with the August echo, would I clear him for surgery, for the same gallbladder surgery presumably is the question.

I guess the answer would be no, but it would not be based on the echo as much as it would be based on the fact that he had fulminant mainly right heart failure and that had to be improved significantly as best one could do that, and, in fact, it was improved significantly. Over that month or two interval the patient diuresed nearly 40 pounds and was much better from a cardiovascular standpoint in October than he was in August.

Q. What medical records did you review to form your opinions today?

A. most are (indicating). All of the Huron records -- I don't recall the exact dates -- August of '94, September of '94 and October of '94, and I remember seeing some records from UH that went into maybe November, I don't know.

MR. CASEY: And I sent him the Lutheran Hospital stuff, too.

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A. Yes, then I had a big file from Lutheran Hospital from about 1989 or '90 up until the present.

Q. These are the depositions that you reviewed?

A. Yes.

Q. You've read all of these?

MR. CASEY: I'm not sure these are all of them. These are some that he had at his house and he brought with him.

BY MR. ALLEN:

Q. You reviewed the deposition of Dr. Adamek?

A. Yes.

Q. You reviewed the deposition of Dr. Semigran?

A. Yes.

Q. You reviewed the deposition of Dr. Badri?

A. Yes.

Q. You reviewed the medical report of Dr. Semigran?

A. Yes.

MR. ALLEN: Mark this as Exhibit 3.

(Thereupon, Plaintiffs' Exhibit 3 to the deposition of James D. Maloney, M.D., was

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marked for purposes of identification.)

BY MR. ALLEN

Q. Did you review the deposition of Dr. Winston Ho?

A. Yes, some time ago.

Q. Did you review any other depositions?

A. I don't recall.

MR. CASEY: I think I sent him the residents' depos, but I can't be sure.

Q. To the best of your recollection?

A. I don't remember seeing them.

Q. Did you see the deposition of Dewey's brother McCloud?

A. I don't think so.

MR. CASEY: I did not send him McCloud's depo!

Q. All the marks on Exhibit 3, were those all put on there by you?

A. Probably, yes.

Q. Did you make that at the time that you reviewed the case? Did you do that at the time you initially reviewed his report, did you make those marks at the initial time you reviewed his report?

A. I only reviewed it once, so I guess so.

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Q. The purpose of you making those marks is to draw your attention to important areas?
A. Some of that, and also to keep me awake when I'm reading these kinds of things.
Q. So you read these things late at night?
A. At night.
Q. Is that when you usually do your reviews is late at night?
A. Or early in the morning.
Q. Did you generate any materials after you reviewed --
A. A letter, just a letter that --
Q. That's marked as Exhibit 2, is that the letter?
A. Yes, I believe so.
Q. That's the only letter that you produced?
MR. CASEY: There's a second one.
A. There is that statement in the back.
MR. CASEY: I wanted to have a supplement.
BY MR. ALLEN:
Q. Supplement being the statement about the life expectancy, okay.
Other than Exhibit 2, do any other

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drafts of this document exist?
A. No.
Q. Did you prepare this exhibit yourself?
A. I did.
Q. You typed it?
A. My secretary did.
Q. And then you sent it to Mr. Casey?
A. She did.
Q. Did you review any literature before you wrote that opinion letter?
A. A little bit, very little, but yes.
Q. What did you review?
A. I reviewed an old issue of Harrison's textbook of medicine. I looked at a, for me a new acquisition of a cardiology textbook that's several years old, Mayo Clinic Textbook of Cardiology.
Q. You looked at Harrison's to review what in particular?
A. One thing was sleep apnea. I didn't know that the definition of ten seconds was their major criteria of yes or no. I read a little bit about obesity and cor pulmonale and the results of hypoventilation.
Q. What is your criteria for sleep apnea, less than ten seconds?

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A. I depend on the diagnosis of sleep apnea from our neurologist and pulmonologists that do those tests. You know, it's a clinical judgment. Ten seconds, I'm sure they have some statistical data to back that up, but I would think that nine seconds would be just as valid, and certainly 11 or 12 would not be invalid. We do the same thing in cardiology, make an arbitrary statistically sound measurement to be a cutoff between positive and negative.
Q. When were the depositions sent to you originally?
A. I got two or three here and there. I think the last one I got was yesterday or the day before.
Q. Which one was that, Dr. Semigran?
A. That's correct.
Q. Did you get a chance to read his entire deposition?
A. I think I read the entire deposition late at night.
Q. When were you sent the records?
A. Boy, probably about three months ago or so.
Q. And it all came at one time?
A. No, no. I think I got the records first

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and then at least some of the depositions came later, and then the last deposition that I read was two days ago.
MR. CASEY: And the echo tape in between, the echo tape, as well.
BY MR. ALLEN.
Q. I take it October 17, 1994 -- tell me, on admission to the hospital can you identify for me any and all risk factors that Dewey Jones had that put him at risk for abdominal surgery, medically at risk?
A. Would you give me that date again?
Q. October 17th, which is the date he came into the emergency room.
A. And your question again was, identify --
Q. All the risk factors that Dewey Jones had for surgery.
A. Risk factors are all relative. Being alive is a risk factor for going to surgery and dying. Certainly obesity is one. In my reading of one of these texts that I mentioned, obesity as an independent variable supposedly is not a risk factor, but as a multi-varying analysis I guess it is a risk factor. Obesity is certainly one.
Q. Would you categorize him as morbidly obese or obese, or does it make any difference?

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A. Well, let's say that in August he weighed 350 pounds. At first I read, I guess, he was 5'10", somebody said 5'11", at one place I saw 5'8". So he should be weighing 170 or 180 at max, and he is a fair amount over that. I would call it morbid obesity.

I would have to look at the term morbid. I would get that by definition that means obesity that has morbidity related to it, and, yes, I think he had morbidity related to it. He had a pulmonary hypertension, he bad his cor pulmonate. I'm sure that the obesity aggravated his labile hypertension. I'm sure that the obesity played a role in his sleep apnea.

Q. Is that it?

A. You better rephrase the question, I forget.

Q. Risk factors.

A. Risk factors for surgery.

Q. Congestive heart failure?

A. Certainly he had both right -- he had histories of both right and left heart failure, and those two were somewhat independent of one another, those are both risk factors. He had a history of peripheral edema. I think on one occasion he had unilateral leg edema that was much greater at one of

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the Bedford admissions or something like that than at another time.

So presumably he had venous insufficiency. Probably chronic venous hypertension could do it, break down some valves. Certainly you want to think about previous thrombophlebitis, that's a risk factor.

I'm not sure how many I mentioned. Left heart dysfunction, cardiomyopathy, right heart dysfunction.

Q. Obesity?

A. Obesity by itself, significant labile and marked systolic and diastolic hypertension, hypoventilation and probably Pickwickian syndrome. He probably had some glucose intolerance with a heavy person like this that may make him more vulnerable to infections, which is another risk factor related to any kind of surgery.

Noncompliance with medication is a risk factor. He had a history, I believe -- and I'm not sure how strong his history is -- of a transient left-sided weakness. Whether this was a cerebrovascular phenomenon or something else, I'm uncertain.

Q. Anything else you can think of?

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A. I think that's about it. I think his kidneys functioned well. I think that when his blood pressure came under control his fluid balance improved markedly.

Q. Did you see when you reviewed the records if he had a previous history of a myocardial infarction?

A. It is my opinion that, no, he has never had a myocardial infarction and that he is not vulnerable to that since he has normal coronaries and his cardiac problem is a cardiomyopathy and not ischemic heart disease.

Q. When you were asked to give your opinion, were you asked to give your opinion strictly for the hospital or were you asked to give your opinions for all the doctors involved in this case?

A. I'm sure that I really didn't get that straight. I was under the impression that I was mainly giving my opinion regarding this patient's care and particularly in relationship to the surgery, and I thought it was the surgery, then I was later asked to give an opinion regarding the prognosis of this gentleman.

Q. So you were more focused on the surgery --

A. That's correct.

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Q. -- when you first reviewed the case?

A. The surgery. Oh, and then somewhere along the line I was told I should also look at the internist and whether his recommendation as well as the anesthesiologist's and the surgeon's for moving towards surgery was appropriate or not.

Q. Have you talked to anybody else besides Mr. Casey in his firm regarding your opinions?

MR. CASEY And Mr. Malone.

Anybody besides me and Mr. Malone have you talked to?

A. About my opinions?

Q. Yes.

A. No.

Q. Have you talked to anybody in the other law firms about your opinions?

A. No.

Q. Is it your opinion that the standard of care was breached when Dewey Jones was medically cleared based upon the clinical factors of his October 17th hospital stay and a review of the August 1994 echocardiogram?

A. No, I think it's my opinion that standard of care was not breached in relationship to his referral to surgery.

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Q. If, in fact, he had been medically cleared based upon his clinical factors, clinical presentation and the August 1994 echocardiogram, would that have been a breach of the standard of care?
MR. JONES: I'm sorry.
That was a little too soft for me to hear the whole thing. Could you read it back for me?
THE NOTARY: Question:
"If, in fact, he had been medically cleared based upon his clinical factors, clinical presentation and the August 1994 echocardiogram, would that have been a breach of the standard of care?"
(Thereupon, there was a brief recess.)
THE NOTARY. Question:
"If, in fact, he had been medically cleared based upon his clinical factors, clinical presentation and the August 1994 echocardiogram, would that have been a breach of the standard of care?"
MR. CASEY: I object.
"hat's the same question as the last question.
A, you

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Q. That's what I rephrased.
A. Will you ask it again, please?
MR. ALLEN would you read it back again?
THE NOTARY Question:
"If, in fact, he had been medically cleared based upon his clinical factors, clinical presentation and the August 1994 echocardiogram, would that have been a breach of the standard of care?"
MR. CASEY I object. He already said he believes that he was properly cleared for surgery.
You can answer.
BY MR. ALLEN
Q. Are you with me?
A. I think so. On his clinical factors alone he could have been cleared for surgery and it would have been appropriate. From my review and from the report of the echo of August, certainly the report using our term waffled on the quality of the echo, not uncommon because getting good quality echo in somebody that's 300 pounds or 350 pounds back then is tough.
From that echo alone you would be very concerned, but if you put that echo on top of the

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clinical data going from August until November. October, and particularly with even some information known about '91, '92, '93, you would probably clear him for surgery.
In fact, if I recall, the cardiac cath data of '92 or thereabouts gave him an ejection fraction of zero percent I believe, which is about the same as the echo. Particularly when you get down in the lower percent ejection fraction the data becomes
So again, from the clinical data alone, knowing that he had improved markedly over those two to three months and knowing that he had a problem that had to be operated on either today, tomorrow or next week and knowing that he was in the best shape that you, we, the physician has seen him in, I would clear him for surgery.
Q. When was the first time Dr. Ho had seen Dewey Jones?
A. It's my understanding that it was in August.
Q. Do you know whether or not Dr. Ho reviewed Dewey's past medical records before medically clearing him in October?
MR. CASEY: objection. As

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to which records, Charles?
MR. ALLEN Any of his previous records.
A. I don't know that for certain. I don't recall. I'm sure it's probably in his deposition, I just don't recall what he said there. But I do know that he was aware of his medical case and course in August and he was aware of his medical case and course in September and he was aware of his medical course in October. Those are three points that can give him some very reliable clinical assessment capability.
Q. He became aware of those three time frames from what personal knowledge?
A. I believe so.
Q. Do you know what time or do you know when Dr. Ho contacted Mr. Jones' primary physician, Dr. Azim, and discussed whether or not Dewey was a candidate for surgery?
A. No, I don't.
Q. Do you know if Dr. Badri or Dr. Adamek had discussed Dewey's care, previous medical history with Dr. Azim?
A. With Dr. Azim, no, I don't.
Q. What is your definition of biliary obstruction?

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A. Obstruction of the biliary tract, either partial or complete.
Q. What causes that?
A. It can be a tumor, it can be a gallstone, it can be a suture, it can be -- those are the primary things.
Q. Do you have an opinion of whether Dewey Jones had biliary obstruction during the October 17th admission?
MR. JONES: Objection.
A. I have an opinion that he was having symptoms of cholecystitis, which was associated with right upper quadrant pain, nausea, vomiting, so, yes, I think that he very well would have some obstruction at that time.
Q. What other symptom did he have consistent with cholecystitis that you recall?
A. Well, symptoms, signs and symptoms, the nausea, the vomiting. I am not aware that they specifically noted that he had a fever. We're talking about symptoms though, aren't we?
Q. Right.
A. Diaphoresis, I guess, would be a symptom. I don't recall that specifically. Mainly the right upper quadrant -- looking at the records that were

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written down, the right upper quadrant pain and some laboratory studies that were slightly abnormal.
Q. Do you know if he had tenderness or rebound [illegible] that right upper quadrant pain?
A. He had tenderness. I don't specifically recall whether they stated rebound or not.
Q. Do you have an occasion to read pathology reports that relate to gallbladders?
A. Yes.
Q. Do you feel that you can offer an opinion as to whether the status of this pathology report is being consistent or inconsistent with cholecystitis or biliary obstruction?
A. I think it can be consistent with that. As I recall, the pathologist stated that the inflammation was minimal or something similar to that. We should probably pull it out and read it, but it was not -- it was certainly not a gangrenous gallbladder.
Q. Based upon that pathology report you have an opinion as to the severity of his cholecystitis?
A. From a clinical standpoint I think it was significant. I'm a clinician, not a pathologist, so I guess I would have to go on clinical signs.
Q. Based upon the pathology, you can't give me an opinion, correct?

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A. Well, let's see. The submitted diagnosis from the surgeon is cholecystitis and cholelithiasis. The gallbladder shows recent hemorrhage in the wall. Findings may represent early developing acute cholecystitis, although little or no acute inflammation was observed. So the surgeon clearly thought that it was cholecystitis and the pathologist said the signs were limited.
Q. So this was not chronic cholecystitis, correct?
A. No, I can't say that. I'm not sure how you would define chronic.
Q. [illegible]
A. [illegible] time. Probably in the literature, certainly the pathology literature would have a set number of days or weeks that we would say something that goes from chronic to subacute to acute. It implies over a period of time.
Q. In your opinion, [illegible] is not chronic; is that correct?
A. No, I can't say that.
Q. You don't have an opinion?
A. Oh, I do -- if I recall correctly, even when he went into the hospital in September he had some

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nausea and vomiting and some vague symptomatology that very well could be the same thing. We know he had gallstones there and he had multiple gallstones, and we know that they probably take two to three to four years to develop or more and during that period of time they are likely to be symptomatic, and, in fact, even cause problems where he doesn't recognize the symptomatology. I'd call it chronic. Certainly the stone presence means he had chronic disease within his gallbladder.
Q. So are you telling me that Dewey Jones on October 17th presented to Meridia Huron with chronic cholecystitis in your opinion?
A. In my opinion, he presented with symptomatic gallbladder disease.
Q. Now, hypertension is controlled when you don't have to use medication; is that a fair statement?
A. You better rephrase that.
Q. All right. To have controlled hypertension, does that mean that you do not have hypertension when you are not on medication; is that correct? Is there a correlation between controlled hypertension and medication?
A. There can be; not necessarily.
Q. So when you're on -- if you're hypertensive and you have medication and you're on

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medication, is that controlled hypertension?
A. No, that's hypertension and you're on medicine.
Q. What is controlled hypertension?
A. Controlled hypertension is someone who is hypertensive but in which his blood pressure is being maintained in an acceptable and desirable level, presumably in a normal tensive range.
Q. What range?
A. Depends on what country you live in and what race you are, but in the United States we like to say 140/90 or less. In Southeast Asia that's hypertensive.
Q. Will hypertension decrease on bed rest?
A. Frequently; not always, but frequently.
Q. Most of the time, correct?
A. You'd have to define what most is. 51 percent?
Q. Yes.
A. I think that it will get -- it will either stay the same or get better, it won't get worse with bed rest, if you're truly resting.
Q. A Swan-Ganz catheter can yield information as to aggression of pulmonary edema, true?
A. If you get wedge pressures, yes.

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Q. Now, do you believe Dewey Jones was a candidate for any alternatives?
A. Therapy?
Q. Therapy, other than a cholecystectomy.
A. Regarding his heart?
Q. Regarding his gallbladder.
MR. JONES: Objection.
A. I guess I would have to know what the alternative therapies are. Continued medical management would be one alternative, no therapy whatever would be another. In fact, at least with his high blood pressure that's what he chose most of the time.
Q. How about percutaneous drainage of the gallbladder?
A. I'm not sure that his gallbladder was overly distended, and so -- I've seen that done once or twice, It's usually when you're worried about perforation of the gallbladder. In the old days when you were afraid to do surgery because of additional risks. As a non-surgeon, I would guess that would not be a likely diagnosis or a likely therapy for this gentleman.
Q. Based upon?
A. Probably he didn't have a markedly

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distended gallbladder to drain and technically its probably -- I'm not a surgeon, I don't do that kind of thing.
MR. CASEY: Doctor, I don't want you to guess.
BY MR. ALLEN:
Q. Do you know anything about success rates of that therapy?
A. The success rate of decompressing the gallbladder so it doesn't rupture is pretty high if you decompress it. It doesn't cure the whole problem, it's palliative.
Q. What about ultrasonic lithotripsy, was Dewey a candidate for that?
A. We had several patients at the Clinic when that was being evaluated and used. I think I would have to defer to an internist that deals with this stuff a lot to say what the exact criteria for lithotripsy of a gallstone is, but multiple small stones I think is essentially a contraindication or a non-indication for it. The therapy for gallstones -- I haven't seen it used as therapy in the last seven years.
Q. Is it your opinion that Dewey was in active congestive heart failure before surgery?

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A. I'm not sure what this word active means.
Q. Is there a difference between active and non-active?
A. We cardiologists don't use that term.
Q. If you have congestive heart failure, you have congestive heart failure?
A. Yes, and then you can either have compensated or non-compensated. That's kind of what I think you're getting at. I think that at the time he was [illegible] failure -- which is both right heart failure and left heart failure -- was compensated and in better than at time he had been seen over the last three or four months, and it was, in fact, even better than when he had his heart cath back in 1992. I just don't have all the data to know about the Bedford admission, but he was markedly improved in October compared to September and August. So it was compensated.
Q. What do you attribute to his congestive heart failure getting better during that time frame between August and October?
A. I would guess, number one, he was probably scared and, number two, I assume that he finally was taking his medicines. I'm also assuming that he did

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not go on a crash starvation diet. So the fact that he diuresed 30 to 40 pounds in that interim tells us that his heart was compensating and able to reverse the mechanisms that caused fluid retention and so he was diuresing. That's good.

Q. Don't you believe that during that time frame Dewey was compliant with his medication and, thus, getting better?

A. I'm assuming that he probably was. I don't know that for a fact, but I assume that's probably the case. He was also on some different medicine, I believe, or -- Dr. Ho had changed his medicines and the residents had changed some of his medicines both in August and September, I believe.

Q. So it's your belief that Dr. Ho saw him in October and saw him in August and in September of '94?

A. Dr. Ho, his medical team, he and his medical team were involved with his care in August at Huron Hospital. I'm sure residents were involved with his therapy and they were being directed and certainly he was directly involved in September and directly involved in October.

Q. Can you categorize for me the level of heart failure Dewey had at the time of surgery?

A. By categorizing, yes, it's less heart

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failure than he had two weeks or a month before.

Q. Was it mild, was it moderate?

A. If we're talking about -- it was improved. We talk about ventricular function. Now, he still had moderate ventricular dysfunction in my opinion at that time, but he was compensated for that. He still had -- the moderate dysfunction was probably both right and left heart. Again, I think that probably the left heart was much more compensated at that time than the right heart.

Q. Explain to me how the body compensates or the heart compensates.

A. You decrease the heart -- first of all, you decrease the stresses on the heart. On the left heart one of the major stresses can be hypertension, and he had multiple blood pressure recordings over those months and years before when he would be out of control at 220/120, 130, diastolics that were very, very high. When he came in in October his blood pressures were closer to the range of just normal to mildly hypertensive, significant decreases in diastolic pressure.

So if the heart only has to push half as hard to get blood out then you don't have blood backing up and increasing the stiffness of the heart

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and the pressure in the left ventricle and diastolic pressure that goes back into the lung. So that's how the left heart gets better.

Q. If I interrupt. So the left heart doesn't have to work as hard?

A. Doesn't have to work as hard. Then the left heart has all sorts of other signals that it sends to the body, hormonal and neurogenic signals. It says, kidneys, you don't have to think that you have to retain more fluid now to help me the heart do better, and so you diurese those fluids. That's another important way of the diuresis. Lasix and a few other medicines are helpful. The Procardia, et cetera, was helpful in lowering the blood pressure.

On the right side of the heart he certainly did not have a lot of the edema that he had before, and the chronic stasis changes and the venous insufficiency was probably in large part due to chronic recurrent severe right heart failure due to pulmonary hypertension. I think he still had some of that.

The echo demonstrated that his right ventricle was enlarged; he had paradoxical motion that says the right ventricle is enlarged. The sleep apnea, the hypoxia that you would get causes worsening of the pulmonary hypertension, and if you decrease these

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things then the pulmonary hypertension decreases and you have less fluid retention due to right heart failure. It becomes a circle and a cycle.

Q. Was he at any risk for going into severe congestive heart failure during the October admission?

A. During the October?

Q. Admission.

A. I think he was -- he's in a risk of going into severe heart failure from 1991 or '90 on.

Q. Any time?

A. Any time. In fact, he did it multiple times. Again, marked -- he needed something to push him over. As far as stressing the left ventricle he has his hypertension, and as far as stressing the right ventricle he had his pulmonary obstructive sleep apnea phenomenon that aggravates pulmonary hypertension.

Most likely complicating both of these two problems is his underlying cardiomyopathy. Does he have a primary independent muscle disorder of the ventricle and what evidence do we have? Well, he's had this for a long time, his mother apparently died by history in his history of cardiomyopathy. It's certainly frequently family.

Q. Do you know at what age his mother died?

A. I do not. It was relatively young, I

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believe. At first I thought she was still alive for a while. I think that it was when he was relatively young. I recall somewhere in one of the history notes he was raised by an uncle or just his father or something, so I have the impression that she was relatively young, probably under 40.

Q. That's important when you base your opinions as to life expectancy?

A. Not necessarily.

Q. The history of the mother?

A. It doesn't help.

MR. CASEY: Plus it's a wrong impression, Doctor. She just died in '95 or '96.

