Page

IN THE COURT OF COMMON PLEAS
OF CUYAHOGA COUNTY, OHIO
- - - - -
DIANE COLVIN, ADMINISTRATOR
OF THE ESTATE OF GREGORY
COLVIN,
Plaintiff,
vs. Case No.
KEITH KRUITHOFF, M.D.,
ET AL., 388614
Defendants.
- - - - -
DEPOSITION OF KEITH KRUITHOFF, M.D.
Friday, June 30, 2000
- - - - -
Deposition of KEITH KRUITHOFF, M.D., a Defendant herein, called by the Plaintiff for examination under the statute, taken before me, Karen M. Patterson, a Registered Merit Reporter and Notary Public in and for the State of Ohio, pursuant to notice and stipulations of counsel, at the offices of Bonezzi switzer Murphy & Polito Co., L.P.A., suite 1400, The Leader Building, Cleveland, Ohio, at 9:35 o'clock a.m. on the day and date set forth above.

Page 2

APPEARANCES:

On behalf of the Plaintiff

Becker & Mishkind Co., L.P.A., by
JEANNE TOSTI, ESQ.
Suite 660 Skylight Office Tower
1660 West 2nd Street
Cleveland, Ohio 44113
(216) 241-2600

On behalf of the Defendant Cleveland Clinic Foundation:

STEPHEN A. SKNER, ESQ.
30025 E. River Road
Perrysburg, Ohio 43551
(419) 666-3417

On behalf of the Defendant Keith Kruithoff, M.D.:

Bonezzi Switzer Murphy & Polito Co., L.P.A., by
JOHNS. POLITO, ESQ.
Leader Building, Suite 1400
526 Superior Avenue
Cleveland, Ohio 44114-1491
(216) 875-2767

On behalf of the Defendant Ohio Permanente Medical Group:

Roetzel & Andress, by
ANNA MOORE CARULAS, ESQ
1375 East 9th Street
Cleveland, Ohio 44114
(216) 623-0150

Page 3

KEITH KRUITHOFF, M.D., of lawful age, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

EXAMINATION OF KEITH KRUITHOFF, M.D.

BY MS. TOSTI:

Q. Doctor, would you please state your name for us and spell your last name.

A. My name is Keith Leonard Kruithoff, K-R-U-I-T-H-0-F-F.

Q. What is your home address?

A. 3305 Dorchester Road, Shaker Heights, Ohio.

Q. And the zip code?

A. 44120.

MR. POLITO: Do me a favor, doctor, speak up a little bit louder because Mr. Skiver has to hear you down at the end of the table.

Q. Is that a single-family home, doctor?

A. Yes.

Q. And what's your current business address?

A. 10 Severance Circle, Cleveland Heights, Ohio. I think it's 44128.

Page 4

Q. And at the time that you rendered care to Gregory Colvin, was that also your business address?

A. No. It was 12301 Snow Road, Parma, Ohio, 44130.

Q. At the time that you rendered care to Gregory Colvin, who was your employer?

A. The Ohio Permanente Medical Group.

Q. Who is your current employer?

A. The Ohio Permanente Medical Group.

Q. Do you currently render professional services for any other entity besides Ohio Permanente Medical Group?

A. No.

Q. Have you ever had your deposition taken before?

A. Yes.

Q. How many times?

A. Three prior times.

Q. And why was your deposition being taken? And by that I mean in what capacity was your deposition being taken?

MR. POLITO: Objection. Go ahead and answer.

A. Twice as Plaintiff -- as a Defendant

Page 5

in a malpractice suit, and once as an expert witness.

MR. SKIVER: I'm sorry, doctor, I didn't hear that last part.

A. Once as an expert witness and twice as a Defendant in a malpractice lawsuit.

Q. I want to review a few of the ground rules for depositions with you. This is a question-and-answer session, and it's under oath, it's important that you understand my questions.

A. Sure.

Q. If you don't understand them, if I phrase them inartfully, let me know, I'll be happy to repeat it, rephrase the question. Otherwise, I'm going to assume you understood my question and you are able to answer.

It's also important that you give all of your answers verbally, because our court reporter can't take down head nods or hand motions.

At some point, were you provided with a set of medical records to look at?

A. Yes, I was.

Q. If at some point you wish to refer to those records, feel free to do so.

Page 6

A. Okay.

Q. Also, at some point one of the defense attorneys may choose to enter an objection. You are still required to answer my question unless counsel tells you not to do so. Do you understand those directions?

A. Yes, I do.

Q. Doctor, you mentioned that you had been named as a Defendant in a medical malpractice litigation on two occasions; is that correct?

A. Yes.

MR. POLITO: Jeanne, just show a continuing line of objection to these questions.

MS. TOSTI: Okay.

Q. Could you tell me, were both of those times in Cuyahoga County?

A. One was.

Q. Where was the other?

A. Jackson County, Michigan.

Q. And are either of those cases still pending?

A, No.

Q. When was the Cuyahoga County case filed, approximately?

Page 7

A. Early 1997.

Q. And how was that case resolved?

A. The case was resolved by a jury trial.

Q. And what was the resolution of the case?

A. The resolution of the case was a finding for the Plaintiff.

Q. What was the name of the Plaintiff in that case?

A. Ernest Tolar.

Q. I'm sorry.

A. Ernest Tolar.

Q. Could you spell that last name?

A. T-O-L-A-R.

Q. And what was the allegation of negligence?

A. The allegation of negligence was wrongful death.

Q. Well, what was alleged that you did improperly?

A. Failure to diagnose cardiac tamponade.

Q. Do you recall who the Plaintiff's attorney was in that case?

A. Steve Charms.

Q. And, doctor, you mentioned that there

Page 8

was another case that was filed in Jackson City, Michigan. When was that case filed, approximately?

A. 1994.

Q. And how was that resolved?

A. It was settled.

Q. And what was the allegation of negligence in that case?

A. Failure to diagnose necrotizing fascitis.

Q. Do you recall the name of the Plaintiff in that case?

A. No.

Q. Do you recall the name of the Plaintiff's attorney in that case?

A. No.

Q. Now, you have indicated that you served as an expert on one occasion; is that correct?

A. Yes.

Q. Is that case currently pending?

A. No.

Q. When did you serve as an expert?

A. It was in 1993.

Q. Was that in Ohio here?

Page 9

A. No.
Q. What state was it in?
A. Michigan.
Q. Was that for Plaintiff or for the defense?
A. Plaintiff.
Q. Do you recall what the allegation of negligence was in that case?
A. I'm not sure if I was an expert witness or a fact witness. It was regarding a child abuse case, and I was a treating physician.
Q. Have you ever given trial testimony? I imagine in the one case that went to trial you did.
A. Yes.
Q. What about in regard to the Michigan case, did you give trial testimony?
A. No.
Q. Did you give trial testimony in the child abuse case that you mentioned?
A. Yes.
Q. Doctor, I'm going to ask you a little bit about your background. Did you happen to bring a curriculum vitae with you?

Page 10

A. Yes.

(Thereupon, PLAINTIFF'S Deposihon Exhibit 1 was mark'd for purposes of identification.)

MR. POLITO: Exhibit 1?
THE WITNESS: Yes.
Q. Doctor, you are currently licensed in both Ohio and Michigan; is that correct?
A. Yes.
Q. And you are also board certified in internal medicine; is that correct?
A. Yes.
Q. Are you also board certified in cardiology?
A. Yes.
Q. Did you pass both of those board certifications on your first try?
A. Yes.
Q. I'd like you to just identify what this document is for the record, and then I'll have a few more questions for you.
A. This is a copy of my curriculum vitae prepared by me.
Q. You're referring to Plaintiff's Exhibit 1; correct?

Page 11

A. Yes, I am.
Q. Are there any additions or corrections that you'd like to make to that document?
A. No.
Q. Is it up to date, as far as you know?
A. Yes.
Q. Doctor, the publications that you have listed on your Curriculum vitae, do you feel any of those have particular significance to the issue in this case?
A. No.
Q. Your background that is listed under professional history in regard to the department of emergency medicine, could you just describe for me in a little bit more detail as to what your responsibilities entailed with that position.
A. Yes. During residency, I moonlighted in two emergency rooms. Following the completion of residency, I worked full time at Foote Memorial Hospital in Jackson, Michigan, as a full-time attending emergency room physician for one year prior to the commencement of my cardiology fellowship in 1994.
I also continued to work part time in

Page 12

the -- at the Hillsdale Community Health Center during this period and into my Cardiology fellowship.
Q. Currently are you providing any emergency room services for Ohio Permanente Medical Group?
A. No.
Q. So all of your work currently is as a cardiologist for Ohio Permanente Medical Group?
A. Yes.
Q. In 1997 and 98, what hospitals did you have privileges at?
A. The Cleveland Clinic Foundation, and I believe I still have admitting privileges at Hillsdale Community Health Center.
Q. Do you currently still have privileges at Cleveland Clinic Foundation?
A. Yes, I do.
Q. Are those admitting privileges?
A. Yes, they are.
Q. Have you ever had your hospital privileges called into question, suspended or revoked?
MR. POLITO: Objection. Go ahead.
A. No.

Q. Doctor, do any of the publications that are listed on your curriculum vitae deal with the subject matter of bacterial endocarditis?

MR. POLITO: Objection. Asked and answered, but go ahead.

A. No.

Q. Do any deal with prosthetic heart valves?

A. No.

Q. Have you ever taught or given a formal presentation on the subject matter of bacterial endocarditis?

A. Yes.

Q. When have you done that?

A. May of 1994.

Q. May of 19 --

A. 94.

Q. Has that presentation ever been reduced to a written form or a video or an audiotape?

A. It was reduced to an abstract.

Q. Is that listed on your curriculum vitae?

A. No.

Q. What is the title of the abstract?

A. I don't recall specifically, but I believe it -- it's the utility of transesophageal and transthoracic echocardiography in the diagnosis of infective endocarditis.

Q. Was that abstract published in any publication?

A. No.

Q. I'm sorry?

A. No.

Q. Do you have a copy of that abstract?

A. At home.

Q. Would you be able to provide that to counsel?

A. Yes.

MS. TOSTI: I'm going to make a request for a copy of that abstract.