BY MR. ALLEN:

Q. If of fluids or ility of the body not t diurese would add to th pressure of the heart, correct?

A. Say that again.

Q. Increasing of fluids, the building up of fluids in the body, does that add pressure on to the heart?

A. Yes and no. You can have diastolic dysfunction and systolic dysfunction. The heart needs a certain filling pressure. It's like priming the

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pump. If indeed you are getting a diuresis then sometimes additional fluid is just what you need. If the primary problems are hypertension that are stressing the left heart and systemic hypertension on the left heart, pulmonary hypertension on the right heart, and if you counteract both of those things with taking your medicine, et cetera, then a fluid load is not bad at all.

Q. But if you're not taking those medicines then the fluid load would be harsh on the heart?

A. Certainly could be. Probably more than the fluid load is the salt load. You can have lots of fluid with little salt and you can get away with it; you can have a lot of salt and little fluid and not get away with it.

Q. The fact that Dewey Jones became compliant with his medications the last three months, two or three months before he entered the hospital in October of 1994, would that not lead you to believe that he would have sustained the compliance after he had been discharged?

A. No, that wouldn't lead me to believe that necessarily, and I'm not sure how compliant he was during those three months. I also don't even know the social background of if he was compliant why he was

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compliant. You'd have to answer all those questions first.

Q. Did you take into effect that he had lost 30 pounds in the last couple months before the hospitalization when you arrived at your figure for life expectancy?

A. Yes.

Q. On the morning of October 20,1994 Dewey Jones was a high risk operative patient, correct?

A. Ask that again.

Q. On the morning of October 20, 1994 Dewey Jones was a high risk operative patient?

MR. CASEY From what standpoint?

A. Relative *to* most 33 year-old patients undergoing *surgery* for gallbladder disease I *guess* I would say yes, relative to most cardiac patients surgery, severe was in the moderate group. It's relative.

Q. Was he at high risk for developing pulmonary edema during the procedure?

A. Again, he developed certainly a pulmonary edema. He had multiple risk factors that could contribute to this. Was he at high risk, yes, he was at high risk, but he was probably at less high risk

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than any time over the last three months.

Q. He had sleep apnea syndrome; is that correct?

A. That's what the records say.

Q. That would put you at a high risk for developing pulmonary edema, correct?

A. One can develop both with the sleep apnea, per se, pulmonary hypertension, but you can also have probably some increased capillary alveolar permeability associated with hypoxia that can give you some pulmonary edema, and then you can also get obstructed or start coughing and have a negative respiratory problem that sucks fluid into the lung, which is non-cardiac pulmonary edema.

Yes, those things are possible; however, with a tube through then you don't get obstruction and then you should not be excessively vulnerable to those kinds of complications from sleep apnea.

Q. As long as you don't attempt to extubate?

A. Well, let's say that as long as you don't obstruct the airway then the problem of obstruction, which is the primary problem with sleep apnea, cannot occur.

Q. And attempting to extubate is one way of

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obstructing the airway?
A. That's one of it.
Q. Now, I Jones, w he ever giv any supplemental oxygen before surgery?
A. I believe so.
Q. When was that?
A. My guess would be that probably it's a standing order for cardiac patients to have p.r.n. oxygen, but I believe that there's something in the record that the night before surgery or early that morning he was given some supplemental *oxygen.* I don't know the exact cause. At our institution every cardiac patient comes down on oxygen.
Q. Every cardiac patient?
A. Going to surgery. They usually make sure they're well oxygenated before intubation.
Q. When did Dr. Adamek know that Dewey Jones was on oxygen before surgery?
A. I don't know.
Q. Do you know when Dr. Badri knew that he was on supplemental oxygen?
A. I don't know when they knew, no.
Q. You don't know that about Dr. Ho either, correct?
A. No.

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Q. S if I t ld cu that none of th doctors knew that he was on supplemental oxygen before *surgery,* do you think that affected Dewey Jones' medical management during surgery?
A. No.
Q. As a cardiologist you medically clear patients for surgery, correct?
A. Say that again.
Q. As a cardiologist do you medically clear patients for surgery?
A. Yes; even non-cardiac patients I medically clear for surgery.
Q. So if you were called in as a cardiologist o consu r Dewey Jones, you have told them that it was a waste of time?
A. If I were asked to consult on him would I tell them it's a waste of time? No, I don't think so. I would probably consult With him and do what I'm asked to do.
Q. So if they asked you to, you would have come and consulted him?
A. Sure.
Q. You can't *think* of any reason why any other cardiologist wouldn't consult if asked, correct?
A. I'm sure that there's some medical and

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some economic reasons for consulting, and he certainly fulfills those.
Q. Does Min widil cause fluid retention?
A. Yes, along with Procardia and almost every vasodilator that we use.
Q. Wh uld be the ideal blood pressure that you would want t maintain c Mr. o s during surgery?
A. It depends on what his blood pressure was beforehand. You would like to have him within normal range, you would not want to keep his blood pressure excessively low. In people that have marked hypertension if you lower their blood pressures too much they have vasoconstriction and it's thought that you can make them end-organ ischemic even when they are, quote-unquote, in regular normal tensive range. But with all that it would be nice to have them somewhere in the range of 150, 160 over 90 *to* 100 all the way down to 110 over 80 or so, that would be a nice range.
Q. So 150 to 110 systolic?
A. Or 160, 170 to 110.
Q. And pre-surgery, that being if his pre-surgery blood pressure was 162/100?
A. I think it's pre-surgery you're talking

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about when he came into the hospital.
Q. No, just before surgery, just before they started to operate.
A. What question are you asking?
Q. If it was 162/100 at that time.
A. It wouldn't bother me.
Q. Would it be the same range we just talked about?
A. That would not interfere with the surgery.
Q. I'm saying, the ideal blood pressure ranges that you just gave me, assuming that his blood pressure was 162/100 just before surgery, those ideal blood pressure ranges would st hold true.
A. I think so. When you're really talking about hypertension, you're talking about peripheral vascular resistance really and end cardiac output. You would like peripheral resistance to be relatively normal and then the blood pressure measurement is an indirect measurement of that.
Q. Let's talk about Swan-Ganz for a second. Now, that allows you to measure and maintain arterial blood pressure during surgery, correct?
A. No.
Q. What does it allow you to do?
you measure pressures

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the heart; it allows you to do a cardiac output if you have another parameter to help you, an arterial line somewhere. Then it enables you to chart those changes in pressure over time.

The changes in pressure or the pressure that you're looking at, if you have all of the lumens connected that you're monitoring simultaneously, you would have a right atrial pressure, pulmonary artery pressure, you could have -- then if you blow up the balloon or extend the catheter out further you can get a pulmonary artery wedge pressure, which is an indirect reflection of left atrial pressure.

Q. So if you have a Swan-Ganz catheter, would you agree with me that you are always able to control a patient's blood pressure with the proper use of vasodilators and nitrates during surgery?

A. No.

Q. Why not?

A. You can never always do anything.

Q. More than likely?

A. Do what now?

Q. Would you more than likely be able to control the patient's blood pressure in surgery?

A. Yes. In fact, even without the Swan-Ganz catheter you're more than likely to control the blood

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pressure of the patient during surgery.

Q. How is that?

A. You measure the blood pressure and you have some understanding of the physiology and you adjust medications as necessary.

Q. Is a Swan-Ganz a better predictor of blood pressure?

A. Predictor of blood pressure, no.

Q. Is it a better predictor of whether a patient would go into pulmonary edema than just measuring the blood pressure?

A. It is a way of monitoring the left heart pressure if you get wedge pressures or if you look at the pulmonary, artery and diastolic pressure. It is a way to do that.

There's an interesting study that just came out using Swan-Ganz catheters. I believe it was either in JAMA or the annals recently where they concluded that the use of Swan-Ganz catheters in intensive care units for managing fluids had a higher mortality rate than the absence of its use. With this they were saying don't be fooled by the numbers, use your clinical judgment.

Q. When was this?

A.

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Q. It was in JAMA or the annals?

A. I believe so.

Q. Annals of what?

A. Internal medicine.

MR. CASEY: Let's go off the record.

(Thereupon, there was a brief recess.)

BY MR. ALLEN

Q. When you looked at the surgical notes and records did you note that Dewey lost about 400 cc's of blood?

A. I believe I noted that. 420 or something like that

Q. Is that a large amount?

A. I think that's a pretty small amount.

Q. If a Swan-Ganz had been placed in Dewey Jones at about 11:00 a.m. what would the readings have shown in your opinion?

A. 11:00 a.m., at this particular time, well, I guess they probably, in my opinion, would have shown essentially a normal wedge pressure.

Q. Which would have been what?

A. Oh, somewhere from 12 to 18 millimeters of mercury left ventricular end diastolic pressure, 19 or so or 20.

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Q. What are you basing this upon?

A. On my clinical assessment of the fact that his left ventricular function was essentially normalized when he went into surgery, and I see nothing hemodynamically that would change that. In fact, with all the vasodilatation that one gets with the drugs, the anesthetics that are used along with the surgical procedure, per se, they're probably lower. So that would be one measurement.

What else would you like to know?

Q. Would that have changed between 11:00 and 1:00 in your opinion?

A. 11:00 and 1:00?

Q. Yes.

A. Yes, it would have changed very abruptly. When he went asystolic -- when he got marked bradycardia I'm sure his cardiac output dropped significantly. I assume --

MR. CASEY: Question was before 1:00.

A. Oh, before 1:00. Probably when his pressures went up slightly here when he was waking up, the adrenaline would come back.

Q. 11:30?

A. This was at 12:30 or so.

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Q. So you would expect the wedge pressure to have been what?
A. Go up two or three points. A lot of adrenaline coming back. Adrenaline can either make the wedge pressure go down or up. With his hypertension and knowing his ventricle, I would guess the wedge pressure went up two or three points.
Q. Do you use Swan-Ganz catheters yourself?
A. Quite infrequent now. We use them in our EP laboratory and in the cath labs to do right heart caths, diagnostic right heart caths. They're easy to slip in and out for monitoring patients in the CCU and things like that quite infrequently.
Q. Intraoperatively?
A. Intraoperatively the cardiac surgeons use it, but for general surgery I have not had a patient go to surgery and come out of surgery with a Swan-Ganz in over the last two years. I've sent several severe heart patients for gallbladder surgery during that time.
Q. Without a Swan-Ganz?
A. Yes. If you really know what the pressures are and know how you're going to treat them, a Swan doesn't tell you anything, it just gets in the way. If you don't know what's happening then it can be

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helpful. If the things are unexpected, marked hemodynamic change, it's of questionable help I guess.
Q. But your ability to look -- were you looking at the blood pressures?
A. The blood pressure, the heart rate and knowing his -- and his oxygen saturation.
Q. Knowing all that you're able to predict what a Swan-Ganz would say?
A. Really, yes, you are.
Q. So I guess you don't use them very much as you just stat
A. That's right. I think the anesthesiologist -- again, this is all from my
tell by the pressure it takes for ventilation, also how much resistance they are beginning to meet within the lung.
Q. Was *the* inadequate cardiac function With the possible fluid overload and high blood pressure in edema?
MR. CASEY: objection. He already told you he didn't think there was a fluid overload.
Go ahead, Doctor.

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A. I think that the pulmonary edema -- and much of it was probably non-cardiac pulmonary edema -- occurred because of the hypoxia. The hypoxia caused the marked bradycardia and we began to have very poor cardiac output and we had those pressures begin to equalize again towards 40, and that's what caused the pulmonary edema, and it was reversed with a little bit of epinephrine.
Q. Do you believe at any time during surgery Dewey Jones got too much fluid?
A. I'm not aware of it.
Q. Did you see anything in the record to indicate that Dewey had an allergic reaction to any medications given to him?
A. No, I did not. During this particular course, no, I did not.
Q. Did you see any evidence of ARDS?
A. Yes.
MR. CASEY: Before or after?
MR. ALLEN At this time.
after.
A. His can be classified as ARDS.
Q. Response to?
A. His bilateral, pulmonary infiltrates with

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the cardiopulmonary collapse phenomena that he had could be classified as adult acute respiratory distress syndrome, and that is just a pathophysiologic process caused by lots of things.
Q. In this case caused by the hypoxia?
A. That was a major trigger, I believe, the hypoxia which then caused the bradycardia which then caused the marked pulmonary edema.
Q. Preoperatively was there any evidence that Dewey Jones had an elevated white blood count?
A. I don't believe so.
Q. Preoperatively was there any evidence that Dewey Jones had a fever?
A. I do not recall it being mentioned as a positive
Q. [illegible] were there any positive blood cultures that came [illegible]?
A. I'm not aware of them. I do recall reading about blood cultures being taken. It was my understanding that they were not positive. I know the patient was on some antibiotics as the usual course of events for things like this.
Q. Was it the attempted extubation process that led to *the* desaturation of the oxygen in Dewey Jones?

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MR. CASEY objection;
assuming facts not in evidence.
BY MR. ALLEN
Q. In your opinion?
A. I'm not sure that there was an attempt at extubation.
Q. So you don't have an opinion that possibly an attempted extubation caused the --
MR. CASEY: Same objection.
A. If indeed the endotracheal tube was removed, that would certainly be a cause for hypoxia, but the records suggest to me that the tube was not removed, and that's what I have to go by.
Q. As far as his present condition, is he in a vegetative state or similar semi coma state?
A. I do not have that specific knowledge.
MR. CASEY Charles, I'm not going to ask him any of those questions.
MR. ALLEN: Pain and suffering and --
MR. CASEY: I will not be asking him any of those questions at trial.
///

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BY MR. ALLEN:
Q. You don't expect to give that testimony?
A. I hope not.
Q. Doctor, assume that Dewey Jones is in a vegetative state due to pulmonary edema. Describe how a breach of the standard of care could have caused that pulmonary edema.
MR. CASEY: objection.
That's an improper question.
You don't have to answer that question, Doctor; that's an improper question.
Q. Hypothetically, a man in a vegetative state due to pulmonary edema, describe how a breach of the standard of care could have caused *the* pulmonary edema.
MR. JONES: objection.
MR. CASEY: same question.
You can't ask him to guess as to what could have caused anything. He's told you what he believes happened in the case.
I'm not going to let him speculate.
Do you understand the question, Doctor?
A. Ask it one more time, please, sir.
Q. A man is in a vegetative state caused by pulmonary edema. Tell me how a breach of the standard

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of care created the pulmonary edema.
MR. CASEY. Now you're asking him how it did create --
MR. ALLEN The standard of care, a breach of the standard of care.
MR. CASEY If you understand the question, Doctor.
A. I think I understand it. First of all, in my opinion, he is not in a vegetative state because of the pulmonary edema, he is in a vegetative state because of cerebral hypoxemia.
How could cerebral hypoxemia occur hypothetically? One hypothetical case at a major institution that I was participating in occurred 10 or 15 years ago when some OR surgical -- 15, 30 years ago -- some OR surgical rooms were hooked up and they mixed up what is gas versus oxygen and so the patient was not given oxygen while he was being given an anesthetic, and that creates a vegetative state, Long term high percentage oxygen can cause injury to the lung and ARDS, pulmonary edema, non-cardiogenic pulmonary edema phenomenon.
What else can happen? One could have extubated this patient and then he could have developed laryngospasm, and laryngospasm you have no airway and

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you have hypoxia, you can have injury again to the alveoli that were already injured to begin with, vulnerable and pour out the ARDS kind of phenomenon again.
If you get your bradycardia from any cause, and essentially a markedly transient, markedly reduced cardiac output all of the pressures go up and you could get a cardiac or at least a secondary cardiac pulmonary edema, and aggravating hypoxia would be a cause.
Let's see if we have some more hypothetical cases. One could have -- as you do sometimes in asthma and probably in sleep apnea, one could have a tube in place and then the patient could start coughing, and the cough, of course, is not heard like a cough with a tube in like you and I hear, it's more like a bucking and you get massive negative pressures and that could cause, again, this negative pressure changes, the oncotic pressure within the alveoli and you get an outpouring of non-cardiac pulmonary edema which aggravates the hypoxia. Then the docs are trying to correct the hypoxia which was the initial problem and they cannot quickly enough get through this non-cardiac pulmonary edema to resaturate the patient's blood.

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Those are a few causes. I guess another cause could be that he suddenly has no blood, and even though you're giving him a hundred percent oxygen it's not enough oxygen or oxygen carrying capacity to oxygenate the end organs and the brain. All of those things can happen and they can cause a vegetative state.

Q. On the pathology reports -- turn to that real quick -- it says, I believe, that the wall of the gallbladder was two millimeters.

MR. CASEY: .2 centimeters.

A. Which is two millimeters.

Q. That's a thin gallbladder wall?

A. I would have to consult my pathology book to say that. The right ventricle is two to three millimeters.

Q. On a daily basis what percentage of your time is spent medically clearing patients for non-cardiac surgery

A. Small percentage, but I would guess maybe four patients a week.

Q. Out of ho many patients a week do you see?

A. A hundred,

Q. Now, why do you do that, you're asked to

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come in and consult; is that correct?

A. Most of the time they happen to be patients that we're following and they have to go have their cataracts fixed or they have to do this or they have to do that, so we clear them. We clear them for gallbladder surgery, for eye surgery, for peripheral vascular disease along with cardiac surgery.

Q. And it's usually a surgeon that's asking you if they're okay or it's an internist; is that correct?

A. Both.

Q. It could be an anesthesiologist asking you?

A. *very* rarely. The anesthesiologists -- it's usually -- the anesthesiologist and the surgeons, from my perspective, they're the last ones in the chain and they have to agree that this patient is an appropriate surgical candidate or it doesn't get done regardless of what I say.

Q. But you've had anesthesiologists ask you to medically clear a patient for a non-cardiac surgery, correct?

A. Yes. Usually, though, after they've already said, wait, hold it, I want another opinion before we move forward or maybe I want a temporary

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pacemaker before this happens or something like that. For non-cardiac surgery, again, any internist that is managing the patient and familiar with the physiology, not just the cardiovascular system, but the GI system and the brain, is involved with surgical clearances.

Q. Have you ever medically cleared a patient like Dewey Jones?

A. Yes.

Q. When is the last time?

A. Probably the patient had surgery yesterday. I think I participated in clearance last week and she went -- this patient went for coronary bypass surgery on a valve. That's the most recent one I can think of.

Q. Have you ever medically cleared a patient like Dewey Jones for surgery, for an elective surgery?

A. Yes.

Q. Would you say this was an elective surgery?

A. It is relatively elective, yes, it's certainly elective. It's the timing or the most appropriate time to do the surgery in relationship to that particular patient, so it's not an emergency, it's elective.

Q. So the last time you medically cleared a

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patient like Dewey Jones for an elective surgery was when?

A. Probably about two to three weeks ago. I cleared a gentleman going to have a laparotomy, which turned out to be a resection of his regional enteritis after three previous abdominal surgeries.

Q. How often does that occur on a monthly basis that you clear a patient like Dewey Jones for an elective surgery?

A. Elective surgery, it depends on how many other criteria I guess. You're saying like Dewey Jones and for elective surgery. What was your question, how many times?

Q. How often a month, once a month?

A. Easily.

Q. More than that, twice?

A. Twice is a good number.

Q. Twice is a fair number?

A. I think so.

Q. This is your opinion letter. I just wanted to ask you a couple, clarify a few things for me, if you , D

In paragraph 1 it says, "The ular health of Mr Jones a well known to his physicians from past medical evaluations and

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pre-operative clinical assessments during the patient's last hospitalization at Meridia Huron Hospital"; is that correct, did I read that correctly?

A. I believe you did.

Q. Do you know for certain whether Dewey Jones was seen by Dr. Badri on his previous hospitalization?

A. In September we're referring to, I presume?

Q. Right.

A. To my knowledge, he was not seen by Dr. Badri then, he was seen by Dr. Ho.

Q. So his previous hospitalization the only physician that had seen him was Dr. Ho, correct?

A. No, there were other physicians that saw him.

Q. That were taking care of him in the October hospitalization?

A. The only one I'm aware of is Dr. Ho in that line, but multiple physicians, I think, saw him in September.

Q. But the only one that had seen Dewey Jones in September that also saw Dewey Jones in the October hospitalization was Dr. Ho?

A. That's right. And he provided the

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continuity.

Q. So he was not well known to his physicians, correct?

A. I guess it depends on how we define physician or physicians. He was well known to his physician Dr. Ho, and I guess if Dr. Ho and the records being available to the hospital then he was well known also to the residents that reviewed his case as well as to the surgeon and the anesthesiologist who were participating as a team effort, as a team effort within that hospital unit.

Q. So define physicians as in the paragraph of that sentence.

A. Which paragraph is it?

Q. Was well known to his physicians.

A. Which paragraph?

MR. CASEY: Paragraph 1.

BY MR. ALLEN

Q. We know to his physicians from past medical history and physical assessments during the patient's last hospitalization. Who are you talking about?

A. I'm talking about certainly Dr. Ho and then with the pieces of medical knowledge within the record, that knowledge that Dr. Ho and his team have is

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also available to anesthesia, the anesthesia resident that supports him, the surgeon and the surgical residents that are participating with him.

Q. Now, the next two lines down, "His obesity has been refractory to multiple therapeutic plans that included diet and exercise, what do you mean by that?

A. He was extremely obese in 1989 or '90 -- whichever is the first actual medical record I have -- and by history long before that. He was counseled with various ways of losing weight and he didn't achieve those. He is in morbid obesity group, therefore, we would say that he is refractory to the interventions that were undertaken for his losing weight.

Q. Going down a little bit you said, "His blood pressure would appear to be a major problem as an outpatient but would come under rapid control when hospitalized." What do you attribute that to?

A. The influence of bed rest is one. The primary influence is probably compliance, forced compliance with medication, and then there is forced compliance with diet. When he goes in the hospital he is on a salt-restricted program, et cetera, he is taking his medications and his blood pressure comes down. This is repeated not only in the Huron hospitalizations, but in the previous hospitalizations.

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Q. Anything else?

A. I'm sure that there's more, but that's a good start.

Q. His cardiac symptoms would appear directly related to the degree of his hypertension. I think we hit on that earlier, correct, hypertension would increase, rise, then it would put more stress on his heart; is that correct?

A. That's correct.

Q. And then that would occur when he was as an outpatient as opposed to an inpatient, correct?

A. That's correct.

Q. And would also rapidly subside when his blood pressure was brought into control.

Is there any heart problem that Dewey Jones had that was not directly related to or caused by his blood pressure?