Q. Tell me what you have reviewed for this deposition.

A. I reviewed the Cleveland Clinic hospital record for Mr. Colvin; I reviewed the Kaiser Permanente chart for Mr. Colvin; I reviewed the Cleveland Heights Medical Center ghost file for Mr. Colvin; I reviewed the record of my telephone documentations with Mr. Colvin; I

reviewed a copy of my schedule on February, March and May of 1998; I reviewed Eugene Braunwald's chapters on infective endocarditis and rheumatic heart disease in the second edition of Braunwald's Textbook of Cardiovascular Diseases.

Q. When you indicated that you reviewed the Cleveland Clinic Foundation records, Mr. Colvin had several admissions. Did you review the records from each of those admissions?

A. Yes.

Q. You also mentioned a Cleveland Heights ghost file. What is contained in the Cleveland Heights ghost file?

A. A copy of pertinent hospital discharge summaries or other records pertaining to the patient's care that have been previously generated through either the Kaiser records or through Cleveland Clinic records.

Q. Is everything in that file a duplicate of what would be found in part in the Cleveland Clinic records or the Kaiser records?

A. Yes.

Q. Now, you mentioned telephone documentation. Do you keep some type of a telephone log when you talk with clients?

A. Yes.

MS. TOSTI: I'm going to make a request for the telephone log that pertains to Gregory Colvin, obviously redacting anything that doesn't relate to him.

MR. POLITO: Okay.

Q. And you mentioned you also referred to a copy of your schedule from February, March, and what months was it?

A. February, March and May of 1998.

Q. And why is it that you referred to those three months of your schedule?

A. I referred to those three months because those were the months that Mr. Colvin had been admitted to the hospital.

MS. TOSTI: I'm going to make a request for the doctor's schedule for those three months also.

Q. Now, in regard to your reference to Braunwald's, do you find Braunwald's to contain accurate and helpful information in your practice?

MR. POLITO: Objection. Go ahead, doctor, you can answer.

A. I don't consider it to be an

Page 17

authoritative text, but the information contained is generally reliable.
Q. And why is it that you referred to Braunwald in this case?
A. To review the subject matter at hand.
Q. And in regard to the material that you reviewed in Braunwald's for this case, did you find that information to be reliable?
MR. POLITO: Objection. Go ahead.
A. I can't validate the accuracy of everything, but generally reliable, yes.
Q. Did you find anything that you didn't agree with in there?
MR. POLITO: Objection. Go ahead.
A. Not specifically.
MR. SKIVER: You're really going to have to work at speaking up because you kind of have a nice, low voice.
THE WITNESS: Can he sit closer?
MR. SKIVER: But, still, your voice is not transmitting at all.
Q. Since this case was filed, have you discussed this case with any physicians?
A. Since it was filed, no.
Q. And other than with counsel, have you

Page 18

discussed the case with anyone else since it was filed?
A. No.
Q. Do you have any personal notes or personal file on this case?
A. I took some notes from some conversations I had had, and when I found this case was the subject of litigation, I reviewed the medical record and summarized the medical record for my attorneys.
Q. Now, you said that you took some notes from conversations you had. Who did you have those conversations with?
MR. POLITO: Objection. Go ahead.
A. Dr. Craig Saunders.
Q. And when did you have those conversations with Dr. Saunders?
MR. POLITO: Objection. Just show a continuing line.
A. Following Mr. Colvin's death.
Q. Do you still have notes from those conversations?
A. I have -- I took those notes, and I wrote a written summary on the computer and I subsequently threw the notes away.

Page 19

MS. TOSTI: I'm going to make a request for the doctor's summary of those conversations that he had had with Craig Saunders.
Q. What was the subject matter of the conversations that you had with Dr. Saunders?
A. The surgical management of the patient and my inquiry as to why the patient wasn't taken to surgery on May 15th.
Q. And what did you find out when you talked with Dr. Saunders in regard to those issues?
A. Dr. Saunders stated that he accepted full responsibility for not taking the patient to surgery on May 15th.
Q. Do you feel that Gregory Colvin should have gone to surgery on May 15th?
MR. POLITO: Objection. Go ahead.
A. Yes.
Q. Did Dr. Saunders say that he thought he should have taken him to surgery on May 15th?
A. Yes.
Q. In this case, do you think if Mr. Colvin had gone to surgery on that date that the outcome would have been positive and he would

Page 20

have survived?
MR. POLITO: Wait a minute, doctor. Objection. Go ahead.
A. Could you rephrase your question or define what you mean by positive?
Q. That he would have survived.
MR. POLITO: Objection.
Q. That's what I mean by positive.
A. Yes.
Q. When did you have the conversation with Dr. Saunders? You said it was after Mr. Colvin's death. Could you tell me how much after his death it was?
A. I believe it was Mr. Colvin died on Sunday, May 17th. I believe the conversation took place that following week. I believe it may have been on Tuesday of that week, but it was within one or two days of that date.
Q. How many conversations did you have with Dr. Saunders?
A. One.
Q. After that one conversation, did you have cause to speak with him at any other time about Mr. Colvin?
A. No.

Page 21

Q. Did you have any communications with the family after you talked with Dr. Saunders in regard to the failure to take Mr. Colvin to surgery?
A. Could you break the question down?
Q. After Mr. Colvin died and you had an opportunity to talk with Dr. Saunders, did you talk with any of the Colvin family members?
A. Yes.
Q. And what did you tell them in regard to why Mr. Colvin was not taken to surgery, if anything?
A. That question was never asked of me.
Q. Did Dr. Saunders tell you why Mr. Colvin was not taken to surgery on May 15th?
A. Yes.
Q. Why was that?
A. He told me he had received inaccurate clinical information on the patient from Joyce Tedrick, the surgical scheduler, and he falsely relied on her opinion, or he inaccurately, he erroneously -- when I say falsely, what I meant to say is he erroneously relied on her opinion.
Q. What information did she provide to him that misdirected him?

Page 22

MR. SKIVER: Objection.
MR. POLITO: If you know.
A. According to Dr. Saunders, he told me that he had received inaccurate information about the patient's clinical status and was led to believe the patient was clinically stable enough to wait till Monday for his surgery.
Q. Was there a particular thing in regard to his clinical status that was considered unstable?
MR. SKIVER: Objection. Go ahead.
Q. I know that's an odd question. But what I'm getting at, was it cardiac decompensation, was it some other problem, that he was told that caused the patient to be clinically unstable?
A. Could you read the question, please.
(Record read.)
A. The patient was in fulminant heart failure with documented valvular dehiscence and severe four plus paravalvular mitral insufficiency.
Q. Did you ever have any conversations with Joyce Tedrick in regard to the information that was provided to Dr. Saunders?

Page 23

A. No.
Q. Do you know if Dr. Saunders got back to her and talked with her?
MR. SKIVER: Objection. Go ahead.
MR. POLITO: After his conversation with him?
MS. TOSTI: Yes.
MR. POLITO: He never spoke to -- go ahead.
A. I'm confused.
Q. Well, let me -- no, not after the conversation. Do you know whether Dr. Saunders ever spoke with Joyce Tedrick in regard to the misinformation he was provided?
A. I don't know whether he spoke subsequently to Joyce Tedrick. I know that he had received two clinical updates from Joyce Tedrick on the date of May 15th regarding the patient's clinical status.
Q. Do you know where Joyce Tedrick received her information from?
A. Joyce Tedrick received her information from Dr. Paul Miller, who was the consulting cardiologist and a member of our cardiology group who was seeing Mr. Colvin on a consultative basis

Page 24

during his admission from May 15th until the time of his death.
Q. Do you know whether the information that Dr. Paul Miller was providing to Joyce Tedrick was inaccurate?
A. No. I can personally verify the accuracy of the information, since on that day I had -- we both clinically evaluated the patient together and we had a conversation as to the clinical acuity of the patient, and both agreed that the patient's condition was serious and required emergent surgery.
Q. Did you and Dr. Miller then concur in regard to the status of the patient as well as the emergent necessity for surgery for this patient?
A. Yes.
Q. Doctor, have you participated in any research dealing with the subject matter of bacterial endocarditis?
A. Yes.
Q. Could you tell me when you participated in that research?
A. In the spring of 1993 as a part of my senior research project at the University of

Page 25

Michigan Medical Center when I was a resident, I performed a retrospective chart review of approximately 90 sequential patients who had been sent to the echocardiogram laboratory for the diagnosis of presumptive endocarditis and compared the sensitivity specificity, positive and negative predicted value, of both surface echocardiography and transesophageal echocardiogram in the diagnosis of infective endocarditis.

Q. What were your findings from that study?

A. I would have to review my abstract.

Q. Did you find that transesophageal echocardiography was predictive of endocarditis?

A. I can't answer that question in the affirmative. Again, I would need to review my abstract. However, I can state from my memory that the study showed that the sensitivity of transesophageal echocardiogram was superior to surface echocardiogram. However, the positive predicted value was lower.

Q. Where was that study done?

A. University of Michigan Medical Center.

Q. Were the results of that study ever

Page 26

published?

A. No.

Q. Was that study ever replicated, to your knowledge?

A. Don't know.

Q. Now, doctor, is your current practice limited to the field of cardiology?

A. Yes.

Q. And was that also true at the time that you cared for Gregory Colvin?

A. Yes.

Q. Do you do any invasive cardiology?

A. Can you define invasive?

Q. Cardiac catheterizations, angioplasties, those types of things,

A. In terms of invasive procedures, I perform diagnostic cardiac catheterizations, I perform transesophageal echocardiograms, I perform implantation of temporary and permanent cardiac pacemakers.

Q. What is prosthetic valve endocarditis?

A. Prosthetic valve endocarditis is infection of a prosthetic cardiac valve usually from a bacteria. It could be from a fungus.

Page 27

Q. Doctor, would you agree that there has to be a high degree of vigilance for bacterial endocarditis in a patient with a prosthetic heart valve?

MR. POLITO: Objection. Go ahead.

A. How would you define vigilance?

Q. That when you are assessing a patient you have to be specifically looking for indicators that might indicate the patient had a bacterial endocarditis if you knew that the patient had a prosthetic heart valve.

MR. POLITO: Objection.

A. I think it's a fairly -- I think with any disease entity, one has to know what they're looking for in order to make a diagnosis.

Q. But specifically with a patient that has a prosthetic valve, don't you have to have a heightened index of suspicion for bacterial endocarditis when you assess the patient?