A. I believe so.

Q. What was that?

A. As we mentioned earlier, I believe he probably has some underlying cardiomyopathy and diffuse abnormality of heart muscle, contractile elements and efficiency. The interesting thing also about this gentleman is that his overall cardiac output when pressured, his cardiac index is always good, super

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normal. In fact, he's got a high cardiac output. That really further supports his ability once the stresses of hypertension, et cetera, are removed to compensate for his fluid retention and then diurese very rapidly and come to almost a near asymptomatic state.

His cardiac indexes are running at five and six liters per minute squared, and that's very good even for a very obese person who's got cardiac reserves still there.

Q. Now, can a patient bring their blood pressure under control within two days, can he just in two days have control of hypertension?

A. Can it be done, sure it can be done.

Q. Is that, in your opinion, what happened here, within two days he had control of hypertension?

A. What statement are you referring to here?

Q. Just that, you know, you talk about the fact that his problems with his heart were directly related to his blood pressure being out of control and then you tell us that you concur that you would have recommended surgery for this patient during the same hospitalization.

Is what happened is his blood pressure got under control within two days of being admitted?

A. His blood pressure clearly came under

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control. In fact, on one or two occasions he actually had some relative hypotension when he would stand up, which would suggest that his vascular volume was decreasing. But more importantly than that, he came under control and improved control somewhere actually after August. He was certainly better in September than he was in August.

We do know that he has lost that nearly 40 pounds we've mentioned before, which, in my opinion, would be fluid diuresis, which is a sign of continued improvement. So he had continued to improve certainly since September, probably since August, and when he did come into the hospital, I believe, in October, yes, he had some significant blood pressure elevations, but they came down very quickly.

He had not gotten into as much trouble as he had previously in August. He was stable and far, far better, far better than from the left heart standpoint in his hypertension, far better than he was back in August.

Q. If I understand it, you attribute some of his hypertension getting better due to the fact that he was taking medications?

A. I presume that.

Q. Anti-hypertensive medications?

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A. I don't know if anyone was counting his pills and putting them down his mouth, but we presume so. He certainly was better.

Q. We know that when he was in the hospital somebody was counting his pills, basically we know he was taking his hypertensive medicine?

A. That's correct.

Q. Are you aware of any time in which his hypertensive medications were discontinued during his hospitalization?

A. I know that they were stopped prior to or when he was NPO as a usual order at midnight, yes. Sure, I'm aware of that.

Q. Is that appropriate?

A. Very common, very appropriate.

Q. So for Dewey Jones not to have his anti-hypertensive medications before surgery, in your opinion, made no difference as to the outcome?

A. Made no difference. In fact, the only important thing is that the anesthesiologist knows that when he is managing the patient. I guess we should ask the question, when would he get his morning dose of drug, 10:00 in the morning probably. At our place Digitalis is given at 1:00 in the afternoon as its daily dose.

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He's already gone to surgery. He really hasn't been deprived of medicine, he just didn't get his medicine earlier than he would normally get it, unless he would get it at 7:00. Most hospitals don't give the medicine out at that time.

The anesthesiologist can titrate his therapy to manage the patient's blood pressure. In fact, we saw where the patient came in with a very satisfactory blood pressure with anesthesia, they induced him with their anesthesia and he actually developed a little bit of hypotension, which is very common and which corrected itself, and he was maintained stable throughout the surgical period.

Q. When was Dr. Adamek aware that Dewey Jones was NPO the night before, taken off his anti-hypertensive medications?

A. I don't have firsthand knowledge of that and I don't recall reading it in the deposition.

Q. When are you aware of the first time Dr. Adamek knew anything about Dewey Jones' medical history?

A. Probably the morning of surgery.

Q. Before surgery?

surgery -- knife was struck.

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Q. It would have been appropriate for him to know Dewey's medical history before surgery or before the knife was struck?

A. It would be appropriate for an anesthesiologist to know that, and I believe some anesthesiologist saw him. Now, whether it's the same fellow that saw him that was participating in his case, I don't have that affixed in my mind. I think there's some uncertainty about that. You'll have to ask him. However, that happens to be the standard practice within the Cleveland Clinic, Baylor College of Medicine and other teaching institutions.

Q. So it would have made no difference had Dr. Adamek known Dewey's previous conditions before surgery in your opinion, correct?

A. I think that it's important from the record for the anesthesiologist to know this information, but, no, I don't think it would make any significant difference.

Q. Isn't cholelithiasis basically the definition of presence of gallstones in the gallbladder -- do you know what cholelithiasis is?

A. Yes. Stones, stones in the gallbladder.

Q. You're aware that Dr. Badri was not concerned with the risk of perforation before surgery?

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A. I'm not concerned about that risk before surgery.

Q. And you understand that did not come into play in Dr. Badri's mind, that there was a risk of perforation, correct?

A. I would accept that.

Q. As it relates to Dr. Badri, is it critical for the surgeon who calls for an internal medicine consult to make sure that that consult was thoroughly done? Do you understand?

A. You need to --

Q. Is it critical for a surgeon when he asks for medical clearance from an internist, is it important for him to follow up to make sure that it was properly performed?

A. No. I guess I would take offense -- if I was asked by a surgeon to do a consultation and if I did that consultation and he came around and asked everybody if I did it correctly, I would take offense to that. I would think that if I told him my opinion and if he has any questions about it he can ask me about it and we can certainly argue or discuss any aspects of the case.

No, it's not part of his direct responsibility to question my every move. At the same time, it is up to each one of the physicians involved to make an independent judgment, and either the surgeon, the anesthesiologist or the internist can counterman or at least put in a negative vote if he feels strongly about surgery or not having the surgery. It's the way the system works.

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Q. Any of those could stop surgery?

A. Yes.

Q. And the fact that the surgeon asked you for a consult is because he's relying on you and feels that you are medically educated well enough and experienced enough to give clearance if it s necessary?

A. That's correct.

Q. So in this case Badri was relying on Dr. Ho in that same instance?

A. He was relying on Dr. Ho to take care of the internal medicine aspects of the clearance. At the same time, he was assessing the surgical aspects of the clearance, and, in fact, there is a cross-fertilization between those factors.

Q. Now, as an internist, if you call in a phonology consult, do you then check to see if the phonology had performed their consult before you medically clear the patient?

MR. CASEY objection.

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Are you talking about this case?

MR. ALLEN Just hypothetically, in general.

BY MR. ALLEN

Q. If you call in a pulmonology consult, you make sure that the pulmonology consult is done, right, before you medically clear the patient?

MR. CASEY: Objection.

A. Not always, not if I've already made up my mind I will be moving forward. Now, if the pulmonologist has some urgent great disagreement, you know, he can contact me or stop it in one way or another if he feels strongly.

I have gotten consults -- certainly I've gotten consults without seeing the full report and moving toward surgery, dermatology consult, neuro consult. Sometimes you want the information just to manage the postoperative course and you want them to have a chance to see the patient before surgery so they have a better feel.

In fact, in cardiology, in our little world of arrhythmology I am frequently asked to see the patient to manage his postoperative heart rhythm and I'm asked to see him before the surgery. The surgeon doesn't care what I want to say beforehand, he just

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says be around to manage this problem afterwards.
Q. So you bear no responsibility to make sure that a pulmonology consult was completed if you call in a pulmonology consult?
A. It depends on the reason why I'm calling it in.
Q. Hypothetically, in this case if Dr. Ho had asked for a pulmonology consult for his evaluation as to whether to medically clear Dewey Jones and that pulmonology consult was not completed nor did he know if it was completed and he still medically cleared the patient, would that be a breach of the standard of care?
MR. CASEY: Objection.
A. That doesn't sound like a hypothetical question. Was it a hypothetical question?
Q. It was a hypothetical question.
A. So Dr. Smith calls in Dr. Jones to see Mr. Adams, right?
Q. Do it however you want to do it. My hypothetical is that --just follow with me on this question. If you can't answer it, that's fine, we'll strike another question.
Hypothetically, if the surgeon finds and the facts show and it's discovered that when

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medically clearing Mr. Jones Dr. Ho[illegible] for a pulmonology consult and when he medically cleared Dewey Jones he did not follow up to find out whether the pulmonology consult was done, completed, nor did he ask pulmonology for their input before he medically cleared, is that a breach of the standard of care?
MR. CASEY: objection. You have to --
A. No.
Q. Because?
A. Depends on why the consult is being called.
Q. If he's calling it as to whether or not to medically clear the patient for surgery.
MR. CASEY: Objection.
A. If he is calling someone to say please advise me whether I can or can't take this patient to surgery and that's the question he's asking, the only question he's asking, then he needs to get the answer if he is going to depend on that answer.
Does he have to depend on that answer? No; he's a physician, he doesn't have to depend on that answer. But if he is calling that physician in, that pulmonologist in to say, look, this guy's got bad chronic pulmonary obstructive disease and I know he's

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going to be in trouble or most likely he's going to be in trouble postoperatively, I want you to come around to help us and be around, then he doesn't have to wait to see that thing, his report, no, he just has to -- he knows that the doc is around, he's been notified and when he needs help the physician will be able to come and help, and he will have a perspective of what the patient looked like before the surgery. It happens all the time. It's good medicine.
Q. But if he's medically relying on pulmonology to help him determine whether Dewey Jones is medically cleared for surgery, then, in your opinion, it doesn't matter whether he waits for the pulmonology consult or not?
A. If he is waiting for that consult to help him make that decision?
Q. Right.
A. If the surgeon says go and if the anesthesiologist says go -- which most anesthesiologists really do acute pulmonary medicine in intensive care units and are in fact equally or better equipped to make that assessment -- if the anesthesiologist who is actually managing the patient says it's okay to go, then it's fine, he doesn't have to wait for the pulmonologist to come in, absolutely

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not.
Q. Do you know who the anesthesiologist was that evaluated Dewey Jones preoperatively?
A. I do not recall his name. It's my understanding that it was not Dr. Adamek.
Q. It was a resident, correct?
A. I will accept that if that's true. Rosen you say?
MR. CASEY: No, it was a resident.
A. Oh, a resident. A resident almost always sees the patient first, yes.
Q. What is your understanding as to when Dr. Adamek was present for surgery?
A. Ask it again.
Q. When is it your understanding of when Dr. Adamek was available in the surgical OR room during Dewey Jones' surgery?
A. I believe he was in the room at the very beginning of the surgical procedure.
Q. Did he stay throughout the surgery?
A. No.
Q. Was he there at the time frame around 11:30?
MR. CASEY: You want to ask

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12:30?
Q. 12:30?
A. I believe, reading his deposition, that he came in, he was in and out of the room. He came in ten minutes or so after the anesthesia resident called him when the patient was developing his desaturation. Now, the exact time, if I go from 12:30, I guess it was 12:45 plus or minus a couple minutes.
Q. Who are you insured by; who is your insurance company?
A. I don't know.
Q. You don't know your insurance company?
A. No.
Q. It's not PIE?
A. I have no idea.
Q. Do you know who writes your checks to your insurance carrier? You don't write your checks?
A. I don't.
Q. Who does?
A. Our group administrator.
Q. So you have no idea who your medical insurance carrier is?
A. I went to a meeting and they gave us a little course one time, but, no, I have no idea.
Q. At your hospital here at Columbia Mercy

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Medical Center, there are gs an nts in that hospital, correct?
A. Yes.
Q. Are all the at that it Board certified?
A. No.
Q. Is there not a policy as to whether they need to be Board certified to be an attending, teach the residents?
A. Boy, to teach residents, not that I'm aware of, particularly depending on what subspecialty it is and how long the person has been around. Mason Sones who introduced coronary angiography before it got to Atlanta wasn't Board certified. He taught me.
Q. Is there a policy at your hospital as to whether or not you're to be Board certified?
A. There is a policy to do what, to practice?
Q. To teach residents.
A. No.
Q. Have you ever had surgery yourself?
A. Yes.
Q. Was the surgeon Board certified to perform surgery?
A. I don't know. I presume so.
Q. Would you have surgery by a surgeon that

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wasn't Board certified?
A. Sure.
Q. Would you allow anybody in your family to have surgery by a non-Board certified surgeon?
A. Depending, sure.
Q. Depending on what?
A. Lots of things. I'm not sure, but I think DeBacki essentially had no formal training in cardiac surgery. He was a peripheral vascular surgeon. He's a pretty famous name. I'd let him operate. Of course, he's 85, he still operates, but that's all right.
Grunsik, your famous cardiologist that invented angioplasty coming from Switzerland at Atlanta was not Board certified. He died in an airplane crash. He taught lots of people.
Q. In your opinion, is Dewey Jones in his present state less likely to develop infection at a nursing home or if he's taken care of out of his own home by an in-house nurse?
A. Depends on who you ask. I'm sure that the nursing home would say that they're less likely to get infection there because they have some actual training and skills and volume of experience. I'm sure that any individual might say that they could do something better.

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Q. Just asking you, Doctor.
A. Probably a trained facility would be less likely *to* introduce nosocomial infections than an untrained home environment.
Q. Have you had any conversations with any of the defendant doctors in this case about this case?
A. No.
Q. Any conversations with any other medical experts regarding this case?
A. Medical experts, no.
Q. That have been hired on this case?
A. No.
MR. ALLEN Thank you, Doctor.
- - -
(DEPOSITION CONCLUDED.)
(SIGNATURE WAIVED.)
- - -

STATEOFOHIO, )
COUNTY OF CUYAHOGA. ) SS:
CERTIFICATE

I, LAUREN I. ZIGMONT-MILLER, Registered Professional Reporter and Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within-named witness, JAMES D. MALONEY, M.D., was by me first duly sworn to tell the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by him was reduced to stenotypy in the presence of said witness, and afterwards transcribed by me through the process of computer-aided transcription, and that the foregoing is a true and correct transcript of the testimony so given by him as aforesaid.

I do further certify that this deposition was taken at the time and place in the foregoing caption specified.

I do further certify that I am not a relative, employee or attorney of either party, or otherwise interested in the event of this action.

IN WITNESS WHEREOF. I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, on this 31st day of July 1997.

Lauren I. Zigmont-Miller, RPR and Notary Public in and for the State of Ohio.

## LAWYER'S NOTES

| Page | Line |
| --- | --- |

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1969-1971 Residency, Internal Medicine
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PLAINTIFF'S EXHIBIT 1 7-25-97

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Pacemaker Committee, Member
Ad Hoc Committee on RBRVS and Clinical Cardiac Electrophysiology
Ad Hoc Committee on Health Care Initiation, President
Training Directors Committee
Abstract Review Committee
*American* Heart Association - Fellow
Texas Affiliate Central Research Review Committee, 1993-94
American Medical Association
Ohio State Medical Association
North American Society of Pacing and Electrophysiology
President, 1991-92
Board of *Trustees*
Abstract Review Committee
Awards Committee
By-Laws Committee
Government Relations Committee (Therapeutic)
Membership Committee

NASPE/ESCWGA Committee
NASPEXAM, Inc.
Nominations Committee
Associate Editor, NASPETAPES Editorial Board
Physician Advisor, Clinical Allied Professionals (CAP) Committee
Chairman, Fellowship Training Program Directors
Program Chairman - National Meeting, San Diego, CA, 5/31-6/2/90
National Electrophysiology Society
Northeastern Ohio Society of Pacing and Electrophysiology: 1982-93
Founder: 1982
President: 1985-1992
Houston EP Society
International Society of Holter Monitoring

**AWARDS:**

*1966* Mosby Book Award, Temple Medical School
1995 American Heart Association's Champions of the Heart-Heart Circle Recognition

EDITORIAL BOARDS:

Editor, Baylor Cardiac Arrhythmia Center: International Digest
Clinical Progress in Electrophysiology
Journal of Cardiovascular Electrophysiology
Journal of Interventional Cardiology

Manuscript Reviewer for:
American Heart Journal
American Journal of Cardiology
American Journal of Physiology: Heart and Circulation Physiology
Circulation
Chest
Clinical Progress in Electrophysiology and Pacing
Journal of the American College of Cardiology
Mayo Proceedings
Pacing and Cardiac Electrophysiology

Abstract Reviewer for:
American College of Cardiology
American Heart Association
North American Society of Pacing and Electrophysiology

**ADVISORY COMMITTEES:**

Independent Multicenter AICD Registry (Bilitch Report) 1982-1993
Physicians Advisory Council on Lead Performance, Medtronic, Inc. 1984-Present

CERTIFICATION AND LICENSURE:

Certification: American Board of Internal Medicine, 1972
Subspeciality Board in Cardiovascular Diseases, 1975

Licensure:
Active: Texas (Distinguished Professors License), 7/2/93
Ohio (35-04-6948), 12/7/81
Minnesota (19059), 2/20/70
Pennsylvania (9613), 7/17/67
Inactive: Massachusetts (30358), 10/26/67

current research activities:

1993-94 Principal-Investigator: "Investigational Plan Medtronic Model 7217B PCD Pacer-Cardioverter Defibrillator With Non-Thoracotomy Lead System." Medtronic.

1993-94 Principal Investigator: "Clinical and Cellular Electrophysiologic Profiles of Selected Antiarrhythmic Drugs" Pilot Study for SCOR (NIH)

1993-95 Principal Investigator: "Mode Selection Trial in Sinus Node Dysfunction" (MOST), NHLBI Brigham & Women's Hospital.

1993-97 Principal Investigator: "Multicenter Automatic Defibrillator Implant Trial" (MADIT), Cardiac Pacemakers, Inc.

1993-98 Principal Investigator: "Antiarrhythmics vs. Implantable Defibrillator (AVID), NHLBI.

1993-98 Co-Investigator: "Transvenous Cardioversion of Atrial Fibrillation in Human."

1993-98 Principal Investigator: "CPI Ventak P2 Endotak System Phase I," cardiac Pacemakers, Inc.

1993-98 Principal Investigator: "CPI Ventak PRX System Phase III," Cardiac Pacemakers, Inc.

1993-98 Principal Investigator: "CPI Ventak PRX Endotak System Phase II," Cardiac Pacemakers, Inc.

1993-98 Principal Investigator: "Investigational Plan for the Clinical Evaluation of the Transvenous Res-Q ACD System." IDEG920047, Intermedics.

1993-98 Principal Investigator: "Pacemaker Selection in *the* Elderly (PASE): A Quality of Life Study," Pilot Study.

1993-98 Co-Investigator: "Clinical Evaluation of the Medtronic Thera Dr Model #7940/7941/7942 Pacemaker Pulse Generators." Medtronic.

1993-98 Principal Investigator: "Comparison of the Safety and Efficacy of D-Sotalol and D,L-Sotalol in Patients with Life-Threatening VT/VF: A randomized, Double Blind, Multi-Center Study," Bristol Myers-Squibb.

1993-98 Co-Investigator: "Assessment of Cardioversion Utilizing Transesophageal Echocardiography" (ACUTE) Pilot Study.

1993-98 Principal Investigator: "Dose-Ranging Study of Oral Bidisomide vs. Placebo in Reducing the Recurrence of Symptomatic Atrial Fibrillation/Flutter and Paroxysmal Supraventricular Tachycardia" (NP8-92-02-046) Searle Scholars Program.

1993-98 Co-Investigator: "Efficacy and Safety of d-Sotalol Versus Placebo in the Maintenance of Sinus Rhythm following Pharmacologic or Electrical Cardioversion in Subjects with Sustained Atrial Fibrillation or Atrial Flutter." (CV102-018) Bristol Myers Squibb

1994-99 Principal Investigator: "An Open-Label Safety Study of Intravenous Amiodarone HCL in Patients with Life-Threatening Ventricular Tachycardia/Fibrillation." Wyeth-Ayerst Research.

## TEACHING ACTIVITIES

1976-81 Director, Cardiac Electrophysiology and Pacing Fellowship Training Progamm
Mayo Medical School and Mayo Clinic Foundation, Rochester, Minnesota

1981-93 Director, Cardiac Electrophysiology and Pacing Fellowship Training Program
Cleveland Clinic Foundation, Cleveland, Ohio

1993-94 Director, Cardiac Electrophysiology and Pacing Fellowship Training pro —
Baylor Collcgc of Medicine, Houston, Texas

1994–pres. Director, Electrophysiology Cardiology Research Program;
Professor of Medicine, NEOUCOM

Sponsorship of Training Awards:

1984-85 Sponsor: NASPE Traveling Fellowship Award to F. Abi-Samra, M.D.

1984-86 Sponsor: Turkey Fellowship Award to Atila Emri, M.D.

1986-87 Sponsor. NASPE Traveling Fellowship Award to Fred Jaeger, D.O.

1989-92 Sponsor: Benson Fellowship Award to Elena Sgarbossa, M.D.

1990-91 Sponsor: NASPE Traveling Fellowship Award to Steven Moore, D.O.

1994-95 **Sponsor: NASPE Fellowship** in Cardiac Pacing and Electrophysiology Award to David J. Arnold, M.D., Ph.D.: "Correlation of Specific Sodium and Potassium Channel Blocking Profiles in Human Cardiomyocytes *with* Electrophysiological Profiles of Antiarrhythmic Drugs." Siemens Pacesetter Systems, Inc., $30,000.

Thesis Advisor and Sponsor of Biomedical Research Training:

1985-88 Eugene Ching Yeh: Masters Thesis "The Effect of Atrio-Ventricular Synchrony on Stroke Volume During Ventricular Tachycardia in Man." Department of Biomedical Engineering, Case Western Reserve University, January, *1988*.

1986-88 Bin Lu: Masters Thesis"A Microcomputer-Based System for Real-Time Beat-to-Beat Measurement of Intracardiac Conduction Time Intervals." Department of Biomedical Engineering, Case Western Reserve University, January 12, 1988.

1985-87 Frank Headley Melville: Masters Thesis"A Computer System for Mapping Endocardial Activation Sequences During Electrophysiologic Catheterization." Department of Biomedical Engineering, Case Western Reserve University, May 18, 1987.

1987-89 Dirar Shafiq Khoury: Masters Thesis "Continuous Right Ventircular Volume Assessment by Catheter Measurement of Impedance for Antitachycardia System Control." Department of Biomedical Engineering, Case Western Reserve University, May 14, 1989.

ORIGINAL PAPERS

1. Mdoncy JD, Ritter DG, McGoon DC, Danielson GK: Identification of the conduction system in corrected transposition and common ventricle at operation. Mayo Clinic Proceedings 1975; 50:387-394.

2. Okoroma EO, Guller B, Maloney JD, Weidman WH: Etiology of right bundle branch block pattern after surgical closure of ventricular-septal defects. Am Heart J 1975; 90:14-18.

3. Hartzler GO, Maloney JD: Supra-His alternate-beat Wenckebach dysrhythmia. Mayo Clinic Proceedings 1975;50:475-488.

4. Hartzler GO, Maloney JD Intra-His block with distal His pacemaker responsive to autonomic stimuli. Mayo Clinic Proceedings 1977; 52:46-50.

5. Pritchard DA, Maloney JD, Seward JB, Tajik AJ, Fairbairn JFII, Pairolere PC: Peripheral arteriovenous fistula: detection by contrast echocardiography. Mayo Clinic Proceedings 1977; 52:186-190.

6. Hartzler GO, Maloney JD: Cardioinhibitory carotid sinus hypersensitivity: intracardiac recordings and clinical assessment. Arch Intern Med 1977; 137:727-731.

7. Pritchard DA, Maloney JD, Barnhorst DA, Spittell JA Jr: Traumatic popliteal arteriovenous fistula: diagnostic methods and surgical management. Arch Surg 1977; 849-852.

8. Hartzler GO, Maloney JD, Curtis JJ, Barnhorst DA: Hemodynamic benefits of atrioventricular sequential pacing after cardiac surgery. Am J Cardiol 1977; 40:232-236.

9. McGoon DC, Danielson GK, Ritter DG, Wallace RB, Maloney JD, Marcelletti C: Correction of the univentricular heart having two atrioventricular valves. 3 Thorac Cardiovasc Surg 1977; 74:218-226.

10. Maloney JD, Pairolero PC, Smith BF Jr, Hattery RR, Brakke DM, Spittell JA Jr: Ultrasound evaluation of abdominal aortic aneurysms. Circulation 1977; 56 (Suppl. II):80-85.

11. Hartzler GO, Maloney JD: Transesophageal atrial pacing in the Wolff-Parkinson-White syndrome. Mayo Clinic Proceedings 1977; 52:576-581.

12. Sieg K, Hagler DJ, Tritter DG, McGoon DC, Maloney JD, Seward JB, Davis GK: Straddling right atrioventricular valve in criss-cross atrioventricular relationship. Mayo Clinic Proceedings 1977; 52:561-568.

13. Hartzler GO, Maloney JD: Programmed ventricular stimulation in management of recurrent ventricular tachycardia. Mayo Clinic Proceedings 1977; 52:731-741.

14, Curtis JJ, Maloney JD, Barnhorst DA, Pluth JR, Hartzler GO, Wallace RB: A critical look at temporary ventricular pacing following cardiac surgery. Surgery 1977; 82:888-893.

15. Espinosa RE, Dlass DW, Maloney JD: Contribution of the electroencephalogram monitoring cardiac dysrhythmias. Mayo Clinic Proceedings 1978; 53:119-122.

16. Pritchard DA, Maloney JD, Bernatz PE, Symmonds RE, Stanson AW: Surgical treatment of congenital pelvic arteriovenous malformation. Mayo Clinic Proceedings 1978, 53:607-611.

17. Tabry IF, McGoon DC, Danielson GK, Wallace RB, Davis Z, Maloney JD: Surgical management of double-outlet right ventricle associated with atrioventricular discordance. J Thorac Cardiovasc Surg 1978; 76:336-344.

18. Danielson GK, McGoon DC, Wallace RB, Maloney JD: Surgery of corrected transposition. International Congress Series No. 470, Proceedings of the VIII World Congress of Cardiology, S Hayase and S Murai Editors. 1978; 747-750.

19. Danielson GK, Tabry IF, Ritter DG, Maloney JD: Successful repair of double-outlet right ventricle, complete atrioventricular discordance associated with dextrocardia and pulmonary stenosis. J Thorac Cardiovasc Surg 1978; 76:710-717.

20. Anderson RH, Danielson GK, Maloney JD, Becker A E Atrioventricular bundle in corrected transposition (letter). Ann Thorac Surg 1978; 26:95-97.

21. Danielson GK, Maloney JD, Devloo RAE Surgical repair of Ebstein's anomaly. Mayo Clinic Proceedings 1979; 54:185-192.

22. Danielson GK, McGoon DC, Maloney JD, Ritter DG: Surgical septations of univentricular heart with outlet chamber, Herz 1979; 4:262-266.

23. Holmes DR Jr, Nissen RG, Maloney JD, Broadbent JC, Merideth J: Transvenous tined electrode systems: an approach to acute dislodgement. Mayo Clinic Proceedings 1979; 54:219-222.

24. Nissen RG, Holmes DR Jr, Mdoney JD, Feldt RH, Danielson GK: Experience with permanent cardiac pacemakers in congenital heart disease. Montreal, Canada, Proceedings of the VIth World Symposium on Cardiac Pacing. PACESYMP 1979.

25. Holmes DR Jr, Maloney JD, Broadbent JC, Gersh B, Merideth J: Transvenous cines electrode systems; an approach to the problem of acute dislodgement. Proceedings of the VIth World Symposium on cardiac Pacing. Montreal, Canada, PACESYMP, 1979; Chapter 31.

26. Holmes DR Jr, Gersh BJ, Maloney JD, Merideth J: Followup experience with permanent endocardial tined pacemaker electrodes. J Thorac Cardiovasc Surg 1980; 79:565-569.

27. Miller FA Jr, Holmes DR Jr, Gersh BJ, Maloney JD: Permanent transvenous pacemaker implantation via the subclavian vein, Mayo Clinic Proceedings 1980; 55:309-314.

28. Holmes DR Jr, Hartzler GO, Mdoney JD: Concealed retrograde bypass tracts and enhanced AV nodal conduction: an unusual subset of patients with refractory paroxysmal supraventricular tachycardia. Am J Cardiol 1980; 45:1053-1060.

29. Marcelletti C, Maloney JD, Ritter DG, Danielson GK, McGoon DC, Wallace RB: Corrected transposition and ventricular septal defect. Ann Surg 1980; 191:751-759.

30. Holmes DR Jr, Gersh BJ, Shub C, Maloney JD, Merideth J: The value of redundancy in chronic bipolar pacemaker electrode systems. PACE 1980; 3:436-439.

31. Holmes DR Jr, Maloney JD, Feldt RH: The use of the percutaneous subclavian technique for permanent cardiac pacing in childhood. Mayo Clinic Proceedings 1980; 55:579-582.

32. Brown KA, Maloney JD, Smith HC, Hartzler GO, Ilstrup DM: Carotid sinus reflex in patients undergoing coronary angiography: correlation of degree and location of coronary artery disease with response to carotid sinus massage. Circulation 1980; 62:697-703.

33. Maloney JD, Nissen RG, McColgan JM: Open clinical studios at a referral center: chronic maintenance tocainide therapy in patients with recurrent sustained ventricular tachycardia refractory *to* conventional antiarrhythmic agents. Am Heart J 1980; 100:1023-1030.

34. Hay I, Duick DS, Vliestra RE, Maloney JD, Pluth JR: Thyroxine therapy in hypothyroid patients undergoing coronary revascularization: a retrospective analysis. Ann Intern Med 1981; 95:456-457.

35. Hayes DL, Maloney JD, Merideth J, Holmes DR Jr, Gersh B, Broadbent JC, Osborn MJ, Fetter J: Initial and early follow-up assessment of *tho* clinical efficacy of the multiparameter-programmable puisc generator. PACE 1981; 4:417-431.

36. Choo MH, Holmes DR Jr, Gersh BJ, Maloney JD, Meridcth J, Pluth JR, Trusty J: Permanent pacemaker infections: characterization and management Am J Cardiol 1981; 48:559-564.

37. Choo MH, Holmes DR Jr, Gersh BJ, Mdoney JD, Merideth J, Pluth JR, Trusty J: Infected pericardial pacemaker systems. J Thonc Cardiovasc Surg 1981; 82:794-796.

38. Kennel AJ, Callahan JA, Maloney JD, Zajarias A: Adult-onset familial infraHisian block. Am Heart J 1981; 102:447-452.

39. McGoon MD, Maloney JD, McGoon DC, Danielson GK: Long-term endocardial atrial pacing in children with postoperative bradycardia-tachycardia syndrome and limittle L, Maloney JD. The effect of atrio-ventricular synchrony on stroke volume during ventricular tachycardia. Presented at 9th Annual Scientific Session of North American Society of Pacing and Electrophysiology, May 1988, Los Angeles, CA.

40. Holmcs DR, Osborn MJ, Gersh B, Maloney JD. Danielson GK: the Wolff-Parkinson-White syndrome: A surgical approach. Mayo Clinic Proceedings 1982; 57:345-350.

41. Eastway RJ, Maloney JD Yiannikas J, golding LAR Electrophysiologically-guided *surgical* treatment of recurrect sustained ventricular tachycardia: variables influencing the decision to intervene. Cleveland Clinic Quaterly 1982; 49: 107-117.

42. Yiannikas J, Eastway RJ, MacIntyre WJ, Maloney JD, Go RT, Cook SA, Sufka B, Castle LW: Phase imaging: a new noninvasive method for diagnosis, localization of accessory pathways and serial assessment of therapy in patients with Wolff-Parkinson-White syndrome. Cleveland Clinic Quarterly 1982; 49:61-72.

43. Hearnes SF, Maloney JD: Pacemaker system failure secondary to air entrapment within the pulse generator pocket, a complication of subclavian venipuncture for lead placement. Chest 1982; 82:651-654.

44. Nishimura RA, Vliestra RE, Maloney JD, Merideth J: Early follow-up of lead performance in atrioventricular sequential systems. PACE 1982; 5:694-699.

45. Hearnes, SF, Maloney JD: Pacemaker system failure secondary to air entrapment within the pulse generator pocket, A complication of subclavian venipuncture for lead placement Chest 1982; 82:651-654.

46. Maloney JD, Castle LW, Eastway RJ, Sterba R, Moodie D, Gill C, McGoon M. "Long-term endocardial pacing in children with postoperative bradycardia-tachycardia syndrome following the Senning, Mustard, and Fontan operations". Cardiac Pacing 1983. Pgs. 585-589.

47. Hayes DL, Holmes DR Jr, Maloney JD, Neubauer SA, Ritter DG, Danielson GK: Permanent endocardial pacing in pediatric patients. J Thoracic Cardiovasc Surg 1983; 85:618-624.

48. Huhta JC, Maloney JD, Ritter DG, Ilstrup DM, Feidt RH: Complete atrioventricular block in patients with atrioventricular discordance. Circulation 1983; 67: 1374-1377.

49. Walls JT, Maloney JD, Pluth JR: Clinical evaluation of a sutureless cardiac pacing lead: chronic threshold changes and lead durability. Ann Thorac Surg 1983; 36:328-331.

50. Eastway RJ, Castle LW, Maloney JD, Yiannikas J, Cooper JC, Morant VA: Dual chamber DDD pacing: initial and early follow-up assessment, problems, complications and limitations. Cardiac Pacing 1983; pgs. 477-482.

51. Levine PA, Belott PH, Bilitch M, Boal B, Escher DJ, Furman S, Griffin JC, Hauser RG, Maloney JD, Morse JD, Morse D, et al: Recommendations of the NASPE Policy Conference on pacemaker programmability and follow-up. PACE 1983; 6:1222-1223.

52. Levine PA, Castle LW, et al. "Proceedings of the Policy Conference of the North American Society of Pacing and Electrophysiology on programmability and pacemaker follow-up programs". Clin Prog in Pacing and Electro-physiology 1984. Vol. 2; pgs. 145-191.

53. Castle LW, Maloney JD, Morant VA, Ching E, and Gilli N. "DDD Pacing; Initial and Early Follow-up Experiences. Efficacy, Safety, and Reliability of the Telectronics 2251 Autima". Vectors. August, 1984.

54. Sedman AJ, Gal J, Mastropaolo W, Johnson P, Maloney JD, Moyer TP: Serum tocainide enantiomer concentrations in human subjects. Br J Clin Pharmacol 1984; 17:113-115 (Review),

55. Adams KV, Raju NV, Sterba R, Castle LW, Morant VA, Maloney JD: Electrophysiology determinants and clinical experience in termination of sustained ventricular tachycardia Cleve Clin Q 1984; 51:47-53.

56. Detrano R, Maloney JD, Letherman J: Ventricular arrhythmias and serum potassium: is there a correlation in the arrhythmic patient? Cleve Clin Q 1984; 51:55-58.

57. Raju NV, Hart N, Maloney J, Zaide A, Adams K: Cardiac involvement in polymyositis: a case report and review of the literature. Cleve Clin Q 1984; 51:89-91.

58. Parsonnet V, Escher DJ, Furman S, Gillette PC, Goldman BS, Harthorne JW, Hauser RG, Levine PA, Maloney JD: Indications for dual-chamber pacing. PACE'1984; 7:3 18-319.

59. Schiavone WA, Lever HM, Maloney J D Atrial and ventricular programmed electrical stimulation in patients with symptomatic hypertrophic cardiomyopathy. Cleve Clin Q 1984; 51:601-609.

60. Maloney JD, Castle LW, Momt V, Sterba R: Sedation and pain management during pacemaker implantation, electrophysiologic testing, and related procedures. Clin Ther 1985; 8:84-89.

61. Boal BH, Escher DJ, Furman S, Hauser R, Maloney J, Parsonnet V, Raza ST, Tomatis L, Kruse IB, Bernstein AD: Report of the policy conference on pacemaker reuse sponsored by tho North American Society of Pacing and Electrophysiology. J Am Coll Cardiol 1985; 5:808-810.

62. Bod BH, Escher DJ, Furman S, Hauser R, Maloney J, Parsonnet V, Raza S, Tomatis L, Kruse I: Report on the policy conference on pacemaker re-use sponsored by the North American Society of Pacing and Electrophysiology. PACE 1985; 8:161-163.

63. King-Rankine M, Maloney JD, Golding LA, Morris R: The initial case at The Cleveland Clinic Foundation of the automatic implantable cardioverter-defibrillator and review of the literature. Cleve Clin Q 1985; 52:75-80.

64. Beaver BB, Maloney JD, Castle LW, Momt VA, Keefe JM, Ching E Design-dependent cross-talk in a second generation DDD pacemaker. PACE 1986;9:65-77.

65. Fontaine JM, Maloney JD, Castle LW, Morant VA: Noninvasive assessment of ventriculo-atrial conduction and early experience wirh *tho* tachycardia termination algorithm in pacemaker-mediated tachycardia PACE 1986; 9:212-222.

66. Valenta H Jr, Nappholz T, Maloney J, Simmons R, Sandra FA, McElroy P: Correlation of heart rate with an intravenous, impedance, respiratory sensor. Biomed Sci Instrum 1986;22:7-12.

67. Rafla SM, Ul-Haque I, Maloney J, Castle L, Sterba R, Morant V: Efficacy of amiodarone therapy in supraventricular tachyarrhythmia role of electrophysiologic study. The Alexandria Medical Journal 1986; 28:125-133.

68. Schiavone WA, Maloney JD, Lever HM, Castle LW, Sterba R, Morant V: Electrophysiologic studies of patients with hypertrophic cardiomyopathy presenting with syncope of undetermined etiology. PACE 1986; 9:476-481.

69. Drummer E, Maloney JD, Castle LW, Sterba R, Yeh E: Catheter ablation of the atrioventricular conduction system to treat patients with atrial tachyarrhythmias, including patients with pacemakers. Cleve Clin Q 1986; 53:151-157.

70. Haggman DL, Maloney JD, Morant VA, Castle LW, King-Rankine M, Goormastic M: Mexiletine therapy in patients with chronic drug-resistant malignant ventricular arrhythmias. Clinical efficacy, safety, and side effects. Cleve Clin Q 1986; 53:171-179.

71. Nappholz T, Valenta H, Maloney J, Simmons T: Electrode configurations for a respiratory impedance measurement suitable for rate responsive pacing. PACE 1986; 9:960-964, 1986.

72. Pycha C, Gulledge AB, Hutzler J, Kadri N, Maloney J: Psychological responses to the implantable defibrillator: preliminary observations. Psychosomatics 1986; 27:841-845.

73. Cooper DM, Maloney JD, Cooper LA, Hodgeman JR, Castle LW: Immunological reversal of digitalis toxicity by Fab fragments of digoxin-specific antibodies. Cleve Clin J Med 1987; 54:43-48.

74. Bilitch M, Hauser RG, Goldman BS, Maloney JD, Harthorne JW, Furman S, Parsonnet V: Performance of implantable cardiac rhythm management device. FACE 3987;10:389-398.

75. Tuzcu EM, Maloney JD, Sangani BH, Masterson ML, Hocevar KD, Golding LA, Starr NJ, Golish JA, Castle LW, Morant VA: Cardiopulmonary effects of chronic amiodarone therapy in the early postoperative course of cardiac surgery patients. Cleve Clin J Med 1987; 54:491-497.

76. Zaidi A, Maloney JD, Zaidi S, Gulledge AD: Cardiac pacing and the patient Psychiatr Med 1987; 5:235-243.

77. Prior M, Masterson MM, Maloney JD: Sensitivity and specificity of invasive and noninvasive testing for risk of sudden death in Wolff-Parkinson-White syndrome (letter). J Am Coll Cardiol 1988; 11:894-895.

78. Wilson JH, Kyreakakis A, Maloney JD: Ventricular fibrillation induced with programmed stimulation: clinical substrate and prognosis. J Electrophysiology 1988; 2:303-314.

79. Bilitch M, Denes P, Goldman BS, Maloney JD, Harthorne JW, Griffin JC, Furman S, Parsonnet V Performance of implantable cardiac rhythm management devices. PACE 1988; 11:371-380.

80. Abi-Samra F, Maloney JD, Fouad-Tarazi FM, Castle LW: The usefulness of head-up tilt testing and hemodynamic investigations in the workup of syncope of unknown origin. PACE 1988; 11:1202-1214.

81. Otero-Cagide M, Masterson ML, Wilkoff BL, Castle LW, Morant VA, Simmons TW, Maloney JD: Syncope of undetermined etiology: Value of procainamide administration during a nondiagnostic cardiac electrophysiologic study. J Electrophysiology 1988; 2:437-447.

82. Cooper D, Wilkoff B, Masterson M, Castle L, Belco K, Simmons T, Morant V, Streem S, Maloney J: Effects of extracorporeal shock wave lithotripsy on cardiac pacemakers and its safety in patients with implanted cardiac pacemakers. PACE 1988; 11:1607-1616.

83. Maloney JD, Jaeger FJ, Fouad-Tarazi FM, Morris HH: Malignant vasovagal syncope: prolonged asystole provoked by head-up tilt. Case report and review of diagnosis, pathophysiology, and therapy. Cleve Clin J Med 1988; 55:542-548.

84. Furman S, Parsonnet V, Goldman BS, Denes P, Song SL, Maloney JD, Harthorne JW, Griffin JC: The Bilitch report: performance of implantable cardiac rhythm management devices. PACE 1989; 12:510-518.

85. Tuzcu EM, Gilbo J, Masterson MM, Maloney JD: The usefulness of amiodarone in management of refractory supraventricular tachyarrhythmias. Clev Clin J Med 1989; 56:238-242.

86. Masterson M, Tarazi R, Sterba R, Maloney J, Castle L, Gill C: Preexcitation syndromes: surgical ablation therapy. The Cleveland Clinic experience. Clev Clin J Med 1989;56:607-613.

87. Khoury D, Maloney J, McAlister H, Simmons T, Wilkoff B, Rudy Y: The. impedance catheter: potential for differentiation between hemodynamically stable and unstable arrhythmias. Proceedings of the Fifteenth Annual Northeast Bioengineering Conference Editor: Soren Buus, Ph.D. 1989:1-2.

88. Maloney JD: Consequences of the Cardiac Arrhythmia Suppression Trail: calamity or clarity? (editorial). Clev Clinc J Med 1989;56:649-653.

89. Ballas SL, Rashidi R, McAlister H, Corbelli R, McCowan R, Wilkoff BL, Castle LW, Morant VA, Simmons RW, Maloney JD: Tho use of beep-0-grams in the assessment of automatic implantable cardioverter defibrillator sensing function. PACE 1989;12:1737-1745.

90. Khoury D, McAlister H, Wilkoff B, Simmons T, Rudy Y, McCowan R, Morant V, Castle L, Maloney J: Continuous right ventricular volume assessment by catheter measurement of impedance for antitachycardia system control. PACE 1989; 121918-1926.

91. . Mdoncy JD, Emre A: Cardiac pacing dilemmas: utilization, indications, and complications. Current Opinion in Cardiology 1989; 4:28-33.

92. Maloney JD, Detrano R, Jaeger FJ, Leatherman 3, Morant VA, Castle L W Potassium loading as adjunct treatment of repetitive ventricular arrhythmias. Cleve Clin J Med 1990;57:223-231.

93. Masterson MM, Pinski SL, Wilkoff B, Simmons TW, Morant VA, Golding LR, Castle LW, Maloney JD: Pacemaker and defibrillator combination therapy for recurrent ventricular tachycardia. Cleve Clin J Med 1990; 57:330-338.

94. Pinski SL, Maloney JD: Adenosine: a new drug for acute termination of supraventricular tachycardia. Cleve Clin J Med 1990; 57:383-388.

95. Saksena S, Akhtar MA, Escher DJW, Fisher JD, Furman S, Hayes DL, Maloney JD, Ruskin JN, Scheinman MM: Recommendations of the North American Society for Pacing and Electrophysiology for pacemaker and electrophysiology procedure codes - 1989. PACE 1990; 13:388-398.

96. Masterson MM, Mdoncy JD, Tuzcu EM, Wilkoff BL, Emre A, Vanerio G, Simmons TW, Morant VA, Castle LW: Atrial pacemaker leads compared. Cleve Clin J Med 1990; 57:433-436.

97. Pycha C, Calabrese JR, Gulledge AD, Maloney JD: Patient and spouse acceptance and adaptation to implantable cardioverter defibrillators. Cleve Clin J Med 1990; 57:441-444.

98. Wunderiy D, Maloney J, Edel T, McHenry M, McCarthy PM: Infections in implantable cardioverter defibrillator patients. PACE 1990; 13:1360-1364.

99. Jaeger FJ, Schneider L, Maloney JD, Cruse RP, Fouad-Tarazi FM: Vasovagal syncope: diagnostic role of head-up tilt test in patients with positive ocular compression test. PACE 1990; 13:1416-1423.

100. Vanerio G, Maloney JD, Rashidi R, McCowan R, Castle LW, Morant VA, Wilkoff BL, Simmons TW. The effects of percutaneous catheter ablation on preexisting permanent pacemakers. PACE 1990; 13:1637-1645.