MR. POLITO: I'm going to object, but go ahead, doctor.

A. I think that you have to understand the spectrum of sequeli that can be related to having a prosthetic valve endocarditis as one of those sequeli.

Page 28

Q. When you see a patient, even if it's for a regular checkup and you know that patient has a prosthetic valve, do you look for indications as to whether the patient may have signs or symptoms of endocarditis?

A. I do if the clinical history suggests that.

Q. How often do you see patients with prosthetic valve endocarditis in your clinical practice?

A. How often or how many times?

Q. In the past year, how many cases have you seen?

A. In the past year, I have seen three cases.

Q. Do you know what the incidence of prosthetic valve endocarditis is after valve replacement surgery?

A. Yes.

Q. What is that?

A. It can vary between one to four percent.

Q. And is early or late prosthetic valve endocarditis more common?

A. I believe late prosthetic valve

Page 29

endocarditis is more common.
Q. And how would you define late prosthetic valve endocarditis?
A. There's various definitions. The classic definition is endocarditis which becomes clinically manifest greater than 60 days after prosthetic valve surgery. However, some people would say that late endocarditis could be defined as clinical presentation of prosthetic valve endocarditis one year after surgery.
Q. In Gregory Colvin's case, would you consider him to be an early or late prosthetic valve endocarditis patient?
A. By the definition, he would have to be considered late, since the diagnosis was made greater than 60 days from surgery. However, I think with Mr. Colvin, an argument could also be made that he was an early case of prosthetic valve endocarditis.
In fact, Dr. Miller felt that, in his note, that the patient had early prosthetic valve endocarditis, and by the definition of some authors suggesting that endocarditis diagnosed within up to a year of initial surgery could still be considered early prosthetic valve

Page 30

endocarditis.
Q. Was Dr. Miller an Ohio Permanente Medical Group physician also?
A. Yes.
Q. Is he still associated with Ohio Permanente Medical Group?
A. Yes.
Q. What are the signs and/or symptoms of bacterial endocarditis?
A. Signs and symptoms are, first, a person who has a specific predisposition to endocarditis with a regurgitant valvular murmur, characteristic skin findings, the presence of fever, and the presence of positive blood cultures. Echocardiography can show the lesions associated with endocarditis as well.
Q. Is anemia associated with bacterial endocarditis?
MR. SKIVER: I'm sorry, I didn't hear what you said.
MS. TOSTI: Anemia.
A. Yes.
Q. What about increased erythryocyte sedimentation rate?
A. Yes.

Page 31

Q. Anorexia and weight loss?
A. Yes.
Q. Did the signs and symptoms for prosthetic valve bacterial endocarditis differ any from the ones that you have just mentioned?
A. No.
Q. How is the diagnosis of the prosthetic valve endocarditis made?
A. The diagnosis is made with a clinical suspicion and appropriate clinical history by documentation of fever and documentation of positive blood cultures with a suspected organism found from those cultures. There can be characteristic skin findings. There may be constitutional symptoms that are also found.
Q. And would you agree that echocardiographic information is also helpful in the clinical diagnosis of bacterial endocarditis?
A. Yes, I would.
Q. What type of complications are associated with prosthetic valve endocarditis?
A. Multiple. They include mechanical valve destruction with destruction of the sewing ring, valvular dehiscence, increase in severity

Page 32

of valvular regurgitation with congestive heart failure and death. They can include embolic phenomenon from emboli, from vegetations, which embolize to the cerebral circulation or to other visceral organs. With this embolization, there can be metastatic infective seeding of other tissues. Additionally, there can be direct invasion of the contiguous myocardium with abscess formation with conduction system disease, heart block.
Q. And, doctor, when you mentioned dehiscence of the valve, could you tell me what that means, what happens with the dehiscence of the valve?
A. What that means is that, in addition to an infection being present on the valve itself, there's also infection present around the supporting structure that the valve is anchored onto. The sewing annulus can become infected, and that can result in contiguous spread to the adjacent annular structures and adjacent myocardium. And with infection, there can be essentially destruction of the suture material, of -- of actual -- the suture material which holds the valve in place and the valve can become

Page 33

unstable, it can actually become separated from the support structure to which the valve is secured.

Q. In regard to endocarditis, what are vegetations?

A. Vegetations are structures which consist of fibrin, platelets, bacteria that form a mass either on the valve or the valve supporting structures, such as the annulus, the struts, or any part of the prosthetic valve itself.

Q. And if vegetations are seen on a heart valve on echocardiography, is that cause for concern?

A. Yes.

Q. Why is that?

A. It implies that the patient may have a diagnosis of either previous or active endocarditis and may be at risk for the sequela of endocarditis.

Q. Specifically would that sequela be septic embolism of a vegetation?

A. As mentioned earlier, it could be septic embolism, it could be actual mechanical destruction of a valve with worsening valvular

Page 34

regurgitation, destruction of the supporting apparatus to which the valve is sewed with dehiscence and paravalvular regurgitation. It could be destruction of the papillary muscle of the chordae tendineae with worsening regurgitation, heart failure. It could be direct invasion into the myocardium, direct invasion to the conduction system with development of heart block.

Q. And, doctor, I think you have already mentioned this before, but I just want to clarify this: Is a transesophageal echo more sensitive for picking up signs suggestive of prosthetic valve endocarditis as compared to a transthoracic echo?

A. It is more sensitive, yes. I would also add that, while being more sensitive with its ability to visualize in detail complex cardiac structures, the positive predicted value may also be lower of a finding of a possible vegetation.

Q. And why is that?

A. Because of the physics of transesophageal echocardiography where, because of the ability to use a higher frequency

Page 35

transducer, you have the ability to refine and to resolve cardiac structures with much greater detail than could be seen with a surface echocardiogram.

Q. So I want to understand what you're saying. In some instances, would a transthoracic be more predictive of vegetations than a transesophageal?

A. The sensitivity would be lower, but the positive predicted value may be higher.

Q. On a transthoracic?

A. Yes.

Q. So if there's a question of endocarditis, is it the best course of action to do both of those tests, to have both the transthoracic as well as a transesophageal echo done?

A. They generally complement one another, but just to explain a little bit of what I mean, because you can see with great clarity, there are certain structures, for example, a valve thickening which you may not appreciate by surface echocardiogram, when seen with a transesophageal echocardiogram could represent a vegetation or could simply represent a myxomatous

Page 36

degeneration of a valve and simple valvular thinning. So there are things which you can see on a transesophageal echocardiogram which aren't necessarily endocarditis, but the diagnosis could also be entertained.

Q. And, generally speaking, to diagnose endocarditis, you have to look at the clinical picture as well as what's being seen on echocardiography; correct?

A. I think that the most important part of the diagnosis is the appropriate clinical history with the presence of, in general, blood cultures which -- let me slow down -- with positive blood cultures of a suggested organism and demonstration of a continuous bacteremia.

Q. What clinical indicators would warrant proceeding with an echocardiogram if you're thinking that the patient may have a bacterial endocarditis? What would move you to do the echocardiogram?

MR. POLITO: Objection. Go ahead.

A. The appropriate -- a person at risk with the appropriate clinical history suggestive of possible endocarditis, regardless of blood culture data.

Page 37

Q. Do you have to have valvular vegetations present before a diagnosis of prosthetic valve endocarditis can be made?
A. No.
Q. And does a patient have to have positive blood cultures before a presumptive diagnosis of prosthetic valve endocarditis can be made?
A. No.
Q. How is prosthetic valve endocarditis treated?
A. It's treated with -- there's two forms of treatment. There's medical treatment with a prolonged course of intravenous antibiotics directed against the bacteremia isolated from the blood cultures, or the presumptive organism. At the minimum, four weeks; at the maximum, longer.
If the patient fails medical management at any time, immediate surgical intervention must be available to treat that patient for mechanical complications related to endocarditis or serious life-threatening complications related to endocarditis, including congestive heart failure, severe valvular regurgitation with congestive heart failure,

Page 38

continuous bacteremia unable to be cleared by medical therapy, evidence of direct myocardial abscess formation or myocardial invasion evidenced by conduction system disease, heart block, multiple embolic phenomenon, or a patient that has continued fever or doesn't respond to medical therapy.
Q. Now, when you say surgical management, are you referring to the removal of the prosthetic valve and replacement?
A. Yes.
Q. Is there any other surgical management? Is it possible to repair a valve that is infected?
A. Yes.
Q. Could you tell me a little bit more about how that might be done.
A. I'm not a surgeon, and I don't have surgical expertise, and I can't render an opinion.
Q. Well, I'm just asking in regard to what procedures. I'm not asking you to explain them, doctor. Are you aware of additional procedures other than pulling the valve and replacing it that can be done?

Page 39

A. Again, for the record, I want to state that I'm not a cardiothoracic surgeon; I do not claim to be an expert in this particular area. In general, it is recommended that if there is a prosthetic valve infection, that the prosthetic valve has to be removed. There could be circumstances where simply the vegetations could be removed, for example, or the valve could be repaired, but this is usually reserved for patients who have a valve endocarditis.
Q. Generally speaking, if there is surgical intervention with prosthetic valve endocarditis, the procedure is going to be to remove the valve and replace it, generally speaking?
A. Because of the fact that it is a prosthesis and there isn't host defense systems available to counter an infection, in general, if a prosthetic valve is infected, it requires surgical removal and replacement.
Q. Would you agree that if a patient has prosthetic valve endocarditis, the sooner the patient is treated with antibiotics, the more likely the outcome will be positive, and by positive, I mean that the infection can be

Page 40

resolved and the treatment will be successful?
MR. POLITO: Objection.
A. I would agree with that supposition if the diagnosis truly is endocarditis.
Q. Would you agree that there has to be a high index for suspicion of bacterial endocarditis when a prosthetic valve patient presents with fever of unknown origin, fatigue and night sweats?
MR. POLITO: Objection.
A. Yes.
Q. And, doctor, in a patient with a prosthetic valve endocarditis, what would be the indicators for recommending surgical intervention from the perspective of the cardiologist?
A. I believe I answered that question previously.
MR. POLITO: He did.
Q. Well, I'm going to ask you to reiterate it, doctor.
MR. POLITO: No. He's already answered it. If you want to hear his answer --
Q. Doctor, please answer my question.
MR. POLITO: He's not going to answer it. He's already answered it.

Page 41

Q. Please answer my question, doctor.
MR. POLITO: No. On advice of counsel, he's not going to answer it again.
Q. Doctor, in a patient with prosthetic valve endocarditis, what would be the indicators for recommending surgical removal and replacement of the valve?
MR. POLITO: Did you already answer that, doctor?
THE WITNESS: Yes.
Q. I'm going to ask you to answer it again, doctor.
MR. POLITO: No. He's already answered it. If you want to read his answer back.
Q. Do cardiologists make recommendations for surgical removal?
A. Yes.
Q. And so you would be an individual, if you were caring for a patient with prosthetic valve endocarditis, that would call in a surgical consult if you felt that the patient's condition indicated that; correct?
A. Yes.
Q. Would the timing of the actual surgery

Page 42

be up to you or up to the surgeon?
A. It's very important that --
MR. POLITO: Just listen to her question. Just answer her question.
A. Could I hear the question again?
(Record read.)
A. It would be a joint management decision.
Q. Do you have an independent recollection of Gregory Colvin as you sit here today?
A. Yes, I do.
Q. And when was the first time that you cared for Gregory Colvin?
MR. POLITO: Off the record.
(Discussion off the record.)
A. October 30th, 1997.
Q. Now, doctor, when you first saw Gregory Colvin, why was it that he was seeing you?
A. He was referred to me from the emergency room for consultation following his emergency room visit, admission on IO-11-97.
Q. What was your conclusion as you had an opportunity to assess him regarding his

Page 43

condition?
A. May I read you my assessment, or --
Q. Feel free, doctor.
A. My assessment from that visit was that he was a 49-year-old gentleman with a history of rheumatic heart disease and clinical evidence of mitral regurgitation and possibly mitral stenosis, and that the patient had new onset atrial fibrillation since October 10th. I felt that his new onset atrial fibrillation was from rheumatic valvular heart disease and that he demonstrated marked symptomatic atrial fibrillation.
Q. And was this a problem that likely had extended over a long period of time gradually becoming worse?
A. Yes.
Q. Did you order any diagnostic testing after you had an opportunity to do your assessment?
A. Yes.
Q. What did you do?
A. I recommended that the patient undergo a TE echocardiogram. I also recommended that he continue and increase the dose of atenolol for

Page 44

recontrol of atrial fibrillation, and continue to receive anti-coagulation warfarin for thromboembolic prophylaxis and rheumatic mitral stenosis and mitral regurgitation.
Q. Did you also arrange for him to have a cardiac catheterization?
A. At that time, no.
Q. At some time after that, did you?
A. Yes.
Q. And once you finished with the echo and the cardiac cath, did you have any impressions regarding his condition that were different than what they were initially?
A. Based upon the echocardiogram, it confirmed that, in addition to the clinical suspicion of mitral regurgitation, that he had at least a moderate degree of mitral stenosis and rheumatic valvular heart disease involving all four of his valves. It was also my conclusion that with his rheumatic heart disease and mitral stenosis that he was very symptomatic with atrial fibrillation.
Q. Did you recommend valve replacement for him?
A. Initially, I asked for him to be seen

Page 45

as a second opinion by Dr. Emin Tuzcu, an interventional cardiologist at the Cleveland Clinic specializing in coronary intervention and mitral valvuloplasty, for consideration of mitral valvuloplasty to treat his condition.

Q. What was the result of that evaluation, if you know?

A. The recommendation was for the patient to undergo a mitral valve replacement and that he was not a candidate for mitral valvuloplasty.

Q. Now, I believe Gregory Colvin had his prosthetic valve placed and a repair of his tricuspid on admission to the Cleveland Clinic on February 4th. To your knowledge, did he have any intraoperative complications or problems?

A. Reviewing the record, he had a second pump run, meaning that he went on cardiopulmonary bypass for a second time following a transesophageal intraoperative echocardiogram which showed, after his first pump run, three plus moderately severe tricuspid insufficiency. It was my understanding it was felt he would benefit from a tricuspid valve annuloplasty to treat that.

Q. Aside from that, is there any other

Page 46

problems or complications that you're aware of that occurred intraoperatively with the surgery?

A. Reviewing the anesthesia record and the operative note, there was no other complications that were noted.

Q. Now, while he was in the hospital for that surgery at The Cleveland Clinic, did you follow him clinically?

A. *Yes*. In part. Not exclusively.

Q. Was there another cardiologist that was sharing responsibilities as far as his clinical followup in the hospital?

A. In general, our inpatient clinical service is divided into two separate services. One part of that service is consultative in nature providing inpatient cardiology consults to the Department of Medicine and other Kaiser subspecialties. The other part of that inpatient service are patients for whom we are primary physicians for. Those patients consist of people who are status post angioplasty and who are status post cardiothoracic surgery. Specifically regarding the patients who are status post cardiothoracic surgery, we're involved with a co-joint management of these patients with the

Page 47

cardiothoracic surgeons.

In general, it was our practice in 1998 at the time of Mr. Colvin's hospitalization that the person who was either on the angioplasty service for that day or the cardiac catheterization service for that day to round the patient. At that time, in our group, there were seven cardiologists who functioned in one of those two roles, and whomever happened to be on the schedule that day would see those patients on our inpatient service. On two of those -- excuse me -- on three of those days I saw Mr. Colvin.

Q. Could you tell me what three days you saw him?

A. I have to refer to the record.

MR. POLITO: Three days you said.

A. I saw him on February 7th, Saturday; February 8th, Sunday; and February loth, Tuesday. I believe I may have also -- I believe I did also receive some requests for verbal orders from nurses on other days as well. But I physically saw him on those three days indicated.

Q. And were you seeing him on those days because it was your turn as the person that was doing the interventional? You said people that

Page 48

were doing angioplasties and that were then going and doing the clinical rounds. Was that those days that you were involved in the cath lab?

A. For the loth, that was correct. For the 7th and 8th, I was on call for the weekend.

Q. Now, several days after his surgery, Gregory Colvin began running a temperature elevation. Why, in your opinion, did he have a fever several days after surgery?

A. Can you define specifically which days you're referring to?

Q. I believe on the 8th, I think, is when he had a fever.

A. Well, there are multiple causes of postoperative fever. There's a long differential diagnosis for postoperative fever, and we usually --

Q. Well, I want to restrict this to Gregory Colvin, this case.

MR. POLITO: Are you asking what he thought was the fever in this case?

MS. TOSTI: Yes.

A. There were many possibilities. They could have included atelectasis from postoperative splinting, change in lung

Page 49

compliance, postoperative pain with poor lung expansion. They could have included pleural effusion, respiratory infection, pneumonia, pneumonitis. They could have included postoperative pericarditis, or post-pericardiotomy syndrome. Additionally, urinary tract infection, collection of blood in the wound, wound infection, bacteremia, and certainly endocarditis were all considerations in Mr. Colvin's case.

Q. All of the things you just mentioned, were those within your differential diagnosis for this patient --

A. Yes.

Q. -- when you saw him?

A. Yes.

Q. When you saw him, did he have any signs or symptoms to suggest bacterial endocarditis or septicemia?

A. No.

Q. Doctor, what does it mean to have a left shift in a differential count on a complete blood count?

A. A left shift refers to an elevated polymorphonucleocyte count in the white blood

Page 50

cell components.

Q. Is that something that's seen with infection?

A. It can be. But not exclusively.

Q. When a left shift is seen on a white blood cell count, is that something that raises the index of suspicion for infection?

A. Yes.

Q. I'd like you to take a look at the CBC and differential that was done on February 8th. I think it's the second page of the two-page lab sheet from that date.

MR. POLITO: Which date?

MS. TOSTI: February 8th.

MR. POLITO: Okay.

Q. And I think the first page is the complete blood count, and then there's a second page --

A. Yes.

Q. -- on the copy that I have of the differential. On it, under differential comments, it says left shift. Do you see that?

A. Yes.

Q. Did you agree that there is a left shift in that differential?

Page 51

A. No.

Q. Why not?

A. I don't see an elevated neutrophil count. And the left -- that's the answer.

Q. So this particular CBC would not raise an index of suspicion to you for infection; is that correct, based on the differential?

A. Yes.

Q. Now, doctor, considering that this patient was having a temperature elevation while he was in the hospital after prosthetic valve surgery, should he have been followed on a regular basis with complete blood counts and differentials prior to the time he was discharged? In other words, do a series of them?

A. He should have had a workup directed towards infection and towards the differential diagnosis that I mentioned to you.

Q. What would that workup include?

A. It would include chest x-ray, blood cultures. An echocardiogram would be helpful in any patient who has undergone valve surgery predischarge. It would have included a urinalysis. It would have included -- it would

Page 52

have included emphasizing to the patient the importance of using his inspirometer and taking daily walks. It would have included inspection of the wounds and careful physical examination.

Q. And do you know in Gregory Colvin's case whether those things that you have just identified were done during this admission?

A. I believe they were.

Q. Now, Gregory Colvin had a CVP line in place when he was in the ICU; is that correct?

A. Yes.

Q. And central venous catheters are usually secured with a suture to the skin; correct?

A. Yes.

Q. When a central venous catheter is removed, the suture is also supposed to be removed; correct?

A. Yes.

Q. In Gregory Colvin's case, do you know who was responsible for removing the central venous catheter during his February 4th admission?

A. Yes.

Q. Who is that?

Page 53

A. Cardiothoracic surgery.
Q. Do you know the individual that removed his CVP line?
A. No.
Q. Now, cardiothoracic surgery, would that be Cleveland Clinic personnel?
A. Yes.
Q. Now, at the time of Gregory Colvin's discharge, he was not supposed to be seen on an outpatient basis for approximately a month; is that correct?
A. It's our custom and practice to see patients usually within three to four weeks of hospital discharge following cardiothoracic surgery.
Q. And that's fairly standard procedure then?
A. Yes.
Q. Now, when you saw Gregory Colvin after his discharge from his heart surgery and prior to his subsequent admission, did you note any murmurs?
MR. POLITO: Wait a minute. You're talking between February the 4th and February the 27th?