101. Brodell GK, Castle LW, Maloney JD, Wilkoff BL. Chronic transvenous pacemaker lead removal using a unique, sequential transvenous system. Am J Cardiol 1990; 66:964-966.

102. Pinski SL, Vanerio G, Mdoncy JD. New antiarrhythmic drugs: Part I. Developments in Cardiology 1990; Vol I, Number 11.

103. Pinski SL, Vanerio G, Maloney JD. New antiarrhythmic drugs: Part II. Developments in Cardiology 1990; Vol I, Number 12.

104. Fouad-Tarazi FM, Maloney JD: Orthostatic hypotension: Diagnosis and management. Cardio April, 1990;60-66.

105. Mdoney JD, Pinski SL, Masterson M, Wiikoff, B, Simmons T, Morant VA, Golding L, Castle LW: Clinical experience with the combination of an antitachycardia pacemaker (Orthocor II) and the implantable cardioverter-defibrillator in drug-refractory ventricular tachycardia, J Interven Cardiol 1990; Vol 3:269-276.

106. Nagi HMK, Pinski SL, Mokhtar S, Saad Y, Maloney JD: Serial electrophysiologic testing of drug therapy in supraventricular tachycardia related to accessory pathways. Cleve Clin J Med 1990; 57:622-626.

107. Emre A, McAlister H, Tuzcu M, Maloney JD: Polarity and fixation of atrial leads. J Interventional Card 1991; 2:109-116.

108. McCowan R, Maloney J, Wilkoff B, Simmons T, Khoury D, McAlister H, Morant VA, Castle L. Automatic implantable cardioverter defibrillator implantation without thoracotomy using an endocardial and submuscular patch system. 1991; JACC 17:415-421.

109. Pinski SL, Arnold AZ, Mick M, Maloney JD, Trohman RG: Safety of external cardioversion/defibrillation in patients with internal defibrillation patches and no device. PACE 1991; 14:7-12.

110. Maloney JD, Masterson M, Khoury D, Trohman R, Wilkoff B, Simons T, Morant V, Castle L: Clinical performance of the automatic implantable cardioverter defibrillator: electrocardiographic documentation of 101 spontaneous discharges. PACE 1991; 14 (Part II):280-285.

111. Lehmann MH, Saksena S, Akhtar M, Bigger JT Jr, Camm AJ, Darling EJ, Dreifus L, Faust M, Fisher JD, Furman S, Goldschlager NF, Griffin JC, Guarnieri T, Guiraudon GM, Harthorne JW, Luceri RM, Maloney JD, et al: Implantable cardioverter-defibrillators in cardiovascular practice: report of the policy conference of the North American Society of Pacing and Electrophysiology. PACE 1991; 14:969-979 and J Interv Cardiol 1991; 4:211-220.

112. Pinski SL, Mick MJ, Arnold AZ, Goiding L, McCarthy PM, Castle LW, Money JD, Trohman RG. Retrospective analysis of patients undergoing one- or two-stage strategies for myocardial revascularization and implantable cardioverter defibrillator implantation. PACE 1991; 14:1138-1147.

113. Pinski SL, Vanerio G, Castle LW, Maloney JD. Patients with high defibrillation thresholds: clinical characteristics, management, outcome. Am Heart J 1991; 122:89-95.

114. Vanerio G, Maloney JD, Pinski SL, Simmons TW, Castle LW, Trohman R, Wilkoff BL. DDIR versus VVIR in patients with paroxysmal atrial tachyarrhythmias. PACE 1991; 14:1630-1638.

115. Vanerio G, Patel S, Ching E, Trohman RG, Wilkoff BL, Castle LW, Maloney JD, Simmons TW. Early clinical experience with a minute ventilation sensor DDDR pacemaker. Published in the Proceedings of the World Symposium of Pacing, 1991, Washington DC. PACE 1991; 14:1815.

116. Edel TB, Mdoney JB, Moore S, McGuinn WP, Gohn D, Williams D, Wilkoff BL, McCarthy P, Monnt VA, Pearce G, Simmons TW, Trohman R, Firstenberg M, Castle LW Six-year clinical experience with the automatic implantable cardioverter defibrillator. PAGE 1991; 14:1850-1854.

117. Moore SL, Maloney JD, Edel TB, McGuinn WP, Gohn D, Morant VA, Trohman R, Simmons TW, Wilkoff BL, Castle LW: Implantable cardioverter defibrillator implanted by nonthoracotomy approach: Initial clinical experience with the redesigned transvenous lead system. PACE 1991; 14:1865-1869.

118. Simmons TW, Nagi H, Wilkoff B, Morant V, Sterba R, Castle L, Maloney J: Transcatheter electrical AV junction ablation: clinical, electrocardiographyical, and electrophysiological predictors of success. Cleve Clin J Med 1991;58:223-228.

119. Vanerio G, Maloney JD. Moricizine: a new antiarrhythmic agent. Pharmacokinetic, pharmacodynamic and therapeutic profile. Cleve Clin J Med. 1992;59:79-86.

120. Trohman RG, Kessler KM, Williams D, Maloney JD: Atrial tachyarrhythmias with left bundle branch block aberration referred for electrophysiologic evaluation as ventricular arrhythmia. Cleve Clin J Med.

121. Rabinowitz AJ, Maloney JD: Survivors of sudden cardiac death: a rational approach to evaluation and therapy of patients surviving ventricular fibrillation. Cleveland Clin J Med 1992; 166-172.

122. Edel TB, Maloney JD, Moore SL, McAllister H, Gohn D, Shewshik JM, Alexander L, Erstenberg MS, Castle LW, Simmons TW, Wilkoff BL, Trohman R: Analysis of deaths in patients with an implantable cardioverter defibrillator. PACE 1992;15:60.

123. Pinski SL, Mdoney, JD: Indications for electrophysiologic study in patients with ventricular arrhythmias. Cleveland Clin J Med 1992; 59:175-185.

124. Maloney J, Khoury D, Simmons T, Wilkoff B, Trohman R, Morant V, Castle LW: Effect of atrioventricular synchrony on stroke volume during ventricular tachycardia in man. Am Heart J 1992; 1561-1568

125. Hughes MM, Trohman RG, Simmons TW, Castle LW, Wilkoff BL, Morant VA, Maloney JD: Flecainide therapy in patients treated for supraventricular tachycardia with near normal left ventricular function. Am Heart J 1992;123:408-412.

126. Trohman RG, Simmons TW, Mwrc SL, Firstenberg MS, Williams D, Maloney JD: Catheter ablation of the atrioventricular junction using radiofrequency energy and a bilateral cardiac approach. Am J Cardio 1992;70:1438-1443.

127. McCarthy PM, Castle LW, Trohman RG, Simmons TW, Maloney JD, Klein AL, White RD, Cox JL: The maze procedure: surgical therapy for refractory atrial fibrillation. Cleveland Clin J Med; 1992

128. Maloney JD, Helguera *ME*, Woscoboinik JR: Physiology of rate-responsive pacing. Cardiology Clinics 1992;10:619-633.

129. Woscoboinik JR, Maloney JD, Helguera ME, Mercho N, Alexander LA, Wilkoff B, Simmons T, Morant V, Castle LW: Pacing lead survival: performance of different models. PACE 1992; 15:1991-1995.

130. Pinski SL, Maloney JD, Sgarbossa EB, Jubranh F, Trohman RG: Survival after a first episode of ventricular tachycardia or fibrillation. PACE 1992;15:2169-2173.

131. Sgarbossa EB, Pinski SL, Castle LW, Trohman RG, Maloney JD: Incidence and predictors of loss of pacing in *the* atrium in patients with sick sinus syndrome. PACE 1992;15:2050-2054.

132. Sgarbossa EB, Pinski SL, Jaeger FJ, Trohman RG; Maloncy JD: Incidence and predictors of syncope in paced patients with sick sinus syndrome. PACE 1992;15:2055-2060.

133. Pinski SL, Helguera ME, Sgarbossa EB, Sterba R, Maloncy JD, Trohman RG: Ablacion por cateter dc vias accesorias auriculoventriculares usando radiofrecuencia como fuente dc energia. Revista Argentina dc Cardiologia 1992;60:541-547.

134. Brison RJ, Davidson JR, Dreyer JF, Jones G, Maloney J, Munkley DP, O'Connor HM, Rowe BH: Cardiac arrest in Ontario: circumstances, community response, role of prehospital defibrillation and predictors of survival. Canadian Med. Ass. Journal 1992; 147(2):191-9.

135. Scheinman MM, Akhtar M, Dreifus L. Evans GT Jr, Gillette P, Huang SICS, Jackman W, Langberg JJ, Mdoncy JD, Morady F, Ruskin J, Saksena S, Waldo A, Zipes D: Catheter ablation for cardiac arrhythmias, personnel, and facilities. Report of the NASPE policy conference. PACE 1992; 15:715-721.

136. Sgarbossa EB, Black IW, Maloney JD: Pacemakers, defibrillators, and direct current cardioversion. Current Opinion in Cardiol 1993;8:27-38.

137. McCarthy PM. Castle LW, Mdoney JD, Trohman RG, Simmons TW, White RD, Klein AL, Cosgrove DM: Initial experience with the maze procedure for atrial fibrillation. J Thorac Cardiovasc Surg 1993; 105:1077-1087.

138. Fouad FM, Sitthisook S, Vanerio G, Mdoney JD III, Okabe M, Jaeger F, Schluchter M, Maloney J D Sensitivity and specificity of the tilt table test in young patients with unexplained syncopc. PACE 1993;16:394-400.

139. Helguera ME, Maloncy MD, Woscoboinik JR, Trohman RG, McCarthy PM, Morant VA, Wilkoff BL, Castle LW, Pinski SL: Long-term performance of epimyocardial pacing leads in adults: comparison with endocardial leads. PACE 1993;16:412-417.

140. Kim SG, Maloney JD, Pinski SL, Choue CW, Ferrick KJ, Roth JA, Gross J, Brodman R, Furman S, Fisher JD: The influence of left ventricular function on survival and mode of death after implantable defibrillator therapy. Am J Cardiol 1993; 72:1253-1267.

140. Maloney JD, Hayes DL, Timmis GC: Report of the policy conference of the North American Society of Pacing and Electrophysiology OR device/lead performance and the development of a postmarket surveillance database. PACE 1993; 16:1945-1952.

142. Sgarbossa EB, Pinski SL, Maloney JD, Simmons TW, Wiikoff BL, Castle LW, Trohman RG: Chronic atrial fibrillation and stroke in paced patients with sick sinus syndrome. Circulation 1993;88:1045-1053.

143. Sgarbossa EB, Pinski SL, Maloney JD The role of pacing modality in determining long-term survival in the sick sinus syndrome. A m Intern Med 1993;119:359-365.

144. McCarthy PM, Castle LW, Trohman RG, Simmons TW, Maloney JD, Klein AL, White RD, Cox JL: The maze procedure: Surgical therapy for refractory atrial fibrillation. Cleveland Clinic J Mcd 1993; 60:161-165.

145. Maloney JD, Rizo-Patron C, Khoury D (eds): Baylor Cardiac Arrhythmia Center: International Digest. Vol 1 (1), 1993.

146. Maloney JD, Rizo-Patron C, Khoury D, Zhu DW, Nitta 3 (eds): Baylor Cardiac Arrhythmia Center, International Digest. Vol 1(2), 1993.

147. Jaeger FJ, Maloney JD, Castle LW, Fouad-Tarazi FM: Is absolute hypovolemia a risk factor for vasovagal response to bad-up tilt? PACE 1993;16:743-50.

148. Maloney JB: Innovation and the FDA: A clinician's viewpoint. PACE 1993;16:793-795.

149. Grimm RA, Stewart WJ, Maloney JD, Cohen GI, Pearce GL, Salcedo EE, Klein AL: Impact of electrical cardioversion for atrial fibrillation on left atrial appendage function and spontaneous echo contrast: characterization by simultaneous transesophageal echocardiography. J Am Col Cardiol 1993;22:1359-1366.

150. Helguera ME, Maloney JD, Pinski SL, Woscoboinic JR, Wilkoff BL, Castle LW: Lung-term performance of endocardial pacing leads. PACE 1994; 17:56-63.

151. Helguera ME, Pinski SL, Mdoncy JD, Woscoboinik JR, Trohman RG, Morant VA, Wilkoff BL, Castle LW: Durability of bipolar coaxial endocardia pacemaker leads compared with unipolar leads. Cleveland Clinic J Med 1994; 61:25-28.

152. Pinski SL, Maloney JD, Sgarbossa EB, Trohman RG: Selection bias in electrophysiologically-guided therapy of sustained ventricular tachyarrhythmias. J Clin Epidemiol 1994; 47:49-57.

153. Hayes DL, Naccarelli GV, Furman S, Parsonnet V, Gillette PC, Goldschlager NF, Griffin JC, Harthorne JW, Maloney JD, Reynolds DW, Spencer WH: Training requirements for permanent pacemaker selection, implantation, and follow-up. Report of the NASPE policy conference. PACE 1994; 17:6-12.

154. Sgarbossa EB, Pinski SL, Trohman RG, Castle LW, Maloney J D Single-chamber ventricular pacing is not associated with worsening heart failure in sick sinus syndrome, Am J Cardiol 1994; 73:693-697.

155. Maloney JD, Jaeger FJ, Rizo-Patron C, Zhu WX: The role of pacing for the management of neurally-mediated syncope: Carotid sinus syndrome and vasovagal syncope. Am Heart J 1994; 127:1030-1037.

156. Bernstein AD, Irwin ME, Parsonnet V, Wilkoff BL, Black WR, Buckingham TA, Maloney JD, Reynolds DD, Saksena S, Singer I, Nichelson DE, Schurig L: Antibradycardia-pacemaker follow-up: effectiveness, needs, and resources. PACE 1994; 17: (in press).

157. Saksena S, Epstein AE, Lazzara R, Maloney JD, Zipes DP, Benditt DG, Camm AJ, Domanski MJ, Fisher JD, Gersh BJ, Lamas GA, Lehmann MH, Nickelson DE, Prystowsky EN, Wyse G: Clinical investigation of antiarrhythmic devices. Position statement of the North American Society of Pacing and Electrophysiology, American College of Cardiology, American Heart Association, and Working Groups on Arrhythmias and Pacing of the European Society of Cardiology. PACE 1994; 17: (in press).

158. Maloney JD, Rizo-Patron C, Khoury DS, Zhu DWX, Nitta J (eds): Baylor Cardiac Arrhythmia Center: International Digest 1994; 2(1).

159. Lehmann MH, Thomas A, Nabih M, Steinman RT, Fromm BS, Shah M, Norsted SW, Participating Investigators: Sudden death in recipients of first-generation implantable cardioverter-defibrillators: analysis of terminal events. (submitted for publication).

160. Maloney JD, Khoury DS, Zhu WX, Rizo-Patron C: The art and science of mixing and matching. J Am Col Cardiol 1994 (in press).

161. Khoury DS, Zhu WX, Nitta J, Rizo-Patron C, Maloney JD: Effects of internal defibrillation on an implanted pacing system with programmable polarity. (submitted)

162. Kleman JM, Castle LW, Kidwell GA, Maloney JD, Morant VA, Trohman RG, Wilkoff BL, McCarthy PM, Pinski SL: Nonthoracotomy versus thoracotomy implantable defibrillators: intention-to-treat comparison of clinical outcomes. (submitted to Circulation)

163. Fouad-Tarazi FM, Schutzman J, Jaeger F, Maloney JD: Head up tilt and hemodynamic changes during orthastatic hypotension in patients with supine hypertension JACC (in press).

164. Josephson M, Maloney J, Barold S, Flowers N, Goldschlager N, Hayes D, Prystowsky E: Task force 6: Training in specialized electrophysiology, cardiac pacing and arrythmia management. JACC 1995;25 (1).

165. Zhu D, Maloney JD, Simmons T, Nitta J, Fitzgerald D, Trohman R, Khoury D, Saliba W, Belco K, Rizo-Patron C, Pinski S: Radiofrequency catheter ablation for management of symptomatic ventricular ectopy. JACC 26:4, 843-849.

166. Raghavan C, Maloney JD, Nitta J: Long-term follow-up of heart transplant recipients requiring permanent pacemakers. The Journal of Heart and Lung Transplant, 14:6, I pg 1081-1089.

## BOOK CHAPTERS

1. Danielson GK, McGoon DC, Maloney JD, Ritter DG: Surgery of primitive ventricle with outlet chamber. In Paediatric Cardiology, Edinburgh, Scotland, Churchill Livingston Publishers, 1975, pp 381-387.

2. Danielson GK, McGoon DC, Wallace RB, Fiddler GI, Maloney JD: Surgery of corrected transposition. In Paediatric Cardiology, Edinburgh, Scotland, Churchill Livingston, 1978, pp 224-230.

3. Danielson GK, McGoon DC, Maloney JD, Ritter DG: Surgery of primitive ventricle with outlet chamber. In Paediatric Cardiology, Edinburgh, Scotland, Churchill Livingston, 1978, pp 381-387.

4. Maloney JD: An approach to the management of outpatients with cardiac arrhythmias. In Cardiovascular Clinics: Office Cardiology. Volume 10. Edited by R. Brandenburg. Philadelphia, F.A. Davis Company, 1980, pp 19-32.

5. Marceletti C, Maloney JD, Ritter DG, Danielson GK, McGoon DC, Wallace RB: Corrected transposition and ventricular septal defect Surgical experience in Fourth Joint Symposium on Congenital Heart Disease, Burakovsky VI and Bockeria LA (eds.), Mir Publishers, Moscow, 1981, pp 598-615.

6. Maloney JD, Nissen RG, McColgan JM: Chronic maintenance tocainide therapy in patients with recurrent sustained ventricular tachycardia. In Harrison DC: Cardiac Arrhythmias, A Decade of Progress G.K. Hall Medical Publishers, Boston, Massachusetts. 1981, pp 271-283.

7. Mdoncy JD: Cardiac events simulating seizures of cerebral origin. Chapter 16 in Pseudoepilepsy by Gross M, D.C. Heath and Company Pubiishers, 1983.

8, Fouad FM, Maloney JD: Orthostatichypotension: Circulatory dynamics and clinical spectrum. In The Heart and Stroke, Furlan AJ (od.). Springer-Verlag London Limited, Chapter 13, 1987, pp 235-248.

9. Abi-Samra FM, Fouad FM, Sweeney PJ, Maloney JD: Syncope: A practical diagnostic approach. In The Heart and Stroke, Furlan AJ (ed.). Springer-Verlag London Limited, Chapter 14,1987, pp 249-283.

10. Jaeger JF, Maloney JD, Fouad-Tarazi F: Newer aspects in the diagnosis and management of syncope. In Cardiology Update, Reviews for Physicians, Rapaport E (cd), New York, Wscvicr Science Publishing Co., Inc., 1990, pp 141-174.

11. Mdoncy JD, Vanerio G, Pashkow FJ: Single-chamberrate-modulated pacing, DDIR-VVIR: Followup and complications. In New Perspectives in cardiac Pacing, Barold SS and Mugica J (eds.), Futura Publishing Company, Mount Kisco, New York, 1991, pp 429-458.

12. Vanerio G, Pinski SL, Maloney JD. Chronic pacing for the management of tachyarrhythmias: basic and clinical aspects. In: Arrhythmias. Mandel WJ ad. 3. B. Lippincott, Philadelphia, 1991.

13. Maloney, JD, Edel T, Pinski SL, Alexander L: Benefits of implantable defibrillators revisited. In: Luderitz B, Saksena S ed. Interventional Electrophysiology. Futura Publishing Inc., Mount Kisco, NY, 1991, pp 557-562.

14. Sgarbossa E, Maloney JD: Pacing and atrioventricular block. Current Opinion Cardiol 1992; 7:15-22.

15. Maloney JD, Vanerio G, Pashkow FJ: Stimulation simple chambre a frequence asservie, AAIR-VVIR: suivi et complications. In: Mugica J, Barold SS, Ripart A (eds) La Stimulation Cardiaque: Nouvelles Perspectives. Masson, Paris, 1992, pp 381-406.

16 Sgarbossa EB, Pinski SL, Ching E, Maloney JD: Adverse effects and limitations of rate-adaptive pacing. In: Barold S, Mugica J eds. New Perspectives in Cardiac Pacing, Vol 3. Futura Publishing Co., Mt. Kisco, NY, 1993, pp 383-423.

17. Pinski SL, Simmons TW, Maloney JD: Troubleshooting antitachycardia pacing in implantable cardioverter defibrillators. In: Wang, Estes, Manolis (eds). Automatic Implantable Cardioverter-Defibrillators: A Comprehensvie Text, Marcel Dekker, Inc., New York, NY, in press.

18. Vanerio C, Pinski SL, Maloney JD, Khoury DS: Chronic pacing for the management of tachyarrhythmias: basic and clinical aspects. In: Mandel WJ (ed) Cardiac Arrhythmias (3rd Edition). J. B. Lippincott, Philadelphia, in press.

19. Nappolz T, Maloney JD, Simmons TW, Khoury DS: Impedence-derived minute ventilation for rate-adaptive pacing. In: Ellenbogen KA, Kay GN, Wilkoff BW (eds). Textbook of Cardiac Pacing, W.B. Saunders, Philadelphia, in press.

20. Zhu WX, Maloney JD: Radiofrequency catheter ablative therapy for atrioventricular nodal reentrant tachycardia. In: Singer, I (ed) Interventional Electrophysiology, Williams and Wilkens, Baltimore, in press. 1996.

21. Maloney JD, Martin RC, Zhu WX: Tilt table testing as a tool of the invasive cardiac electrophysiologist. In: Singer, I (ed) Interventional Electrophysiology, Williams and Wilkens, Baltimore, in press. 1996.

22. Maloney JD, Zhu WX, Martin RC, Bailey A: AV node ablation to create complete heart block. In: Singer, I (ed) Interventional Electrophysiology, Williams and Wilkens, Baltimore, in press. 1996.

**BOOK** REVIEW

1. Maloney JD: Book review: Practical approach io physiologic cardiac pacing. PACE 1984; 7:306-307.

2. Maloney, MD: Book review Dreifus's pacemaker therapy: An interprofessional approach. FACE 1987; 155.

## EXHIBITS AND MOTION PICTURES COMPLETED

1. Maloney JD, Hayes DL, Furman S: Recent advances in cardiac pacing: Why, When, How. Videotape. Cardiology Update, May, 1988.