Page 54

MS. TOSTI: Yes.
Q. Did you see him during that period of time?
A. No.
Q. When is the next time that you did see him?
MR. POLITO: I think it's March 18th. Is that right?
A. Could you rephrase the question?
Q. When, after he was discharged from the hospital from his heart surgery, was the next time that you saw him?
A. I saw him on March 19th. I did communicate by phone with him on February 23rd. It may have been March 18th.
Q. The last time that you saw him was in the hospital on February loth, though; correct?
A. Yes.
Q. And at the time that you saw him on February loth, did you have any concerns that he had any type of an infectious process going on?
A. It was, again, part of the differential diagnosis, and I had requested an infectious workup to be done and reviewed the workup that had been done over the preceding

Page 55

three days.
There's -- let me refer to my note on the 10th. On the 10th, I made note that he had had a chest x-ray on the 8th which had showed a small right pleural effusion. I noted that he had two blood cultures pending. And I noted that his white blood cell count was 9.4 and that his urine was not sent. I recommended that the urine be re-sent. I know that he had received, I believe, three blood cultures on February 9th and two additional blood cultures on February 10th.
Q. Now, doctor, Gregory Colvin came into the emergency room, was admitted, on February 23rd, I believe. You indicated that you had a conversation with him prior to that admission; is that correct?
A. Yes.
Q. Can you tell me when that conversation occurred?
A. Yes, if I review my record. It was on February 23rd.
Q. Did he contact you?
A. Yes.
Q. And why was he calling you? Was this a telephone call, I take it?

Page 56

A. Yes.
Q. Why was he calling you?
A. The patient's wife called stating that the patient was sweating so much since the procedure at night and had fever which had not been more than 101, and that the patient and his wife would like to hear from me.
Q. Now, you are referring to a document. What document are you referring to?
A. I'm referring to documentation of my phone encounter with the patient in the medical record.
Q. The document that you're looking at currently, is that part of the Kaiser records, or is this a personal document of yours?
A. This is part of the Kaiser record.
Q. Did you give his wife any instructions after you were provided with that information?
A. Yes.
Q. What instructions did you give her?
A. I requested that the patient be brought to the emergency room to be admitted to rule out prosthetic valve endocarditis.
Q. Now, doctor, at the time that he went to the emergency room, did you have an

Page 57

opportunity to review those records, the evaluation that was done at the time you went to the emergency room?
A. I was called by Dr. Yitzchak Glick from the emergency room, who was the Kaiser attending physician caring for the patient during that admission and emergency room evaluation.
Q. What did Dr. Glick tell you?
A. I need to review the record.
MR. POLITO: What did he tell you?
A. He told me essentially the patient's physical examination and what he had done thus far for the patient's management,
Q. What was the physical examination findings that he gave you?
A. There were no remarkable physical exam findings excepting -- there was no physical -- there was no remarkable physical exam findings.
Q. Did he tell you that Mr. Colvin was having intermittent chills, fever and night sweats?
A. Well, Mr. Colvin had told me the history himself when I talked to him that day on the phone.
Q. And that he had generalized body

Page 58

weakness, decreased appetite for about a week?
A. He, you know, summarized his history of present illness, and that was the same information that was provided to me by Mr. Colvin and by Mrs. Colvin.
Q. And based on the information provided, did you have a high index of suspicion for prosthetic valve endocarditis?
A. Yes.
Q. Would you agree that in Gregory Colvin's case a transesophageal echo was warranted as part of the evaluation for prosthetic valve endocarditis?
A. I recommended that the patient be admitted and that he have that procedure done.
Q. And was that done?
A. Yes. I also recommended that he --
MR. POLITO: Doctor, listen to her question, okay.
THE WITNESS: Yes, sir.
Q. Go ahead and finish what you were going to say, doctor.
A. I answered the question.
Q. Doctor, he did have a transesophageal echo; correct?

Page 59

A. Yes.
Q. What were the findings on the transesophageal echo? Were those something that you reviewed?
A. No.
Q. Did anyone notify you of those results?
A. I reviewed them as part of the discharge summary from the patient's hospitalization. I did not review the primary data. I did not review the report of the data at the time.
Q. Have you at any point in time reviewed any echocardiography films on this patient?
A. No.
Q. In regard to the transesophageal echo that was done after his admission on the 23rd, did you review the report at the time that he was in the hospital? Was that information provided to you?
MR. POLITO: While he was in the hospital?
MS. TOSTI: Yes.
A. No.
Q. Did you receive any phone calls from

Page 60

any physicians in regard to the findings of that transesophageal echo?
A. No.
Q. I'd like you to take a look at the report of the February 24th transesophageal echo that was done. Now, you had an opportunity to review that prior to your deposition; is that correct?
A. Yes.
Q. That particular transesophageal echo notes that there's a small echo density, I think, in the anterior lateral part of the annulus suggesting it's a suture, and it recommends followup to be certain of the benign nature of the echo; correct?
A. Yes. Correct.
Q. Do you know whether Gregory Colvin had a followup TEE to determine if there was any changes in that echo density?
A. I know that he did not have a followup TEE.
Q. And for this particular patient, given the fact that he had a prosthetic valve and that he had a fever of unknown origin, wouldn't it have been prudent to do a followup TEE?

Page 61

MR. POLITO: Objection.
A. Not necessarily.
Q. Well, in this case, you don't think it was indicated?
A. Not necessarily.
Q. Why not?
A. Because the findings appeared benign. Additionally, the report of the -- this specific report was not available for my review when I saw the patient on March 18th, that the review of this report would not have changed my decision, however.
Q. You'd agree that Gregory Colvin was at high risk for prosthetic valve endocarditis given his history of mitral valve replacement and fevers of unknown origin; correct?
MR. POLITO: Objection.
A. Yes.
Q. And in this case, given that history, I want to be perfectly clear, you don't feel that it was necessary to do a followup transesophageal echo while he was in the hospital to determine whether or not there was a change in that echo density given his history of fever, night sweats and prosthetic valve; correct?

Page 62

MR. POLITO: Objection. It's been answered twice.
A. Could you read the question.
(Record read.)
A. I don' feel it was necessary to repeat it while he was in the hospital seeing that the clinical utility of doing that would have been low, since he received his echocardiogram on the 24th and he was discharged on the 27th.
Q. How about after discharge? Should his echo, his transesophageal echo, been repeated to determine whether there was a change in that echo density?
A. Knowing the sensitivity of a transesophageal echocardiogram, knowing the person who -- knowing the reputation of the person who read the echocardiogram, knowing the fact that with the increased sensitivity of transesophageal echocardiography, there is a much lower positive predicted value, and knowing that echo can resolve very small fine cardiac structures, it seemed to me in my clinical judgment that this finding did indeed most likely represent a suture.
Again, this report wasn't immediately

Page 63

available to mc at the time of his evaluation when I saw the patient in followup.
Q. Doctor, if you have an echo density on a transesophageal echo, and then you do a second one and you have two to compare, if there's a change in that echo density, isn't that going to be more indicative of an endocarditis than if the echo density remains the same?
A. No, because echocardiography in and of itself does not make the diagnosis of endocarditis.
Q. So an additional transesophageal echo would not provide you with anymore information regarding the character of that echo density; is that correct?
A. On the basis of the first transesophageal echo, it was fairly clear that it was a suture.
Q. Well then, why did the echocardiographer suggest a followup?
MS. CARULAS: Note an objection as to the mindset of that individual.
MR. POLITO: Right.
A. You would have to ask Dr. Marek.
Q. Now, at the time of his discharge from

Page 64

the hospital on February 26th, Gregory Colvin's hemoglobin, I believe, was down to 10.1, and his hematocrit was 30.5. Would you agree that he was anemic at the time that he was discharged?
A. Yes.
Q. Do you have any idea as to why he had that anemia?
A. Yes.
Q. What was causing his anemia?
A. My impression is that it was postoperative anemia from his recent valvular heart surgery, and that he had some additional fall in his hematocrit from phlebotomy that took place during his hospitalization during February 23rd and the 27th.
Q. What phlebotomy are you referring to in his February 23rd admission?
A. The entirety of the blood that was drawn from that patient reflected in the record.
Q. So you're referring to just the normal laboratory blood draws that were done on him?
A. I'm referring to the laboratory blood draws in addition to the blood cultures which were drawn on him, any phlebotomy that was drawn on him during that hospitalization.

Page 65

Q. You feel that was reflected in his drop in hemoglobin/hematocrit; correct?
A. That, in conjunction with his postoperative anemia.
Q. Now, during his February 23rd hospital admission, Gregory Colvin was noted to have a stitch abscess from a retained silk suture on the right side of his neck at the site of a prior CVP line, and there was purulent drainage that was expressed on more than one occasion. Were you aware that he had an abscess during this admission?
MR. POLITO: I think, Jeanne, the question should be asked of him, was he involved with the patient's care during this admission.
MS. TOSTI: No. The question I'm asking, he saw the guy after he was discharged.
Q. Were you aware that this patient had an abscess in his neck during that admission?
MR. POLITO: Subsequently?
MS. TOSTI: Yes.
MR. POLITO: You keep saying during that admission.
Q. Doctor, did you see him at all during the February 23rd admission?

Page 66

A. I did not care for the patient. I saw him socially very briefly on one occasion, I believe the first or second day after his admission.
Q. And when you saw him, were you reviewing his chart or looking at any of his management or anything at that point in time?
A. No.
Q. So the next time that you saw him, was that on March 18th? I think that's what you previously said.
A. Yes.
Q. When you saw him on March 18th, were you aware that he had had a stitch abscess during the time that he was in the hospital beginning on February 23rd?
A. Yes.
Q. And, doctor, would you agree that the standard of care is to remove the sutures anchoring a central venous pressure catheter when the catheter is removed?
A. Yes.
Q. And that the fact that he had a retained suture, would you agree that someone made an error when they did not remove that

Page 67

suture when he was in the hospital?
MR. POLITO: Objection.
A. Yes.
Q. Would you agree that, given his fever of unknown origin and his high risk for prosthetic valve endocarditis and the purulent drainage from that stitch abscess in his neck, he should have been cultured when he was in the hospital?
MR. POLITO: Objection.
A. Yes.
Q. And would you agree that an abscess in his neck that was emitting several cc's of purulent material placed him at high risk for infection of his prosthetic valve?
MR. SKIVER: Objection.
MR. POLITO: Objection.
MR. SKIVER: Go ahead.
A. Yes.
Q. Now, doctor, given the fact that he had a fever of unknown origin, that he was having night sweats, that he had a stitch abscess in his neck and there was an echo density on his transesophageal echo that wasn't clearly defined as to what it was, wouldn't it have been prudent

Page 68

to repeat the transesophageal echo to determine if there was any changes on this patient?
MR. POLITO: Wait a minute, Jeanne. He's answered that twice, and he's already given you his answer.
MS. TOSTI: No, he has not answered that question twice. We have not discussed purulent drainage in the neck with that set of facts. I'm asking him another question.
Q. Now, doctor, given the fact that he had a stitch abscess in his neck, that he had a fever of unknown origin and he had the echo density on his transesophageal echo and that the source of that fever was never determined, shouldn't he have had a followup transesophageal echo, given those facts?
MR. POLITO: I'm going to object, but go ahead, doctor.
A. Can I take a break?
Q. I'd like you to answer the question that's before you, doctor, and then feel free to take a break.
A. If that was the only diagnosis being considered, yes, but there were many other diagnoses being considered.

Page 69

Q. Well, doctor, considering the catastrophic nature of prosthetic valve endocarditis, wouldn't it have been prudent to err on the side of caution and to do a followup transesophageal echo for this patient?
MR. POLITO: Objection.
A. First of all, I disagree with your contention that he continued to have fevers. When he was seen by me on March 18th, he noted tiredness and night sweats, but did not, to me, document fevers. He had called into the Kaiser phone system on the 17th stating that he had a fever to 99 degrees and was given advice from the advice nurse. But on his visit on March 18th, it's not reflected, in my record, that he even mentioned that to me.
Q. Did you take his temperature on March 18th?
A. Yes.
Q. Was it normal?
A. Yes.
Q. You would agree that with bacterial endocarditis, patients have fluctuations in temperatures; correct?
A. Generally speaking, yes.

Page 70

Q. Was Mr. Colvin asked to keep a temperature diary?
A. Upon discharge from hospital on February 27th, that was what he was instructed to do.
Q. Was he doing that?
A. I don't believe so.
Q. Did you ask him specifically, are you taking your temperature on a regular basis?
A. I don't believe I asked him that specific question.
Q. So do you know one way or the other whether he was doing it or not?
A. No, I don't.
Q. Doctor, you had requested a break, and if you'd like to take one, that's fine.
(Recess had.)
Q. After his discharge from the hospital on February 27th, were you the person that was going to follow him medically?
A. No.
Q. Do you know who that was?
A. He was to follow up with his primary physician, Dr. Howard Simon.
Q. But from a cardiology perspective, was

Page 71

he supposed to have followup from a cardiologist after discharge?
A. Yes.
Q. And were you the cardiologist that was going to provide that followup?
A. Yes.
Q. Now, did he have any blood cultures done after his discharge from the Cleveland Clinic on the 27th, to your knowledge?
A. No.
Q. And were you ever asked to do that, to do blood cultures on him after discharge?
A. No.
Q. Do you have an opinion as to whether followup cultures were warranted after his discharge from Cleveland Clinic on the 27th?
A. It was the recommendation of the infectious disease specialist who saw the patient.
Q. And whose responsibility would it be then to do those blood cultures?
A. It would have been the responsibility of the discharging physicians to provide the patient either a prescription for blood cultures or a laboratory requisition slip.

Page 72

Q. And do you have any knowledge as to whether either of those things were done?
A. No.
Q. Now, doctor, you saw him then on March 18th of 98; correct?
A. Yes.
Q. And there's a clinical note in the Kaiser records that's in your handwriting; is that correct?
A. Yes.
Q. Now, doctor, could you open to that particular clinical note that you wrote.
A. Yes.
Q. Now, at the bottom of the first section where it begins, "Patient admitted 2/23 through 2/27," do you see that? It's a handwritten progress sheet.
MR. POLITO: Yes.
Q. Do you see where I'm talking about in the bottom of the first block of writing?
A. Yes.
Q. Could you read what that says, beginning with "Patient admitted 2/23"?
A. "Patient readmitted 2/23 through 2/27 with FUO and bacterial endocarditis ruled out.

Page 73

Now returns, notes fatigue and continued weakness."
Q. Thank you. Now, is it your opinion that prosthetic valve endocarditis was ruled out during his admission of 2/23?
A. It was my opinion based upon reading the discharge summary and the impression of the infectious disease consultant who saw the patient.
Q. So the answer to my question is yes, it was your opinion that it was ruled out during that admission; correct?
A. My answer is yes.
Q. Was the source of his fever ever discerned?
A. No, but speculations were made as to what it may be due to.
Q. What were the speculations as to the cause of his fever?
A. The infectious disease specialist who saw the patient suspected it was a stitch abscess. He also considered postcardiotomy syndrome. At one point he considered urinary tract infection.
Q. Were any of those more likely than the

Page 74

other?
A. Stitch abscess was the most likely.
Q. What is postcardiography syndrome?
A. Postcardiotomy syndrome is --
Q. Is it cardiotomy? I didn't hear the term.
A. Cardiotomy. It's fever from -- resulting from pericarditis or from simply opening the pericardium at the time of surgery.
Q. Do you know whether Gregory Colvin was seen by any other physicians between the time of his discharge and the time that you saw him on March 18th?
A. No.
Q. Did he have any echocardiograms done between the time of his discharge and the time that you saw him on March 18th?
A. No.
Q. Now, when you saw him on March 18th, he was complaining of fatigue and weakness; correct?
A. Yes.
Q. What did you believe was causing those symptoms?
A. I believed it was a combination of

Page 75

recovering from open heart surgery, postoperative anemia, and symptomatic atrial fibrillation.
Q. Now, when you examined Gregory Colvin, you found he had a one-over-six early systolic murmer at the right sternal border; correct?
A. Yes.
Q. Was that a new finding?
A. No.
Q. Had you previously documented that systolic murmur anywhere?
A. *Yes*.
Q. Could you tell me where?
MR. POLITO: Let me go back to the admission right after the surgery. Go ahead, doctor.
A. I documented it on my progress note, February 7th and February 8th, 1998.
Q. So you would disagree with Dr. Mistry who said he had no murmurs at the time of his discharge on February 12th of *98* from the Cleveland Clinic; correct?
A. Yes.
Q. Doctor, if blood cultures had been done on March 18th when you saw him, do you have an opinion as to whether they would have been

Page 76

positive?
A. I have an opinion that they would be negative.
Q. Why is that?
A. Based upon his recent hospitalization and his nine negative sets of blood cultures that were obtained between February 23rd and February 27th. In addition, I believe there was two other blood cultures obtained while in the emergency room on February 23rd. All of those blood cultures have a negative. And, in addition, the patient's clinical status was improved when I saw him on followup on 3-18.
Q. Now, after you saw him on 3-18, when is the next time that you saw Gregory Colvin?
A. April 22nd, 1998.
Q. April 22nd?
A. April 22nd.
Q. Now, I believe I saw in the records that he had an EKG done, I believe, on April 20th. Was that done by a technician or -- I was just wondering if you were involved when that EKG was done.
A. That was done at preadmission testing orior to his cardioversion on the 22nd.

Page 77

Q. Now, on April 21st of 98 he had a hemoglobin and hematocrit done and his hemoglobin was 9.7 and his hematocrit was 29.1, which was somewhat lower than what it had been. Do you have any opinion as to why his hemoglobin and hematocrit was continuing to go down rather than come up?

A. No, I don't.

Q. Doctor, you'd agree that weight loss and anemia are symptoms that may be associated with endocarditis?

MR. POLITO: Objection. Asked and answered. Go ahead, doctor.

A. Yes.

Q. Do you know if Gregory Colvin had any weight loss following his prosthetic valve surgery?

MR. POLITO: Up to what point? At any time?

Q. At any time after his valve surgery, are you aware of any weight loss that he had?

MR. POLITO: Let's take a look at it.

A. Could you read the question?

(Record read.)

A. Yes.

Page 78

Q. And would you tell me what type of weight loss you are aware of?

A. 1know that his weight on the Cleveland Clinic Foundation admission assessment dated 2-4-98 indicates his weight was 183 pounds. And when the patient was seen by me in followup on 3-18-98, his weight was 1558 pounds. However, when he was seen on May 7th, there was no appreciable change in his weight. His weight at that date was 154.2 pounds.

Q. Now, you saw him again then on May 7th; is that correct?

A. Yes.

Q. And at the May 7th visit, did he complain of continued intermittent night sweats?

A. Yes.

Q. And did you have an opinion as to what was causing his intermittent night sweats?

A. I was considering various possibilities.

Q. And what were those possibilities?

A. I made for myself a broad differential diagnosis of things which could be causing his night sweats. I was, number one, concerned about infectious etiologies and requested that a CBC

Page 79

with differential be obtained. I also requested that a chest x-ray be repeated. I was additionally concerned about hematologic malignancy or lymphoma, and for that reason, I wanted to repeat a CBC with differential and wanted to perform a chest x-ray. I was also concerned about collagen vascular diseases and wanted to do a chest x-ray to -- excuse me -- wanted to do a chest x-ray to exclude sarcoidosis as a potential cause and also tuberculosis.

Because of the night sweats, I also was concerned about the possibility of hyperthyroidism and requested that a thyroid function test be done. And that was the initial screening that I did to consider the differential diagnosis of night sweats.

Q. Did you take his temperature at that visit or have it taken?

A. No, I did not. He denied fever.

Q. Now, was a complete blood count done on him at that office visit?

A. Yes.

Q. What were the findings of that complete blood count?

Page 80

A. The white blood cell count was 7.1. RBC is 2.84; hemoglobin, 8.8; hematocrit, 25.9. Red cell indices were performed.

MR. POLITO: Do you want him to read everything?

MS. TOSTI: No. Just the beginning is fine.