2. Mdoney JD, Gorlin R: Managing atrial fibrillation today. Videotape. Professional Postgraduate Services, New Jersey, 1991.

3. Cook SA, Maloney JD: Usefulness of plain radiography in identifying ICD device and some of the mechanical comparisons. Exhibit. RSNA Annual Meeting, Chicago, November 20-December 4, 1991.

ABSTRACTS

1. Mdoncy JD, Rutherford B, Frye RL, Titus JL. Distribution of coronary artery lesions found at autopsy in paticnts with pre-infarction angina. Am J Cardiol 33:155, January 1974.

2. Okoroma E, Guller B, Maloney JD, Weidman W, Smith R. Etiology of right bundle branch block (RBBB) following closure of ventricular septal defect (VSD). Pediat Res 8:353, April 1974.

3. Maloney JD, Hattery R Jr, Pairolero P, Spittell J Jr. The use of ultrasound in the diagnosis of abdominal aneurysm. Minnesota Society of Internal Medicine, pp 12, May 18, 1974.

4. Stokes J, Maloney JD. His bundle electrograms and sick sinus syndrome. Minnesota Society of Internal Medicine, pp 12, May 18, 1974.

5. Okoroma E, Guller B, Maloney JD, Weidman W, Smith R. The etiology of right bundlc branch block pattern after surgical closure of ventricular septal defects. Circ 50:III-196, October 1974.

6. Maloncy JD, McGoon D, Danielson G. Identification of the conduction system in patients with corrected transposition of the great arteries or common ventricle. Type A, at the time of operation. Am J Cardiol 35:154, January 1975.

7. Pritchard D, Maloney JD, Spittell J Jr, Barnhorst D. Acquired arteriovenous popliteal fistula Minnesota Society of Internal Medicine, pp 13, May 24, 1975.

8. Hartzler G, Mdoncy JD. A-V nodal alternate beat Wenckebach. Minnesota Society of Internal Medicine, pp 13, May 21. 1975.

9. Hartzler G, Maloney JD, Danielson G. Surgical treatment of the Wolff-Parkinson-White syndrome. Minnesota Society of Internal Medicine, pp 10-11, May 22, 1976.

10. Hartzler G, Maloney JD. Cardio-inhibitory carotid sinus hypersensitivity: intracardiac recordings and clinical assessment. Presented at Fifty-seventh Annual Meeting of the American Collcgc of Physicians, Philadelphia, Pennsylvania. April 1976.

11. Radtke W, Rutherford 3. Madigan N, O'Donovan T, Maloney JD, Ilstrup D. Hemodynamic profiles in unstable angina pectoris: A prospective study. Presented at Sixth Asian-Pacific Congress of cardiology, October 1976.

12. Rutherford B, Madigan N, Radtke W, Maloney JD, O'Donovan T. Hemodynamic profilesin acute myocardial infarction: A rational basis for therapy. Presented at Sixth Asian-Pacific Congress of Cardiology, October 1976.

13. Hartzler G, Maloney JD, Curtiss J, Barnhorst D. Hemodynamic benefits of A-V sequential pacing in the early postoperative period. Circ 54:II-31, October 1976.

14. Hartzler G, Maloney JD, Curtiss J, Barnhorst D. Hemodynamic benefits of A-V sequential pacing in the early postoperative period. Minnesota Society of Internal Medicine, October 30, 1976.

15. Smith B, Mdoney JD, Pairolero P, Spittell J Jr. Ultrasound evaluation of abdominal aortic aneurysms. Circ 54:II-12, October 1976.

16. McGoon D, Marcelletti C, Danielson C, Wallace R, Ritter D, Maloney JD. The problem of correcting single and common ventricle. Circ 54:II-101, October 1976.

17. Fiddler G, Money JD, Danielson G, McGoon D, Ritter D. Intraoperative identification of the conduction system in dextrocardia with complex congenital disease. Am J Cardiol 39:301, February 1977.

18. Pritchard D, Seward J, Maloney JD, Fairbairn J II. Peripheral arteriovenous fistula: Detection by contrast echocardiography. Fourth Annual San Diego Vascular Symposium, March 1977.

19. Maloney JD, Fiddler G, Danielson G, McGoon D, Wallace R, Ritter D. Intraoperative identification of the conduction system in congenital heart disease with atrioventricular discordance (ventricular inversion). Circ 56:III-105, October 1977.

20. Williamson M, Smith H, Giuliani E Lie J, Maloney JD, Pluth J. Prognostic factors in postmyocardial infarction ventricular septal defects. Circulation 56: (Suppl II):III-59, October 1977.

21. Keeton B, Maloney JD, Lie J, Danielson G, McGoon D, Wallace R, Feldt R. Intraoperative identification of specialized conduction tissue in persistent common atrioventricularcanal and straddling atrioventricular valve. Am J Cardiol 41:423, February 1978.

22. Marcelletti C, Maloney JD, Ritter D, Danielson G, McGoon D, Wallace R. Corrected transposition and ventricular septal defect: Surgical experience. Circ 58:II-149, October 1978.

23. Maloney JD, Olukotun A, Danielson G, McGoon D, Ritter D, Weidman W. Electrocardiographic and vectorcardiographic pattern in patients with A-III common ventricle (univentricular heart with outflow chamber). Circ 58: (Suppl II):II-246, October 1978.

24. Holmes D Jr, Mdoncy JD, Broadbent J, Gersh B, Merideth J. Transvenous tined electrode system: An approach to the problem of acute dislodgement. PACE 1979;2:A-90.

25. Holmes D Jr, Shub C, Maloney JD, Merideth J. The usefulness of redundancy in bipolar pacemaker electrodes. PACE 1979;2:A-88.

26. Nissen R, Holmes D Jr, Maloney JD, Feldt R, Danicison G. Experience with permanent cardiac pacemakers in congenital heart disease. PACE 1979;2:A-72.

27. Allen W, Maloney JD, Hartzler G, Holmes D Jr, Puga F. Resection of ventricular aneurysm modified by electrophysiologic assessment in patients with intractable ventricular tachycardia and left ventricular aneurysm. Am J Cardiol 45:417, February 1980.

28. Hayes D, Maloney JD, Merideth J, Holmes D Jr, Gersh B, Broadbent J, Osborn M. Early experience with a new multiparameter-multiprogrammable pacemaker system. Minnesota Society of Internal Medicine, pp 13, May 17,1980.

29. Maloney JD, Nissen R, McColgan J. Open clinical studies at a referral center: Chronic maintenance tocainide therapy in patients with recurrent sustained ventricular tachycardia refractory to conventional antiarrhythmic agents. Presented at Symposium on Cardiac Arrhythmias, A Decade of Progress 1980. Stanford, California, May 1980.

30. Gersh B, Holmes D Jr, Maloney JD, Hartzler G. The role of permanent cardiac pacing in the management of patients with "isolated" carotid sinus hypersensitivity. PACE 3:372, May-June 1980.

31. Mdoney JD, Holmes D Jr, Gersh B, Broadbent J, Hartzler G, Merideth J, Berkovits B. Control, conversion, and prevention of resistant dysrhythmia with demand and double-demandatrioventricular sequential pacing. PACE 3:379, May-June 1980. Presented at XI Interamerican Congrcss of Cardiology, September 1980.

32. Kennel A, Maloney JD, Callahan J, Zajarias A. Adult-onset familial intra-Hisian conduction disease. PACE 1980;3:379. VIII European Congress of Cardiology, Paris, France, June 1980.

33. Hayes D, Maloney JD, Merideth J, Holmes D Jr, Gersh B, Broadbent J, Osborn M. Assessment of clinical efficacy of a multiparameter programmable pulse generator. Am J Cardiol, February 1981.

34. Maloney JD, Medina-Ravell V, Pieretti O, Portillo B, Maduro C, Berkovits B, Moleiro F. Long-term effectiveness of dual-demand sequential pacing for automatic conversion and prevention of refractory reentry supraventricular tachycardia. Am J Cardiol, February 1981.

35. Maloney JD, Medim-Ravel1 V, Pieretti O, Portillo B. Maduro C, Castellanos A, Berkovits B. Followup assessment of dual-demand, dual-chamber DVI-DVO pacing for automatic conversion, control and prevention of refractory paroxysmal supraventricular tachycardia Second European Symposium on Cardiac Pacing, May 1981.

36. Maloney JD, Berkovits B. Hemodynamic and antitachycardia value of dual-chamber pacing: Initial and followup assessment. Second European Symposium OR Cardiac Pacing, May 1981.

37. Berkovits B, Maloney JD. Treatment of tachycardias by double demand sequential pacing. 34th Annual Conference on Engineering in Medicine and Biology, September 1981.

38. Hayes D, Maloney JD, Neubauer S, Ritter D, Danielson G. Effectiveness of transvenous endocardial pacing in the pediatric age group. 54th session of the American Heart Association, November 1981.

39. Yiannikas J, Eastway R, Maloney JD, MacIntyre W, Moodie D, Sufka B. Phage Imaging: a non-invasive method of localizing accessory atrioventricular tracts. The 55th session of the American Heart Association, November 1982.

40. Eastway R, Esper W, Maloney JD, Tsai A, Yiannikas J, Momt V, Castle L, Dorfman P. Investigational dual chambered pacing systems functioning in the DDD mode - initial experience. American Heart Association 55th Scientific Session, November 1982.

41. Maloney JD, Eastway R, Morant V, Castle L, Berkovits B. Clinical, hemodynamic and electrophysiologic parameters for selecting dual chamber pacing systems; means for patient selection. Second Central Pacific Symposium on Cardiac Pacing, February 1983 and the VIIth World Symposium on Cardiac Pacing, May 1983.

42. Maloney JD, Eastway R, Sterba R, Moodie D, Gill C, McGoon M. Long-term endocardial atrial pacing in children with postoperative bradycardia-tachycardia syndrome following the Senning option, Mustard operation and Fontan option. Second Central Pacific Symposium on Cardiac Pacing, February 1983 and the VIIth World Symposium on Cardiac Pacing, May 1983.

43. Furman S, Griffin J, Herbinger W, Maloney JD, Mugica J, Rickards A. Future directions in cardiac pacing. Seventh Symposium World Pacing, Vienna, Austria, May 1983.

44. Beaver B, Ching E, Castle L, Morant V, Maloney JD, Sterba R. Cordis Gemini DDD Pacemaker: Initial investigational experience with a second generation DDD pacemaker. American Heart Association;Circ;Vol 68;Suppl III-378;Oct 1983.

45. Abi-Mansour P, Maloney JD, Ching E, Haque I, Grigera E, King-Rankine M, Momt V, Sterba R, Castle L. Clinical assessment of various antitachycardia pacing devices for chronic treatment of paroxysmal supraventricular tachycardia Third Central Pacific Symposium on Cardiac Pacing and Arrhythmias, February 1984.

46. Maloney JD, Abi-Mansour P, Castle L, Ching E, Roberts J, Gilbo J, Morant V, Sterba R. Early experience with the Medtronic 7008 antitachycardia pacing system. Cardiologia '84, Seville, Spain, March 1984.

47. Haque I, Maloney JD, Abi-Mansour P, Grigera F, King-Rankine M, Moms R, Sterba R, Morant V, Castle L. Assessment of efficacy of transvenous cardioversion for ventricular tachycardia Cardiologia '84, Seville, Spain, March 1984.

48. Abi-Mansour P, O'Donnell J, Haque I, Maloney JD, Go R, Grigera F, Sterba R, Morant V, Castle L. Value of radionuclide phase imaging in the localization of accessory pathways in patients with Wolff-Parkinson-White syndrome. North American Society of Pacing and Electrophysiology, New York, New York, May 1984.

49. Sterba R, Mdoney JD. "Ventricular response to atrial fibrillation in adolescents with Wolff-Parkinson-White Syndrome". American College of Cardiology, Anaheim, California, March 1984.

50. Dinga M, Golish J, Maloney JD. "Amiodarone pulmonary toxicity". American Review of Respiratory Diseases;Vol.124;No 4:A80;1984.

51. Mdoncy JD, Abi-Mansour P, Grigera F, Haque I. King-Rankine M. Initial experience with a new implantable pacemaker for the treatment of brady and tachycardia. American Heart Association;Circ;Vol 70;No 4,Part II-202;Oct 1984.

52. Maloney JD, Abi-Mansor P, Grigera F, Haque I, King-Rankine M. "Initial experience with a new implantable pacemaker for the treatment of brady and tachycardia." American Heart Association 57th Scientific Sessions, Miami Beach, Florida, November 1984.

53. Fontaine J, Maloney JD, Castle L, Morant V. Won-invasive assessment of ventriculo-atrial conduction and early experience with the tachycardia termination algorithm in pacemaker-mediated tachycardia." NASPE Sixth Annual *Scientific* Session, Toronto, Canada, May 1984.

54. Mdoncy JD, Schiavonc W, Lever H, Sterba R. "Electrophysiologic assessment of patients with hypertrophic cardiomyopathy presenting with syncope of undetermined etiology." NASPE Sixth Annual Scientific Session, May *1985,* Toronto, Canada.

55. Sanders R, Beaver B, Maloney JB, Castle L, Morant V. "Crosstalk inhibition - yet another complication of the DDD modality." Third European Symposium on Cardiac Pacing. Junc 1985, Madrid, Spain.

56. Haggman D, King-Rankine M, Castle L, Maloney JD, Momt V, Goormastic M. "Initial and long-term follow-up with mexiletine as a single agent in the treatment of drug refractory sustained ventricular tachycardia." XII Interamerican Congress of Cardiology, June 1985, Vancouver, BC.

57. Simmons T, Maloney JD, Abi-Samra F, Rafla S, Castle L, Sterba R. "Role of electrophysiologic study after amiodarone therapy for ventricular tachycardia." XII Interamerican Congress of Cardiology, June 1985, Vancouver, BC. .

*58.* Abi-Samra F, Maloney JD, Simmons T, Ching E, Momt V, Castle L. "Occurrence of crosstalk inhibition in an anti-tachycardia DDD bipolar p i n g device" XII Interamerican Congress of Cardiology, Junc 1985, Vancouver, BC.

59. Abi-Samra F, Maloncy JD, Fouad F, *Casde* L. Vasovagal and vasodepressor syncope: abnormalities in blood volume and its distribution. Circ 72 (Suppl III):III-251, 1985.

60. Masterson M, Abi-Samra F, Kadri N, Tuczu M, Simmons T, Morant V, Maloney JD, Castle L. Ventricular tachycardia during amiodarone therapy, Clinical Progress in Electrophysiology and Pacing *1986;* Vol 4, Suppl 72.

61. Gossman D, Masterson M, Ramsey K, Morant V, Castle L, Mdoney JD. Assessment of ventricular function utilizing digital subtraction angiography before and during chronic oral amiodarone therapy. Abstracts of the Xth World Congress in Cardiology Sept 14-19, 1986, 299.

62. Tuczu M, Maloney JD, Sangani F, Masterson M, Hocevar K, Golding L, Castle L, Momt V, Starr N. Early postoperative effects of chronic amiodarone therapy in patients undergoing cardiac surgery. PACE 1986, Vol 9, 309.

*63.* Tuczu M, Maloney ID, Sangani F, Masterson M, Hocevar K, Goiding L, *Castle* L, Morant V, Starr N. Adverse effects of chronic amiodarone *therapy* complicating heart surgery. Xth World Congress in cardiology Sept 14-19, 1986,209.

64. Simmons T, Maloney JD, Abi-Samra F, Valenta H, Nappholz T, *Castle* L, Morant V. Exercise-responsive intravascular impedance changes as a rate controller for cardiac pacing. FACE 1986;9:285.

65. Valenta H, Nappholz T, Maloney JD, Simmons T, McElroy P, Abi-Samra F. Correlations of heart rate with an intravenous impedance respiratory sensor. 23rd Annual Rocky Mountain Bioengineering Symposium, Univ. of Missouri, Columbia, MO, 1986.

66. Abi-Samra F, Simmons T, Maloney JD, Valenta F, Nappholtz T, Castle L. Intravascular impedance: A reliable sensor of minute ventilation suitable for use in physiological cardiac pacing. X World Congress of Cardiology, Washington, DC, 1986.

67. Kadri N, Maloney ID, Castle L, Morant V, Golding L, Simmons T, Gilbo J. Implantable cardioverter defibrillator, Initial and follow-up experience. X World Congress of Cardiology, Washington, DC, 1986.

68. Abi-Samra F, Maloney JD, Fouad F, Castle L. Head-up tilt testing: An important tool in the work-up of recurrent syncope of unknown etiology. Fifth Annual Cleveland Clinic Foundation Research Day, September 13, 1985. JACC 1986;II;7:126A.

69. Abi-Samra F, Fouad F, Maloney JD, Castle L. The role of hemodynamic testing in the investigation of syncope of unkonwn origin. Presented June, 1986 in Monaco.

70. Abi-Samra F, Fouad F, Maloney JD, Castle L. Clinical characterization of pathogenetic mechanisms in vasovagal and vasodepressive syncope. Presented June 1986 in Monaco.

71. Abi-Samra F, Fouad F, Bravo E, Maloney JD, Castle L. Vasovagal syncope: Vagal overtone or tack of sympathetic stimulation? Circ 74(Suppl II):II-182, 1986.

72. Abi-Samra F, Fouad F, Bravo E, Maloney JD, Castle L. Vasovagal syncope: Vagal overtone or lack of sympathetic stimulation? American Heart Association CME Offerings 1986-87;Circ;Vol 74;Suppl II-182;Oct 1986.

73. Hector D, Mdoney JD, Simpfendorfer C, Blackburn G. Exercise induced ventricular tachycardia clinical significance and prognosis. American Heart Association CME Offerings 1986-87;Circ;Vol 74;Suppl II-504;Oct 1986.

74, Simmons T, Maloney JD, Abi-Samra F, Valenta H, Napholtz T, Castle L, Morant V. Respiration related intravascular impedance changes as a rate controller for cardiac pacing. JACC 1986;Vol 7;No 2:4A.

75. Tuczu M, Mdoney JD, Sangani F, Hocevar K, Golding L, Star N, Morant V, Castle L. Effects of amiodarone therapy on acute post-operative period of cardiac surgical patients. JACC 1986;Vol 7;No 2:91A.

76. Lytle B, Ellis J, Maloney JD, Cosgrove D, Goormastic M, Loop F. Late survival after isolated aortic valve replacement for 236 patients; influence of ventricular arrhythmias. JACC 1986;Vol;No 2:161A.

77. Kadri N, Maloney JD, Castle L, Morant V, Gill C, Moms R, Yeh E. Complications and problems with the implantable defibrillator: Initial and early follow-up experience. PACE 1986;Vol 9:276.

78. Kadri N, Maloney JD, Petrovic F, Casde L, Momt V, Ching E Automatic implantable cardioverter-defibrillator: Is it cost-effective? PACE 1986;Vol 9:276.

79. Abi-Samra F, Maloney JD, Castle L. Usefulness of transderm scopolamine in the treatment of severe recurrent vasovagal syncope. PACE 1986;Vol 9:289.

80. Prior M, Masterson MM, Wilkoff BL, Blackburn G, Morant VA, Castle L, Maloney JD: Classification of chronotropic incompetence in patients with sinus node dysfunction requiring a permanent pacemaker. PACE 1987;10:1225.

81. Masterson M, Wilkoff B. Castle L, Morant V, Golding L, Simmons T, Maloney JD. Automatic implantable cardioverter defibrillator: Clinical experience and complications. PACE 1987;10:435.

82. Masterson M, Maloney JD, Wilkoff B, Morant V, Golding L, Castle L. Automatic anti-tachycardia pacemaker (Orthocor 11284 A) and automatic implantable cardioverter defibrillator as therapy for recurrent ventricular tachycardia. PACE 1987; 10:416.

84. Masterson M, Tuczu M, Maloney JD, Morant V, Castle L Atrial pacing and sensing: Unipolar versus bipolar. Seven different leads compared. PACE 1987;10:435.

84. Prior M, Masterson M, Morant V, Castle L, Maloney JD. Do patients with symptomatic sinus node dysfunction requiring pacemaker therapy need an additional chronotropic sensor? PACE *1987;*10.

85. Mdoncy JD, Masterson M, Wilkoff B, Simmons T, Morant V, Castle L and Golding L. Antitachycardia pacemaker and automatic implantable cardioverter defibrillator as sole therapy for ventricular tachycardia JACC 1987, Vol 9, (Suppl A) 140A.

*86.* Tuczu M, Gilbo J, Masterson M, Vanderlann L, Maloney JD. Amiodarone therapy in patients with refractory supra-ventricular tachyarrhythmias. Chest *1987,* in press.

87. Nappholz T, Maloney JD, Simmons T, Masterson M, Fischer S, Valenta H. A two vear research study of minute ventilation as an indicator for rate responsive pacing. PACE 1987;10:1222.

*88.* Cooper D, Wilkoff B, Castle L, Masterson M, Bdco K, Matranga D, Simmons T, Streem S, Momt V, Maloney JD. *Safety* of extracorporeal shock wave lithotripsy treatment in patients with permanent pacemakers. PACE 1987; 10:443.

*89.* Cooper D, Wilkoff B, Castle L, Streem S, Bdco K, Matranga D, Shimokochi D, Jacobs B, Morant 3, Maloney JD. *Safety* of extracorporeal shock wave lithotripsy in patients with permanent pacemakers. PACE 1987; 10(Part II):660.

*90.* Prior M, Masterson M, Wilkoff B, Blackburn G, Momt V, Castle L, Maloney JD. Classification of chronotropic incompetence in patients with sinus node dysfunction requiring a permanent pacemaker. PACE 1987; 10: 122.

91. Winkelman E, Money JD, Tuthill R. Amiodarone hepatoxicity is not benign. 60th Scientific Sessions Program, Nov 1987;Suppl IV-366;Vol 76;Oct 1987.

92. Maloney JD, Masterson M, Wilkoff B, Simmons T, Momt V, Castle L, Golding L Antitachycardia pacemaker and automatic implantable cardioverter defibrillator as sole therapy for ventricular tachycardia. JACC 1987;Vol 9;No 2:140A.

93. Abi-Samra F, Maloney JD, Fouad F, Castle L. The usefulness of head-up tilt testing and hemodynamic investigations in the workup to syncope of unknown origin, PACE 1987;Vol 10:406.

94. Prior M, Masterson M, Morant V, Castle L, Maloney JD. Do patients with sinus node dysfunction and permanent pacemakers require an additional chronotropic sensor? PACE, Vol 10;March-April 1987;418.

95. Jaeger F, Fouad-Tarazi F, Abi-Samra F, Cruse R, Maloney JD. Transdermal scopolamine for the treatment of vasovagal syncope. Clinical Research 1987; 35:832A.

96. Masterson MM, Maloney JD, Wilkoff BL, Simmons TW, Morant VA, Golding L, Castle LW: Clinical performance of the automatic implantable cardioverter-defibrillator: electrocardiographic documentation of 82 spontaneous discharges. JACC 1988; Vol 2(Suppl A):18A.

97. Masterson M, Maloney JD, Otero-Cagide M, Wilkoff B, Castle L, Morant VA, Simmons T. Value of procainamide administration during a non-diagnostic cardiac electrophysiologic study in patients with recurrent undiagnosed syncope. PACE 1988; 11:409. Presented at Cardiostim '88, June 1988, Monaco.

98. Masterson MM, Maloney JD, Wilkoff BL, Simmons TW, Morant VA. Golding L, Castle L. Automatic antitachycardia pacemaker and the automatic implantable cardioverter defibrillator as therapy for recurrent drug refractory ventricular tachycardia. JACC 1988: 2(Suppl A):17A.

99. Cooper D, Wilkoff BL, Masterson MM, Castle L, Belco K, Simmons T, Morant V, Streem S, Maloney JD. Effects of extracorporeal shock wave lithotripsy on cardiac pacemakers and its safety in patients with implanted cardiac pacemakers. PACE 1988; 11:483.

100. Simmons TW, Valenta H, Masterson MM, Fisher S, Wilkoff BL, Mdoncy JD: Verification of a minute ventilation rate responsive algorithm with a computer based external pacing system. PACE 1988; 11:505.

101. Prior M, Masterson MM, Blackburn G, Maloney JD, Wiikoff BL: Critical identification of patients with sinus node dysfunction for potential sensor-driven pacing. PACE 1988; 11:512.

102. Wilkoff B, Blackburn G, Prior M, Harvey S, Morant V, Casde L, Maloney J: Analytic techniques in the assessment of chronotropic response to exercise. PACE 1988; 11:530.

103. Masterson M, Maloney JD, Wilkoff B, Simmons T, Morant V, Castle LW. Comparison of active versus passive fixation leads implanted in the atrium. PACE 1988; 11:869. Presented at Cardiostem June 1988, Monaco.

104. Masterson M, Money JD, Wilkoff B, Simmons T, Momt V, Golding L, Castle L Clinical performance of the automatic implantable cardioverter defibrillator. Electrocardiographic documentation of 82 spontaneous discharges. JACC 1988;2 (Suppl A} 18A.

105. Masterson M, Maloney JD, Wilkoff L, Simmons T, Morant V, Castle L. Comparison of active versus passive fixation leads implanted in the atrium. PACE 1988; "In Press".

106. Yeh E, Simmons T, Fischer S, Morant V, Castle L, Maloney JB. The effect of atrio-ventricular synchrony on stroke volume during ventricular tachycardia. Presented at 9th Annual ScientificSession of North American Society of Pacing and Electrophysiology, May 1988, Los Angeles, CA.

107. Jaeger F, Masterson M, Maloney JD, Fouad-Tarazi F, Morant V, Castle L. Head up tilt combined with electrophysiologic testing for the diagnosis of recurrent unexplained syncopc. Presented at the 9th Annual Scientific Session of North American Society of Pacing and Electrophysiology, May 1988, Los Angeles, CA. PACE .1988.

108. Wilkoff V, Blackburn G, Prior M, Harvey S, Simmons T, Castle L, Morant V, Maloney JD. The chronotropic assessment exercise protocol for the comparative functional assessment of rate responsive pacemaker patients. PACE 1988; 11:530.

109. Spencer W, Streem S, Cooper D, Masterson M, Castle L, Maloney JD, Morant V, Simmons T. ESWL in patients with cardiac pacemakers. PACE 11:1607, 1988.

110. Masterson M, Maloney JD, Wilkoff B, Simmons T, Momt V, Golding L, Castle L. Automatic antitachycardia pacemaker and the automatic implantable cardioverter defibrillator as therapy for recurrent drug refractory ventricular tachycardia. JACC 1988;2 (Suppl A) 17A.

111 Jaeger F, Fouad-Tarazi F, Maloney JD. Relationship between blood volume and vasovagal response during had-up tilt. Eighth Annual Cleveland Clinic Foundation Research Day, September 23, 1988, Cleveland, Ohio. PACE 1988;II:534.

112. Jaeger F, Schneider L, Fouad-Tarazi F, Maloney ID, Cruse R. Convulsive syncope in the young: Diagnostic role of ocular compression test and head-up tilt. Accepted for poster presentation at the Ninth Annual Cleveland Clinic Foundation Research Day 9/7/89. Epilepsia 1988;29:68.

113. Golding L, Mahfood S, Maloney JD, Morant V, Wilkoff B, Simmons T, Sterba R, Borsh J, Castle L. Late results of implanted defibrillators. 61st Scientific Sessions Program, Nov 1988;Suppl II-446;Vol 78;No 4, Oct 1988.

114. Yeh E, Morant V, Castle L, Fischer S, Maloney JD. Right ventricular stroke volume assessment using an impedance catheter. JACC 1988;Vol 11;No 2:166A.

115. Yeh E, Simmons T, Fischer S, Morant V, Castle L, Maloney JD. The effect of atrio-ventricular synchrony on strokc volume during ventricular tachycardia PACE 1988;Vol 11:517.

116. Maloney JD, Jaeger F, Fouad-Tarazi F, Morris H. Malignant vasovagal syncopc: Prolonged asystole provoked by had-up tilt Cleveland Clinic Journal of Medicine 1988; 55:542-548.

117. Corbelli R, Masterson M, Maloney J, Castle L, Momt V, Simmons T, Wilkoff B. Exercise chronotropic response in atrial fibrillation. PACE 1989; 12:641 (or 645).

118. McCowan R, Wilkoff B, Simmons T, Morant V, Castle L, McAlister H, Khoury D, Theis R, Sterba R, Maloney J. Automatic cardioverter defibrillator implantation without thoracotomy: early follow-up. PACE 1989; 12:645.

119. Khoury D, McAlister H, Simmons T, Wilkoff B, McCowan R, Brod M, Morant V, Castle L, Maloney J. Impedance volumetry: potentials for differentiating between hemodynamically stable and unstable arrhythmias. PACE 1989; 12:662.

120. Marwick T, McAlister H, Salcedo E, Morant V, Simmons T, Wilkoff B, Maloney J, Castle L. Effect of implantable defibrillator patches on left ventricular filling. PACE 1989; 12:681.

121. Khoury D, Maloney J, McAlister H, Simmons T, Wilkoff B, Rudy Y. The impedance catheter: potential for differentiating between hemodynamically stable and unstable arrhythmias. Institute of Electrical and Electronics Engineers, Inc. 1989; 8:1-2.

122. McAlister HF, Gross J, Castle LW, Fisher JD, Morant VA, Mercando A, Simmons TW, Wilkoff BL, Furman S, Maloney JB. Automatic implantable cardioverter defibrillator: analysis of spontaneous shocks. JACC 1989; 13(Suppl.A):66A.

123. McCowan R, Maloney JD, Khoury D, Simmons TW, Wilkoff BL, McAlister H, Morant VA, Mullis DW, Theis R, Castle LW. Automatic implantable cardioverter defibrillator implantation by a non-thoracotomy approach. JACC 1989;13(Suppl. A): 217A.

124. Edel T, McAlister HF, Castle LW, Momt VA, Simmons TW, Wilkoff BL, Maloney JD. Analysis of deaths in patients with automatic implantable defibrillators. Oral presentation at the 62nd Annual Scientific Sessions, American Heart Association, New Orleans, Louisiana, November 13-16, 1989.

125. McAlister H, Rashidi R, Ballas S, Corbelli R, McCowan R, Castle L, Momt V, Simmons T, Wilkoff B, Mdoncy JD. Initial beep-o-gram experience: Assessment of automatic implantable cardioverter defibrillator sensing function. American College of Cardiology March 1989.

126. McAlister H, McCowan R, Castle L, Morant V, Simmons T, Sterba R, Wilkoff B, Maloney JD. Automatic implantable cardioverter defibrillator, Have the criteria for implantation changed? North American Society Pacing and Electrophysiology May 1989.

127. McCowan R, Mdoncy JD, Simmons T, Wilkoff B, Morant V, Sterba R, Berkovits B, Castle L. Termination of ventricular tachycardia by autodecremental pacing. American College of Cardiology March 1989.

128. Rashidi R, Maloney JD. Golding L, Morant V, Simmons T, Wilkoff B, McCowan R, Castle L. Impedance measurements during cardiac stimulation. North American Society of Pacing and Electrophysiology May 1989.

129. Marwick T, McAlister H, Schiavone W, Simmons T, Wilkoff B, Momt V, Maloney JD, Castle L. Left ventricular filling before and after replacement of implantable defibrillator patches. American College of Cardiology March 1989.

130. Nagi H, Simmons T, Wilkoff B, Morant V, Sterba R, Castle L, Maloney JD. Catheter ablation of the AV junction in patients with supraventricular tachyarrhythmias. American College of Cardiology March 1989.

131. McAlister H, Wilkoff B, Castle L, Morant V, Simmons T, Sterba R, Maloney JD. Spontaneous shocks from the automatic implantable cardioverter defibrillator. North American Society of Pacing and Electrophysiology May 1989.

132. Castle L, Saksena S, Maloney JD, Wilkoff B, Simmons T, Morant V, Golding L, Tullo N, Krol R. Initial clinical experience with a second generation implantable cardioverter defibrillator. American Heart Association, 1989.

133. Wilkoff B, Maloney JD, Morant V, Castle L, Simmons T, Goode L, Shipko F, Heggs K, Fearnot N, Smith H. Transvenous removal of chronic endocardial pacemaker leads (submitted to AHA 1989).

134. McAlister H, Castle L, Momt V, Simmons T, Sterba R, Wilkoff B, Maloney JD. Automatic implantable cardioverter defibrillator: experience in 152 patients. The Cardiac Society of Australia and New Zealand, 1989.

135. McCowan, R, Wiikoff B, Khoury D, McAlister H, Simmons T, Casde L, Morant V, Sterba R, Mdoney JD. Cardioverter defibrillatorimplantation without thoracotomy: intermediate follow-up. Submitted lo 62nd Scientific Session of the American Heart Association, November 13-16, 1989; New Orleans. LA.

136. Edel T, McAlister H, Castle L, Morant V, Simmons T, Wilkoff B, Maloney JD. Analysis of deaths in patients with automatic implantable defibrillators. Oral presentation at the 62nd Annual Scientific Sessions, American Heart Association, New Orleans, Louisiana, November 13-16, 1989.

137. Jaeger F, Fouad-Tarazi F, Maloney JD. Vasovagal syncope: Lack of relationship between baseline blood volume and presyncopal chronotropic orthostatic response. Poster presentation at the Midwest meeting of the American Federation for Clinical Research, November 8-10, 1989, Clin Res 37(4), 1989.

138. Jaeger F, Fouad-Tarazi F, Bravo E, Maloney JD. Supine norepinephrine levels and vasovagal response during head-up tilt. Oral presentation at the 62nd Scientific Sessions, New Orleans. November 13-16, 1989. Circ 1989;80:II-90.

139. Brodsky M, James K, Morant V, Maloney JD, Whitlow P, Hollman J, Healy B. Post angioplasty silent ischemia by holter monitoring as a predictor of cardiac outcome. PACE: April 1989;12:635.

140. McCowan R, Wilkoff B, Simmons T, Morant V, Castle L, McAlister H, Khoury D, Theis R, Sterba R, Maloney JD. Automatic cardioverter defibrillator implantation without thoracotomy: Early follow-up. PACE 1989;12:645.

141. Vanerio G, Rashidi R, McCowan R, Williams D, Simmons T, Wilkoff B, Morant V, Castle L, Mdoney JD. Effect of catheter ablation procedures on permanent pacemakers. Abstracts of the 63rd Scientific Sessions Program, 1989-1990;III-181.

142. Edel T, McAlister H, Castle L, Momt V, Simmons T, Wilkoff B, Maloney JD. Analysis of deaths in patients with automatic implantable defibrillators. 62nd Scientific Sessions Program, 1988-1989; Suppl II-121; Circ 80, No 4, Oct 1989.

143. McAlister H, Castle L, Morant V, Pollard C, Simmons T, Sterba R, Wilkoff B, Golding L, Maloney JD. Automatic implantable cardioverter defibrillator: Early and late results in 164 patients. North American Society of Pacing and Electrophysiology May 1989.

144. McCowan R, Maloney JD. Simmons T, Wilkoff B, Morant V, Sterba R, Berkovits B, Castle L. Termination of ventricular tachycardia by autodecremental pacing. American College of Cardiology March 1989.

145. Nagi H, Simmons T, Wilkoff B, Monnt V, Sterba R, Castle L, Maloney JD. Long-term results of catheter ablation of the AV junction in patients with supraventricular tachyarrhythmias. North American Society of Pacing and Electrophysiology May 1989.

146. Hughes MM, Simmons TW, Trohman RG, Castle LW, Wilkoff BL, Morant VA, Maloney JD. Flecainide provides safe therapy for supraventricular tachyarrhythmias. Oral presentation at the 39th Annual Scientific Sessions of the American College of Cardiology, New Orleans, Louisiana, March 18-22, 1990. JACC 1990; 15(2):40A.

147. Edel TB, McAlister H, Castle LW, Morant VA, Simmons TW, Wilkoff B, Trohman R, Money JD. The automatic implantable cardioverter defibrillator in patients with ejection fractions greater than 50 percent JACC 1990;15:199A.

148. Brodell G, Maloney J, Castle L, Goode L, Smith H, Wilkoff BL. Transvenous removal of chronic pacemaker leads. Oral presentation at the 11th Annual Scientific Sessions, North American Society of Pacing and Electrophysiology, San Diego, California, May 31 - June 3, 1990. Oral presentation at Cardiostim 90 7th International Congress, Nice, France - June 20-23, 1990. PACE 1990;13:502.

149. Edel TB, Castle LW, Morant VA, Simmons TW, Wilkoff BL, Trohman R, Maloney JD. Effect of combined cardiac surgery during implantable defibrillator placement on operative mortality and morbidity, lace mortality and shock analysis. Accepted for poster presentation at the 11th Annual Scientific Sessions, North American Society of Pacing and Electrophysiology, San Diego, California, May 31 - June 3, 1990. PACE 1990;13:529.

150. Wunderly D, Maloney J, Momt V, Castle L, Simmons T, Wilkoff B, McHenry M. Infections in automatic implantable cardioverter defibrillator patients. Accepted for oral presentation at the 11th Annual Scientific Sessions, North American Society of Pacing and Electrophysiology, San Diego. California. May 31 - June 3, 1990. PACE 1990;13:510.

151. Mdoney 3, Masterson M, Khoury D, Trohman R, Wilkoff B, Simmons T, Morant V, Castle L. Clinical performance of the automatic implantable cardioverter defibrillator in 105 patients. Oral presentation at Cardiostim 90 7th International Congress, Nice, France - Junc 20-23, 1990.

152. Nagi H, Simmons T, Wilkoff B, Monnt V, Sterba R, Castle L, Maloney J. Long-term results of catheter ablation of the AV junction in patients with supraventricular tachyarrhythmias. Accepted for oral presentation at Cardiostim 90 7th International Congress, Nice, France - June 20-23, 1990.

153. Gohn DC, Edel T, Moore S, Castle L, Morant V, Wilkoff B, Simmons T, Trohman R, Maloney JD. Sensing characteristics of epicardial leads in implantable cardioverter defibrillator patients: long-term follow-up. Submitted to 2nd International Congress on Rate Adaptive Cardiac Pacing and Implantable Defibrillators; Munich, Germany, 1990.

154. Firstenberg M, Edel T, Moore S, Morant VA, Wilkoff BL, Maloney JD, Castle LW. Long term follow-up of defibrillator patients with severe left ventricular dysfunction and poor functional status. Submitted to 2nd International Congress on Rate Adaptive Cardiac Pacing and Implantable Defibrillators; Munich, Germany, 1990.

155. Firstenberg M, Edel T, Moore S, Morant VA, Wilkoff BL, Maloney JD, Castle LW. Clinical predictors of poor prognosis in patients with implantable cardioverter defibrillators. Submitted to 2nd International Congress on Race Adaptive Cardiac pacing and Implantable Defibrillators; Munich, Germany, Oct 10-13, 1990.

156. Williams D, Walsh T, McCowan R, Vanerio G, Trohman RG, Simmons TW, Morant VA, Wilkoff BL, Pashkow F, Castle LW, Maloney J. Automatic implantable cardioverter-defibrillator related complications. J Am Coll Cardiol 1990;15:55A. Presented at the 39th Annual Scientific Session, American Collcgc of Cardiology, New Orleans, 1990.

157. Maloney JD, Vanerio G, Pashkow F. Follow-up and complications of rate-modulated pacemakers. Cardiostim 1990, PACE

158. Vanerio G, Trohman RG, Pinski SL, et al. Initial experience with DDIR pacing. PACE 1990;13:505. Presented at the Eleventh NASPE Meeting, San Diego. 1990.

159. Vancrio G, Pinski SL, Simmons TW, Trohman RG, Wilkoff BL, Castle LW, Maloney JD. Ventricular rate responsive pacing? or dual chamber rate responsive pacing? in patients with frequent atrial tachyarrhythmias. PACE 1990;13: 1214. Presented at the 2nd International Congress on rate adaptive cardiac pacing and implantable defibrillators, Munich, Germany, October 10-13, 1990.

160. Vanerio G, Rashidi R, McCowan R, Williams D, Castle LW, Momt VA, Wilkoff BL, Simmons TW, Maloney JD. Effects of high energy catheter ablation on permanent pacemakers. Circ 1990.

161. Pinski SL, Vanerio G, Castle LW, Morant VA. Simmons TW, Trohman RG, Wilkoff BL, Maloney JR. Clinical characteristics and follow-up of patients with high defibrillation thresholds. Circulation 1990; 82:III-169.

162. Williams D, Castle L, Morant V, Simmons T. Wilkoff B, Maloney JD, Trohman R. Automatic implantable cardioverter/defibrillator complications, Poster presentation at the American Collcgc of Cardiology meeting, 1990.

163. Edel T, Castle L, Momt V, Simmons T, Wilkoff B, Trohman R, Maloney JD. Effect of combined cardiac surgery during implantable defibrillator placement on operative mortality and morbidity. late mortality and shock analysis. Presented at NASPE 11th Annual Scientific Session, San Diego, California, May, 1990. PACE 13:529, 1990.

164. Pinski S, Maloney JD. Adenosine: a new drug for acute termination of supraventricular tachycardia. Cleve Clin J Med 1990; 57:383-388.

165. Pinski S, Mick M, Arnold A, Castle L, Maloney JD. Two-staged operative approach for patients with severe ischemia and malignant ventricular arrhythmias. PACE 1990; 13:1207.

166. Edel T, Castle L, Morant V, Simmons T, Wilkoff B, Trohman R, Maloney JD. Effect of combined cardiac surgery during implantable defibrillator placement on operative mortality and morbidity, late mortality and shock analysis. PACE 1990: 13:529.

167. Firstenberg M, Edel T, McAlister H, Moore S, Wilkoff B, Simmons T, Trohman R, Maloney JB, Castle L. Clinical predictors of poor prognosis in patients with implantable cardioverter defibrillators. PACE 1990: 13:1195.

168. Moore S, Firstenberg M, Edel T, Gohn D, Trohman R, McGuinn P, Simmons T, Wilkoff B, Maloney JD. Five year clinical device life of implantable cardioverter defibrillators. PACE 1990: 13:1205.

169. Pinski S, Mick M, Arnold A, Castle L, Maloney JD, Trohman R. Two-staged opcrativc approach for patients with severe ischemia and malignant ventricular arrhythmias. 2nd Internal Congress on Rate Adaptive Cardiac Pacing and Implantable Defibrillators October 10-13, 1990, Munich, West Germany.

170. Gohn D, Edel T, Moore S, Castle L, Morant V, Wilkoff B, Simmons T, Trohman R, Maloney JD. Sensing characteristics of epicardial leads in implantable cardioverter/defibrillator patients: Long-term foilow-up. Poster Presentation. 2nd Internal Congress on Rate Adaptive Cardiac Pacing and Implantable Defibrillators October 10-13, 1990, Munich, West Germany.

171. Hughes M, Simmons T, Trohman R, Castle L, Wilkoff B, Morant V, Mdoncy JD. Flecainide provides safe therapy for supraventricular tachyarrhythmias. JACC 1990; Vol 15;No 2:40A.

172. Maloney JD, Detrano R, Jaeger F, Leatherman J, Morant V, Castle L. Potassium loading as adjunct treatment of repetitive ventricular arrhythmias. Cleve Clin J Med 1990; 57:223-231

173. Brum J, Ribeiro M, Bedoya L, Jaeger F, Vanerio G, Maloney JD, Fouad-Tarazi F. Frequency-specific modulation of autonomic neural control of heart rate during tilt in normal teenager and adult volunteers. J Am Coll Cardiol 1991.

174. Moore S, Maloney JD, McGuinn W, Edel T, Gohn D, Morant V, Wilkoff B, Trohman R, Simmons T, Castle L. Automatic implantable cardioverter defibrillator implantation by non-thoracotomy approach: Initial clinical experience with the resigned transvenous lead system. FACE 1991;14:623.

175. Pinski S, Sgarbossa E, Alexander L, Castle L, Trohman R, Money JD. Survival of patients declining defibrillator implantation PACE 1991;14:641.

176. Edel T, Moore S, McGuinn P, Gohn D, Williams D, Shewchik J, Castle L, McCarthy P, Morant V, Simmons T, Trohman R, Wilkoff B, Maloney JD. Six-year

clinical experience with the automatic implantable cardioverter defibrillator. PACE 1991;14:642.

177. Vancrio G, Patel S, Ching E, Simmons T, Trohman R, Wilkoff B, Castle L, Maloney JD. Early clinical experience with a minute ventilation sensor DDDR pacemaker. PACE 1991;14:664.

178. Vanerio G, Maloney JD, Jacger F, Fouad-Tarazi F. Sensitivity and specificity of the head-up tilt in the young, PACE 1991;14:715.

179. Rashidi R, Corbelli R, Castle L, Simmons T, Wilkoff B, Morant V, Maloney JD. Clinical usefulness of a magnetic field detector in patients with ICDs. PACE 1991;14:717.