Q. So his hemoglobin and hematocrit had gone down slightly since the last time you had reviewed it?

A. Yes.

Q. And did you come to any conclusion as to what was causing that?

A. I was quite concerned about it when I saw this.

Q. Did you have a heightened concern that it was being caused by any particular problem?

A. The differential diagnosis of anemia was entertained and I was concerned about several possible causes. They included anemia from either GI or genitourinary blood loss. Since the patient was on an anticoagulants, I was concerned about hemolysis and hemolytic anemia with the patient's history of prosthetic valve. I knew the patient also had a history of sickle cell

Page 81

trait. While sickle cell trait under usual circumstances doesn't cause anemia, it was still in my mind.
Q. Were you concerned about the possibility of prosthetic valve endocarditis after you did your assessment of this patient?
A. I was concerned about prosthetic valve endocarditis for the reason that hemolytic anemia can be associated with prosthetic valve endocarditis.
Q. Now, three days after Gregory Colvin saw you, he was seen again in the Kaiser/Cleveland Clinic emergency room. Were you notified at the time of that admission that he had come into the emergency room?
A. No.
Q. Did he call you prior to going to the emergency room?
A. No.
Q. Did his wife or any family member?
A. Are you finished with your question?
Q. Prior to the time he went to the ER, did anybody tell you that he was going to the ER?
A. No.

Page 82

Q. Did you at some point learn that he had gone to the emergency room on May loth?
A. I was made aware of it on May 12th at 9:45 a.m.
Q. Doctor --
A. I just wanted to clarify that I was made aware -- yes, I was made aware of that.
Q. When he was seen in the emergency room on the loth, he had a fever of 100, I believe. Given his prior history with the prosthetic valve and all of the other things that we had previously reviewed in regard to his anemia, his weight loss, the things that occurred in his prior hospitalization, do you think that a transesophageal echo should have been done on him when he presented to the emergency room or soon after?
MR. POLITO: Well, first of all, you threw kind of the weight loss in there. There had been no weight loss for a period of time. There was weight loss from the time of surgery to the first visit, but there had been no weight loss. The problem I had with the question is you preface it that there was somehow some additional weight loss.

Page 83

Q. With the weight loss that we had previously discussed.
A. I need to hear the question again.
(Record read.)
A. Yes.
Q. Do you have an opinion as to whether it was appropriate to discharge him to home following his 5-10-98 ER visit with the complaints of fever and night sweats?
MR. POLITO: Objection. Go ahead, doctor.
A. I have an opinion, yes.
Q. 'what is your opinion?
A. I would have wanted the patient admitted. However, if the transesophageal echo could have been done in a reasonably prompt fashion, provided that blood cultures had been drawn, that could also be clinically reasonable.
Q. What, in your opinion, is a reasonably prompt transesophageal echo?
A. Within three days.
Q. Doctor, isn't it likely, if a transesophageal echo had been done on May 10th of 98, that indications of prosthetic valve endocarditis would have been evident?

Page 84

MR. POLITO: Is that from a retrospective standpoint? I mean, because we know eventually, a couple days later, it was, so --
MS. TOSTI: Yes.
A. From a retrospective analysis, yes.
Q. Now, at the time of his May loth, 98 visit to the emergency room, his sedimentation rate was 58 with a reference range of zero to 20. Do you have an opinion as to what was causing his elevated sedimentation rate?
A. No, I don't.
Q. In this instance, doctor, is it likely it was infectious endocarditis?
MR. POLITO: Objection.
A. It's a distinct possibility.
Q. Did Gregory Colvin call you after he went to the emergency room on May 1Oth? Did you talk with him at all?
MR. POLITO: On May loth?
MS. TOSTI: Yes.
Q. After he went to the ER on May loth, did you get any phone calls from him or his family?
A. His wife left a message on May 11th at

Page 85

10:00 or 11:00 p.m.
Q. What was the message that she left?
A. The message that she left was seen last night for chest pain -- this is the transcriptionist summarizing the message. Seen last night for chest pain and SOB. States sent home and told to contact Dr. Kruithoff for future TEE procedure. Now has temperature 103.3. Denies any chest pain or pressure, does feel like he has the flu with chills, nausea, headache. Advice per PRT, parentheses, fever, end parentheses, advice to take Tylenol, retake temperature in one-half hour, and if not decreased or SX, symptoms change, or worsen, to call back. Will send message to Dr. Kruithoff about procedure. Advice ETS available to them if symptoms worsen. Will await call from Dr. Kruithoff tomorrow. Will call back if symptoms change or worsen.
Q. Did you eventually receive that phone message?
A. The message was left at 2051 on 5-11. I received the message at 9:45 a.m., 5-12.
Q. Did you take any action as a result of receiving that message?

Page 86

A. Yes, I did.
Q. What did you do?
A. I contacted the patient by phone and reviewed the events, and I instructed him to go to the emergency room for admission to rule out endocarditis.
Q. Did he give you any additional information about his condition aside from what you have just reviewed in that phone message?
A. He summarized his symptoms, and they were similar to what he had recalled -- what he had -- what was in the chart from the phone message.
Q. And after he went to the emergency room on May 12th, were you called by anyone at the emergency room and given information regarding their assessment of the patient?
A. Yes.
Q. Who did you speak to?
A. I spoke to -- I received two phone calls. I received one phone call from Aaron Smith and I received one phone call from Peter King.
Q. Who is Aaron Smith?
A. Aaron Smith is attending physician in

Page 87

in a Kaiser emergency room. And Peter King is the same.
Q. And what information did they provide to you? Let me back up a minute.
Did you receive both of these calls while Mr. Colvin was still in the emergency room?
A. Yes.
Q. And then go back to my previous question, which was: What information did they provide to you?
A. They provided me vital signs, physical examination, and they -- Aaron Smith reiterated the history that I had told him.
Q. What was the plan of care for Gregory Colvin after --
A. It was -- I'm sorry, finish your question.
Q. What was the plan of care for Gregory Colvin after they had assessed him in the emergency room?
A. They were asking me for a disposition on the patient.
Q. What did you advise them of?
A. I advised them to admit the patient to

Page 88

the internal medicine service for a diagnosis of prosthetic valve endocarditis, to perform multiple sets of blood cultures prior to initiation of antibiotics, and to perform a surface and transesophageal echocardiogram.
Q. And at the time that you advised them, when did you think that those procedures would be completed?
A. Well, the admission right now, right at that time, and blood cultures to start in the emergency room and the echocardiography as soon as possible, you know, within reason.
Q. And in this case, what would be reasonable?
A. For which?
Q. For the echocardiogram,
A. For the echocardiogram, I would say within 24 hours.
Q. Now, after his admission on May 12th, did you see him while he was in the hospital?
A. I saw him once.
Q. When was that?
A. I saw him on the morning of May 15th.
Q. And was that a clinical visit in which you were participating in his care?

Page 89

A. No. However, I did render recommendations.
Q. What recommendations did you make?
A. I recommended that the patient be transferred from H-81 to the intensive care unit due to worsening congestive heart failure, and I recommended that the patient have emergent open heart surgery to replace his prosthetic mitral valve.
Q. Now, did you at any time talk with the surgeons in regard to your recommendations? Did you talk to Dr. Saunders or any other cardiothoracic people telling them your impressions of this patient's condition and your recommendations for surgery?
A. I spoke to Paul Miller, who was --
MR. POL, ~ Did you talk to the surgeon?
A. No.
Q. Now, you said you talked to Paul Miller. He's another cardiologist; is that correct?
A. He is one of my partners and our department chief.
Q. You made your recommendations known to

Page 90

him; is that correct?
A. Yes.
Q. Did you at any time talk to anyone in cardiothoracic surgery in regard to your recommendations that this patient should have surgery?
A. No.
Q. Do you know if Dr. Miller did?
A. Yes.
Q. Who did Dr. Miller talk to?
A. Dr. Miller spoke to Joyce Tedrick and spoke to Dr. Saunders' secretary.
Q. And when did Dr. Miller do this?
A. Initially upon the patient's arrival to the cardiac intensive care unit.
Q. Was that on the 15th when you saw him?
A. Yes.
Q. Do you know whether Dr. Miller spoke directly to a cardiothoracic surgeon about the urgency of surgery for this patient?
A. He left two messages with Dr. Saunders' secretary and spoke to the surgical scheduler at least twice, if not more, during that day regarding the patient's status.

Page 91

Q. Did Dr. Miller ever talk to you again after you made your recommendations in regard to what he was doing as far as arranging for surgery?
A. Yes.
Q. Was that on the 15th that you spoke with him again?
A. Yes.
Q. What occurred during that conversation?
A. I -- we both had evaluated the -- seen and evaluated the patient upon the patient's arrival in the intensive care unit. At that time, he had initially made contact with the surgical scheduling office and left his first message with Dr. Saunders' secretary. Somewhat later in the day, early afternoon, because I believe his transfer occurred in the morning, somewhere around 10:00 o'clock to the ICU, sometime in the early afternoon, approximately 1:00 or 2:00 p.m., we again touched base when I was between cases in the cath lab, which was my duty for that day, and I asked him what the status of the patient was and what the status of getting him to the operating room was.

Page 92

Q. And what did Dr. Miller tell you?
A. He reiterated to me that he had left now I believe two messages with Dr. Saunders' secretary to have Dr. Saunders personally call him upon his return from the operating room, and that he had confirmed to me that Joyce Tedrick had communicated with Dr. Saunders regarding the clinical status of the patient and that the patient would go to the operating room that night.
Q. So it was your impression that he would have surgery the evening of the 15th; correct?
A. That's correct.
Q. Is there a particular reason why Dr. Miller was contacting Dr. Saunders?
A. Because Dr. Saunders was the surgeon who was going to operate on the patient.
Q. I'm just wondering why Dr. Saunders and not another physician at Cleveland Clinic.
A. When the patient came in, he was evaluated by the surgical scheduler, and the specific reason why Dr. Saunders is because Dr. Saunders did the patient's original surgery on May 4th and was the physician of record.