180. McGuinn P, Moore S, Edel T, Gohn D, Trohman R, Wilkoff B, Castle L, Maloney JD. Temporary dual-chamber pacing during tilt table testing for vasovagal syncope: A predictor of therapeutic success PACE 1991;14:734.

181. Herre JM, Cannom DS, Fogoros RN, Horowitz LN, Guarnieri T, Irwin JM, Levine JH, Maloney JD, Myerburg RJ, Porterfield JG, Prystowsky EN, Veltri EP, Winkle RA, VENTAX PRx Phase I Investigator Group: Initial multicenter clinical experience with a multifunctional implantable pacemaker defibrillator. Circ 1991;84:II-428.

182. Guarnieri T, Cannom DS, Chapman PD, Chilson DA, Echt DS, Epstein AE, Furman S, Greer GS, Luceri RM, Mdoney JD, Parsonnet V, Prystowsky EN, Ruskin JN, Veltri EP, Winkle RA, The ENDOTAK Phase I Investigator Group: Multicenter experience: Transvenous implantable cardioverter defibrillator lead system. Circ 1991;84:II-428.

183. McGuinn WP, Wilkoff BL, Maloney JD *et al*: Treatment of autonomically medicated syncope with rapid AV sequential pacing on demand. J Am Coll Cardiol 1991;17:271A.

184. Brum J, Ribeiro M, Ferrario C, Estafanous F, Masanori O, Maloney J, Fouad-Tarazi F: Autonomic alterations preceding syncope during head-up tilt. JACC 1992;19(3):75A.

185. Grimm RA, Klein AL, Cohcn GI, Maloney JD, Sgarboss E, Pearce GL, Stewart WJ, Salcedo EE: Concurrent transesophageal echo and electrical cardioversion in patients with atrial fibrillation: Effect of cardioversion on left atrial smoke. JACC 1992;19(3):155A.

186. Grimm RA, Klein AL, Cohcn GI, Maloney JD, Stewart WJ, Salcedo EE: Return of left atrial appendage function post electrical cardioversion of atrial fibrillation by transesophageal doppler echo. JACC 1992;19(3):156A.

187. Kimm SG, Pinski SL, Maloney JD, Furman S, Choue CW, Gross J, Brodman R, Roth J, Ferrick KJ, Fisher JD: Significance of ventricular function in implantable defibrillator patients: Montefiore Hospital and Cleveland Clinic Foundation JACC 1992;19(3):208A.

188. Sgarbossa EB, Pinski SL, Castle LW, Trohman RG, Mdoney JD: Long-term survival in paced patients with sick sinus syndrome is determined by underlying clinical status. JACC 1992;19(3):325A.

189. Firstenberg MS, Moore S, Ching E, Carlblom D, Maloney JD, Castle L, Simmons T, Wilkoff BL. Prognosis following treatment with a pacemaker and an implantable cardioverter defibrillator. PACE 1992;15:509.

190. Moore S, Firstenberg MS, Trohman R, Wilkoff BL, Simmons T, Maloney JD, Castle L. **Should** implantable cardioverter **defibrillators** be routinely replaced? PACE 1992;15:585.

191. Alexander LA, Erstenberg MS, Castle L, Maloney JD. Pacemaker implantation: Single versus dual chamber. Time/resource utilization. **PACE** 1992;15:508.

192. Sgarbossa EB, Pinski SL, Castle **LW.** Trohman **RG,** Maloney **JD.** Determinants of **chronic atrial** fibrillation **and** stroke in paced patients with **sick** sinus syndrome. **PACE** 1992;15:511.

193. Sgarbossa EB, Pinski SL, Castle LW, Trohman RG, Maloney **JD.** Determinants of congestive heart failure in paced patients with **sick sinus** syndrome. **PACE** 1992;15:512.

194. Helguera ME, Woscoboinik JR, Pinski **SL,** Shehadeh A, Castle LW, Money JD. **Long-term** performance of endocardial **pacing leads.** PACE 1992;15:512.

195. Rashidi R, Trohman RG, Moore SL, Simmons **TW,** Sterba R, **Castle** LW, Maloney **JD.** Importance of cutaneous patch location in radiofrequency catheter ablation **PACE** 1992;15:539.

**196.** Pinski **SL,** Sgarbossa EB, Maloney **JD,** Jubran F, Trohman **RG.** Determinants **of survival in** patients **with** malignant ventricular arrhythmias: evidence of selection bias **in** electrophysiologically-guided therapy. **PACE** 1992;15:550.

197. Woscoboinik JR, Mercho N, Helguera ME, Pinski **SL,** Simmons TW, Castle LW, Cook **SA,** Maloney JD. Diagnostic value of the chat x-ray in detection of pacemaker.lead failure. PACE 1992;15:572.

**198.** Woscoboink JR, Helguera ME, Pinski SL, Mercho N, *Castle* **LW,** Maloney JD. Performance **of** epicardial pacing leads in adults comparison with endocardial leads. **PACE** 1992;15:573.

199. Grimm RA, Klein **AL,** Cohen **GI,** Maloney JD. Transesophageal echocardiography in patients with atrial arrythmias undergoing electrical cardioversion: idnetification **of** sources of emboli. **PACE** 1992;15:587.

200. Schutzman JJ, Jaeger FJ, Maloney JD, **Fouad** FM. Head up tilt **and** hemodynamic changes **during** orthostatic hyporcnsion **in** patients **with** supin systolic **hypertension.** **PACE** 1992;15:592.

**201.** Schutzman JJ, Jaeger **FJ,** Maloney **JD, Fouad** FM. Head **up** tilt **and** hemodynamic **changes during** orthostatic **hypotension in patients with** supin systolic hypertension. **PACE** 1992;**15592**

202. Suri RS, Pinski SL, Williams D, Shewchik JM, Firstenberg M, Castle LW, Maloney JD: A comparison of simultaneous shock pathway vs sequential pathway in a non-thoracotomy triple electrode defibrillator. Eur JCPE 1992;2:A106.

203. Maloncy JD, Sgarbossa EB, Pinski SL: Problems with rate-adaptive systems. Eur JCPE 1992;2:

204. Williams D. Moreyra E, Tan M, Underwood D, Maloney JD: Frequency domain analysisof thc SA-ECG as a predictor for ventricular tachycardia in patients with conduction defects. Eur JCPE 1992;2:A150.

205. Khoury DS, Maloney JD, Castle LW: Modeling the electro-mechanical properties of the left ventricle using a network analysis program. Eur JCPE 1992;2:A151.

206. Woscoboinik J, Helguera M, Mercho N, Alexander L, Firstenberg M, Simmons T, Monnt V, Castle L, Maloney JD: Lead survival: Performance of different models. Eur JCPE 1992;2:A82.

207. Helguera M, Woscoboinik J, Pinski S, Bdco K, Hardy M, Tobin M, Castle L, Trohman R, Wilkoff B, Maloncy J: Performance of bipolar coaxial leads. Performance of bipolar coaxial leads. Eur JCPE 1992;2:A82.

208. Schutzman J, Jaeger F, Mdoncy J, Fouad-Tarazi F: Head up tilt and hemodynamic changes during orthostatic hypotension in patients with supine hypertension. Eur JCPE 1992;2:A31.

209. Sgarbossa EB, Pinski SL, Castle LW, Trohman RG, Maloney J D Incidence and predictors of loss of pacing in the atrium in sick sinus syndrome. Eur JCPE 1992;2:A42.

210. Sgarbossa EB, Pinski SL, Castle LW, Trohman RG, Maloney JD: Predictors ob syncope in paced patients with sick sinus syndrome. Eur JCPE 1992;2:A42.

311. Moore S, Firstenberg M, Trohman R, Wilkoff BL, Simmons T, Maloney JD, Castle L: Value of electropohysiology testing for routine implantable dcfibrillatar replacement. Eur JCPE 1992;2:A120.

212. Moore S, Edel T, Firstenberg M, Wilkoff B, Simmons T, Pollard C, Maloney J, Castle L: Mortality predictors in patients with implantable cardioverter defibrillators. Eur JCPE 1992;2:A124.

213. Williams D, Arnold A, Edel T, Firstenbert M, Suri R, Bdco K, Moore S, Maloney J, Trohman R: Long rem survival of women with implantable cardioverter defibrillators. Eur JCPE 1992;2:A125.

214. 'Pinski SL, Sgarbossa EB, Jubran F, Trohman RG, Maloney JD: Survival after a first episode of ventricular tachycardia or fibrillation. Eur JCPE 1992;2:A147.

215. Firstenberg M, Ching B, Wilkoff B, Pashkow FJ, Maloney J: Characteristics of a universal device programmer: An achievable goal with current computer technology. Eur JCPE 1992;2:A53.

216. Firstenberg M, Wilkoff B, Pashkow F, Moore S, Maloney J, Castle L: I.M.A.G.E. - A model for arrhythmia patient care: 21st Century concepts, available today. Eur JCPE 1992;2:A56.

217. McCarthy P, Castle L, Mdoncy J, Trohman R, Simmons T, Klein A, White R: Surgical treatment for atrial fibrillation. Eur JCPE 1992;2:A148.

218. Klein AL, Grimm RA, Black IW, Bailey AS, McQueen YM, Cohen GI, Pearce GL, Maloney JD, Castle LW Return of atrial function postcardioversion: Comparison between left atrial appendage and left arterial cavity function by doppler transesophageal echocardiography. JACC 1993;21:28A.

219. Grimm RA, Klein AL, Stewart WJ, Maloncy JD, Black IW, Thomas JD: Characterization of left atrial appendage flow by fourier analysis Application to patients with atrial fibrillation and flutter. JACC 1993;21:29A.

220. Suri RS, Woscoboinik JR, Maloney JD, Helguera ME, Shewshik JM, Morant VA, Castle LW: Non-thoracotomy transvenous leads and programmable implantable cardioverter defibrillators: Technique, morbidity and outcome. JACC 1993;21:126A.

221. Horvitz LL, Pietrolungo JF, Castle L, Trohman R, Maloney JD: Complete coronary revascularization is associated with a lower risk of ventricular arrhythmias in patients with implantable defibrillators. JACC 1993;21:151A.

222. Jaeger FJ, Maloney JD, Castle LW, Fouad-Tarazi FM: Is absolute hypovolemia a risk factor for vasovagal response to head-up *tilt?* PACE 1993;16:743-750.

223. Sgarbossa EB, Pinski SL, Ching E, Maloney JD: Adverse effects and limitations of rate-adaptive pacing: In: Barold S, Mugica J eds. *New* Perspectives in Cardiac Pacing, Vol 3. Futura Publishing *Co.*, Mt. Kisco, NY, *1993*, pp 383-423.

224. Rashidi R, Alexander LA, Belco K, Trohman R, Sterba R, Maloney JD, Castle L: Reuse of radiofrequency ablation catheter: A feasibility study. PACE 1993; 16:952.

225. Pinski SL, Helguera ME, Mafoncy JD: Short- and long-term outcome after an episode of ventricular electric storm. PACE 1993; 16:872.

226. Sgarbossa EB, Pinski SL, Wilkoff BL, Castle LW, Trohman RG, Maloney JD: Is programming a long A-V delay effective in permitting spontaneous ventricular activation? PACE; 1993; 16:872.

227. Kleman JM, Pinski SL, Helguera ML, Maloncy JD, McCarthy PM, Wilkoff BL, Morant VA, Trohman RG, Castle LW: An intention to treat analysis of transvenous and epicardial ICD system implantation. PACE 1993; 16874.

228. Winkelman E, Maloney JD, Tuthill R: Long term effects of amiodarone hepatotoxicity and cirrhosis - Five year followup. PACE 1993; 16:892.

229. Holmes DR, Nadzam WE, Alexander LA, DeLuca SA, Stein SM, Sapp S, Goormastic M, Maloney JD: Dose-related effects of intravenous ativan on anxiety, sedation and amnesia during cardiovascular procedures. PACE 1993; 16:910.

230. Moore S, Firstenberg MS, Trohman RG, Sterba R, Maloney JD: Long term effects of radiofrequency catheter ablation on previously implanted pacemakers. PACE 1993; 16:947.

231. Khoury DS, Rizo-Patron C, Maloney JD: Mapping of cardiac arrhythmias. Current and future directions. Proc 11th Conf Biomed Eng Res 1993, Houston, Texas, p 81.

232. Raghavan C, Nitta J, Lowry RW, Kirkpatrick CD, Khoury DS, Zhu WX, Rizo-Patron C, Young JB, Short WD, Noon GP, Maloney JD: Time course of sinus node dysfunction and AV conduction disturbance after cardiac transplantation. JACC 1994 7A: 157A.

233. Hauser R, tango T, Martin R, Emanuele T, Mdoney JD, Wadsworth D, Maloney J: Cardiovascular device technology transfer: tracking trends. PACE 1995;

234. Emanuele T, Coutinho N, Maloney JD, Lango T, Somberg, J: Ventricular dilation: A factor for QRS duration and a predictor of clinical arrhythmia. FACE 1995;

235. Maloney AD, Emanuele T, Lango T, Chryssos A, Dash S, Simmons M: Suture induced lead deformity. PACE 1995;

236. Maloney JD, Kirkpatrick C, Metcaff J, Zhu D: Bipolar coaxial ventricular lead failure: clinical profile. PACE 1995;

237. Lowry RW, Raghavan C, Nitta J, Vardan S, Cocanougher B, Noon GP, Short HD, Mdoney JD, Young JB: *Can* clinical parameters predict efficacy of ealry permanent pacemaker implantation following cardiac transplant? PACE 1994; 17: (in press).

238. Raghavan C, Gallinghouse J, MacLellan R, Kirkpatrick C, Freeman M, Bray C, Zhu WX, Rizo-Patron C, Spencer W, Maloney JD: Adequacy of rate control therapy for atrial fibrillation in a pacemaker clinic population. PACE 1994; 17: (in press).

239. Nitta J, Lowry RW, Raghavan C, Freeman M, Berrier H, Khoury D, Zhu WX, Rizo-Patron C, Young JB, Maloney JD: Long-term follow-up of cardiac transplant recipients requiring permanent pacemakers. PACE 1994; 17: (in press) (accepted as alternate for presentation at NASPE 15th Annual Scientific Session).

240. Lamas GA, Venditti FJ, Maloney JD: Quality of life and clinical events in DDDR versus VVIR paced patients: design and preliminary results of a ransomized trial. Accepted as presentation at the 68th scientific sessions of the American Heart Association.

241. Maloney JD, Ragahvan R, Young J: Indications for permanent pacing in post transplant patients with relative bradycardia. Submitted *to* Xth World symposium OR cardiac pacing and electrophysiology, 1995.

242. Mdoney JD, Emanuele T, Lango T: Suture induced lead deformity. Submitted to Xth World symposium on cardiac pacing and electrophysiology, 1995.

243. Zhu WX, Nitta J, Koury D, Maloney JD: Docs inducibility of ventricular tachyarrhythmias correlate with discersion of ventricular activation and refractoriness in hypertrophic cardiomyopathy? Revista Chilena dc Cardiologia Vol 14 No 3, 1995.

244. Zhu W, Nitta J, Maloney JB: Impact of slow pathway modification on ventricular rate control during atrial fibrillation. PACE 1995 (Part II); 18:1162.

245. Zhu W, Pinski S, Nitta J, Trohman RG, Khoury D, Rizo-Patron C, Maloney JD: Safety and efficacy of radiofrequency catheter ablation of symptomatic ventricular ectopy. PACE 1995 (Part II); 18:1166

246. Khoury DS, Zhu WX, Nitta J, Rizo-Patron C, Maloney JD: Protection of a programmable polarity pacemaker from excessive electrical energy Proc 12th Conf Biomed Eng Res 1994, Houston, Texas, in press.

247. Martino L, Martin RC, Maloney JD: New onset polymorphic incessant venticular tachycardia/ventricular fibrillation: Clinical profile, relationship so acute ischemia survival and role of acute amiodarone. Accepted for presentation at 10th International Congress Cardiostim 1996.

248. Maloney JD, Martin RC, Vidysagar C: Transvenous bi-atrial and bi-ventricular pacing is technically feasible for management of arrhythmias and end-stage heart failure Accepted for presentation at 10th International Congress Cardiostim, 1996.

249. Martin RC, Maloney JD, Smith J: Finances of cardiac pacing in a community hospital: Is it worth it in 1995. Accepted for presentation at 10th International Congress Cardiostim, 1996.

250. Martin RC, Simmons M, Wadsworth D, Maloney JD: Bilateral femoral triport introducer sheaths for concomitant diagnosis and radiofrequency ablation of paroxsysmal supraventricular tachycardia. Accepted for presentation at NASPE 16th annual Scientific session.

4-1-97

Jim Casey
Reminger & Reminger
The 113 St. Clair Building
Cleveland, Ohio 44114

Dear Mr. Casey:

After reviewing the materials (medical records and affidavits) that you provided me regarding the care of Mr. Dewey Jones, I have concluded the following:

1. The cardiovascular health of Mr. Jones was well known to his physicians from past medical evaluations and pre-operative clinical assessments during the patients last hospitalization at Meridian Huron Hospital. At the time of his hospitalization, Mi-. Jones was a thirty three year old obese male weighing more than 310 pounds and 5'8" in height. His obesity had been refractory to multiple therapeutic plans than included diet and exercise. He had been treated on multiple occasions in local hospitals for labile hypertension, recurrent congestive heart failure, obesity and cardiomyopathy. All of these conditions appeared to be chronic and were risk factors for premature cardiovascular death. His blood pressure would appear to be a major problem as an outpatient but would come under rapid control when hospitalized. His cardiac symptoms would appear directly related to the degree of his hypertension and would also rapidly subside as his blood pressure was brought under control. He had left ventricular dysfunction that appeared to be symptomatic only when his blood pressure was out of control.

2. Mr. Jones' condition(s) had been adequately stabilized prior to his gall bladder surgery, and the internist, anesthesiologist, and general surgeon assessed their aspects of the patient and all felt he was a satisfactory candidate for the necessary and required gall bladder surgery. I concur with this decision as an internist, a cardiologist and a cardiac electrophysiologist. Knowing this man's history and his current probiem, I would have also recommended surgery for the patient during this *Same* hospitalization.

3. Mr. Jones had recurrent symptoms of chronic recurrent cholecystitis and chronic cholelythiasis

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that had to be effectively treated and would best be treated by *surgical* intervention, because

the complications of acute cholecyctitis untreated in this same patient with a compromised

health status posed even greater risk.

4. Mr. Jones tolerated the general anesthesia and surgical removal of the gall bladder Without difficulty. After completion of the *surgical* removal of the gall bladder and wound closure, Mr. Jones became hypoxic. The hypoxia and subsequent events occurred when preparations were being made to extubate Mr. Jones. The hypoxia preceded the reflex bradycardia and led to the subsequent pulmonary infiltrations. He did not experience a cardiac arrest, but rather developed reflex bradycardia and hypotension. These problems resolved rapidly when the heart rate and cardiac output was enhanced by medication, thereby demonstrating the presence of good cardiac reserve.

5. The pre-operative and surgical management of Mr. Jones was appropriate and well within the standard of care.

If a more detailed review of the history and subsequent hospital course is required, please let me know.

Sincerely yours,

James D. Maloney, M.D., F.A.C.C.

July 9, 1997

Jim Casey
Reminger & Reminger
The 113 St. Clair Building
Cleveland, Ohio 44114

Dear Mr. Casey:

As a supplement to my report of 4-1-97, I will be rendering an opinion regarding Mr Jones' life *expectancy* prior to the operation of 10-20-94.

Sincerely yours,

James D. Maloney, M.D.

HARVARD MEDICAL SCHOOL
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March 5, 1997

Paul Grieco
Landskroner & Phillips
55 Public Sq. Suite 1040
Cleveland, OH 44113

Re: Dewey Jones

I, Marc J. Semigran, am a licensed physician Board Certified in Cardiology. I have reviewed the records of Dewey Jones including the hospital records of 1991-1994 of the Community Hospital of Bedford and of 9/18-9/20/94 and 10/17-11/21/94 of the Meridia Huron Hospital.

Mr. Jones is a 34 year old man with a history of severe hypertension and heart failure. An echocardiogram performed on 6/24/94 had revealed left ventricular dilation and moderate hypokinesis with overall depressed systolic function. Mild left ventricular hypertrophy was also noted. Mr. Jones was admitted to Meridia Hospital from 9/18-9/20/94 with hypertension and decompensated heart failure. He responded to intravenous diuretics and an increase in his vasodilator regimen.

Mr. Jones was again admitted to Meridia Hospital on 10/17/94 with abdominal pain due to cholelithiasis. He was hypertensive on admission, and minoxidil was added to his regimen. Intravenous fluids were administered, and on 10/20 he was taken to the operating room where he underwent a cholecystectomy. At the time of extubation after the procedure, the patient developed acute pulmonary edema and had a bradyarrhythmic cardiac arrest. He was resuscitated and resuscitated. His pulmonary edema was treated with intravenous Lasix, enalapril and transdermal nitropaste. At the time of placement of a PA line 4.5 hours later, his pulmonary artery wedge pressure was elevated at 18 mm/Hg as was his cardiac index at 4.93 l/min/m2. After several days of treatment, Mr. Jones's hemodynamics stabilized. Unfortunately, he remained unresponsive during the remainder of his Meridia hospitalization, likely due to cerebral anoxic injury at the time of cardiac arrest.

It is my considered opinion that the care given to Mr. Jones prior to surgery deviated from good and accepted medical practice in that: 1) the vasodilator given to him, minoxidil, commonly leads to fluid retention, an effect which would be expected to exacerbate Mr. Jones's underlying heart failure; 2) Mr. Jones was given a large amount of intravenous hydration (D5W/0.25NS @ 120 ml/hr) beginning the evening prior to surgery despite his cardiomyopathy and tendency to volume overload; this added to his already high risk of developing pulmonary edema; 3) Mr. Jones was cleared for surgery despite the fact that an echocardiogram ordered on

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10/18/94, which would have likely indicated the presence and severity of Mr. Jones' cardiomyopathy and helped guide his management, had not been performed. I believe that the non-emergent nature of the cholecystectomy would have allowed time for a complete cardiac evaluation, including the echocardiogram, to have been performed. It is more likely than not that, with a reasonable degree of medical certainty, the failure to appropriately manage Mr. Jones' cardiac condition led to his post-operative arrest.

Sincerely,

Marc J. Semigran MD