MR. POLITO: February 4th.
Q. On February 4th.
A. Thank you for the correction. February 4th, and was the surgeon who was to perform the repeat surgery.
Q. Now, what is your understanding as to what happened with Gregory Colvin during that last admission?
MR. POLITO: At what point?
Q. He did not go to surgery on the 15th; correct?
A. Yes, correct.
Q. Is it your understanding the reason that he did not go was because Dr. Saunders was not provided with appropriate information by his secretary or the scheduler?
MR. SKIVER: Objection. Go ahead.
MR. POLITO: Objection. Go ahead.
A. Just for the record, I want you to repeat the question.
(Record read.)
Q. And I'm speaking of surgery on May 15th.
A. That's my conclusion, yes.
Q. Now, he did not go to surgery on that

date. What happened in regard to his physical condition after the 15th?
A. I learned about what had happened to Mr. Colvin and his course not until Monday when I returned from the weekend.
Q. What did you learn on Monday then?
A. I had spoke to Dr. Miller, and I had found that the patient had died on Sunday morning, and that he had never gone to surgery.
Q. When you received that information, did you take any action?
A. I -- can you define action?
Q. Once you received that information that he had not gone to surgery, did you take any action, do anything, as a result of that information?
A. Yes.
Q. What did you do?
A. I went to Dr. Saunders' office, and I asked to have a meeting with Dr. Saunders' secretary, with Dr. Saunders.
Q. And did you have that meeting?
A. Yes.
Q. What occurred at that meeting?
A. I was called by Dr. Saunders'

secretary to tell me that Dr. Saunders was available to meet with me, and I went to his office and had an approximately 15, 20, maybe even longer, minute discussion with Dr. Saunders.
Q. Was this on Monday?
A. I believe it was on Tuesday, but it may have been within a couple days of that specific day.
Q. The people in attendance at that meeting was you, Dr. Saunders, and was his secretary there?
A. No. It was in Dr. Saunders' office. The people who were present were me and Dr. Saunders only.
Q. What was the content of the discussion that you had with Dr. Saunders at that meeting?
A. I asked Dr. Saunders why he didn't operate on my patient on Friday, May 15th, and -- that was what I asked him.
Q. What did he respond?
A. He responded that he had received false information from the surgical scheduler regarding the status of the patient, and that he erroneously relied on that information and didn't evaluate the patient himself. He admitted full

responsibility for the consequences of what happened, and he said it was an error in his judgment not to take the patient to surgery that day.
He subsequently told me in an extremely open, nonconfrontational way, the circumstances which occurred on Saturday morning after the time of his arrest. He also told me of his frustration with the triaging system of scheduling surgical patients at the Cleveland Clinic,
Q. And what was his frustration with the triage system?
A. He stated that the triage system of having the surgical scheduler schedule the patients for surgery was a poor one, and that it was, quote, the nail in the coffin as to why he was leaving the Cleveland Clinic, and this case had conclusively made up his mind to leave the Cleveland Clinic.
Q. Do you think that Dr. Saunders should have come to the hospital and evaluated Gregory Colvin himself on May 15th when the recommendation for surgery was made?
A. Dr. Saunders was at the hospital on

Page 97

May 15th.
Q. Did he evaluate Gregory Colvin himself on that date?
A. No.
Q. My question was: Do you think he should have evaluated Gregory Colvin on May 15th after the recommendation for surgery was made?
MR. POLITO: Objection.
A. Yes.
Q. The surgical scheduler that you're talking about is Joyce Tedrick?
A. Yes.
Q. And the secretary that you had previously referenced, what is her name?
A. I do not know.
Q. Aside from the conversation that you had with Dr. Saunders on that Monday or Tuesday, did you discuss the problem of Gregory Colvin not going to surgery on the 15th with anyone else?
A. No, excepting Dr. Miller.
Q. Did you make any type of complaint to anyone in administration at Cleveland Clinic regarding the scheduling problem that Dr. Saunders told you about?
A. No, I did not.

Page 98

Q. Do you know if Dr. Saunders did?
A. I donotknow.
Q. Do you have an opinion when Gregory Colvin developed bacterial endocarditis?
A. Possibly sometime between April 23rd and the time of diagnosis on May 13th.
Q. Do you have an opinion as to whether the stitch abscess that he had during his prior admission of 2-23 had any relationship to his later development of prosthetic valve endocarditis?
A. The two may be correlated.
Q. After Gregory Colvin's death, did you talk to the family at any time?
A. Yes.
Q. When did you do that?
A. Mrs. Colvin called me approximately two weeks after Greg's death.
Q. And why did she call you? Rather, what was the content of the conversation?
A. She had asked me -- I don't remember the conversation real well. I believe that she was calling to, you know, find out the circumstances of his illness.
Q. And what did you tell her?

Page 99

A. I told her that -- again, I don't remember specifically what I told her. We chatted for a few minutes. I asked her how she was, I asked her how the kids were. I stated that, you know, it was a terrible tragedy that Greg had died, and that he had a very aggressive infection of his heart valve, and that most likely the heart valve broke and it resulted in his immediate death.
Q. Did you tell her about your conversations with Dr. Saunders in regard to the scheduling problem, getting her husband into surgery?
A. No.
Q. Is there a reason why you didn't tell her that?
A. I felt that it wasn't appropriate.
Q. Why is that?
A. I felt that it wouldn't bring Greg back.
Q. Do you have an opinion as to a point in time when his condition was irreversible?
MR. POLITO: Objection.
A. Yes.
Q. What's your opinion?

Page 100

A. My opinion as to when his clinical status was irreversible was on Saturday, May 16th, following his prolonged resuscitation of over one hour and 17 minutes.
Q. So there was a window of opportunity then for successful treatment if he would have gone to surgery on May 15th then; correct, doctor?
MR. POLITO: Objection.
Q. At least in your opinion.
A. I want the question repeated.
(Record read.)
A. I want you to be more specific in your question.
Q. By successful?
A. It's sort of vague.
Q. I mean that he would have survived the surgery.
MR. POLITO: Objection.
MR. SKIVER: Objection. Go ahead.
A. I think that Greg was critically ill. I think that, regardless of whether he had gone to surgery or not on May 15th, there was no guarantee that he would have lived either in the short term or the long term. I think that his

Page 101

operative mortality was high if he were to have gone on May 15th, but it was probably the only window of opportunity for saving him. The actual surgical mortality, I can't quote, but he was still critically ill on May 15th.
Q. Do you have an opinion as to what ultimately caused his death?
A. Yes.
Q. What's that?
A. Valvular dehiscence, mitral valvular dehiscence, and acute congestive heart failure resulting from mechanical disruption of his mitral valve from endocarditis.
Q. If Gregory Colvin's prosthetic valve endocarditis had been treated successfully, do you have an opinion as to what his reasonable life expectancy would have been?
MR. POLITO: Objection.
A. I don't profess to be an expert on infectious diseases, so I can't answer with great certainty, but I think there's a, you know, a reasonable degree of confidence that he had probably greater than at least a 70 to 80 percent chance of living five years.
Q. Do you have any criticism of any of

Page 102

the care that was rendered to Gregory Colvin?
MR. POLITO: Objection.
A. When?
Q. At any point from the time that he had his valve surgery until the time of his death.
A. My biggest criticism is him not being taken to surgery in a timely fashion on May 14th or 15th. I have criticism that following his discharge on February 27th that he either did not receive or did not comply with his recommended followup.
Q. In what way?
A. I don't know whether -- I can't say yes or no whether he received specific blood draw slips to return for blood cultures, for example, and I wish that his discharge physicians would have called me to tell me about more of the details of his hospitalization during that time.
Q. Why do you wish they would have given you more detail?
A. I think if they truly requested the followup as they indicated, they did a poor job of arranging that,
Q. And aside from what you just mentioned in regard to the blood draw slips, do you blame

Page 103

Gregory Colvin in any way for the complications that he suffered?
A. When I saw Gregory Colvin on March 18th, I had asked him whether he had gone for blood cultures as was recommended, and he was not complying, and he said he didn't feel it was necessary. So I think that at times he didn't demonstrate complete compliance with what was recommended by his treating physicians.
Q. Did you ask him if he was given blood draw slips at that time?
A. I don't recall asking him that, no.
Q. Did you ask him if he was told to go for blood cultures?
A. Yes.
Q. Did he say he was told to go for blood cultures?
A. Yes.
Q. And he didn't say whether or not he had any type of requisitions for those blood cultures, though; correct?
A. No.
MS. TOSTI: Doctor, I don't have any further questions.
MS. CARULAS: I don't have any

Page 104

questions.
MR. SKIVER: I have no questions.
MR. POLITO: He'll want to read it.
(Signature not waived.)
(Deposition concluded at 12:14 o'clock p.m.)
- - - - -

AFFIDAVIT

I have read the foregoing transcript from page 1 through 104 and note the following corrections:

PAGE	LINE	REQUESTED CHANGE

_____

KEITH KRUITHOFF, M.D.

Subscribed and sworn to before me this _____ day of _____,2000.

_____

Notary Public

My commission expires _____

CERTIFICATE

State of Ohio,)
) ss:
County of Cuyahoga.)

I, Karen M. Patterson, a Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named KEITH KRUITHOFF, M.D. was by me first duly sworn to testify to the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony as above set forth was by me reduced to stenotypy, afterwards transcribed, and that the foregoing is a true and correct transcription of the testimony.

I do further certify that this deposition was taken at the time and place specified and was completed without adjournment; that I am not a relative or attorney for 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 7th day of July 2000.

Karen M. Patterson, Notary Public
Within and for the State of Ohio

My commission expires October 7,2004

-1-
1 [4] 10:3 10:5 10:25 105:3
10 [1] 3:24
10-11-97 [1] 42:23
10.1 [1] 64:2
100 [1] 82:9
101 [1] 56:6
103.3 [1] 85:8
104 [1] 105:3
10:00 [2] 85:1 91:19
10th [15] 43:9 47:18 48:4 54:17 54:20 55:3 55:3 55:11 82:2 82:9 83:23 84:7 84:18 84:20 84:22
11:00 [1] 85:1
11th [1] 84:25
12301 [1] 4:4
12:14 [1] 104:5
12th [4] 75:20 82:3 86:15 88:19
1375 [1] 2:19
13th [1] 98:6
1400 [2] 1:23 2:14
14th [1] 102:7
15 [1] 95:3
1542 [1] 78:10
155.8 111 78:7
15th [24] 19:9 19:15 19:17 19:21 21:15 23:18 24:1 88:23 90:16 91:6 92:12 93:10 93:23 94:2 95:18 96:23 97:1 97:6 97:19 100:7 100:23 101:2 101:5 102:8
1660 [1] 2:5
16th [1] 100:3
17 [1] 100:4
17th [2] 20:15 69:12
183 [1] 78:5
18th [14] 54:7 54:15 61:10 66:10 66:13 69:9 69:14 69:18 72:5 74:13 74:17 74:19 75:24 103:4
19 [1] 13:17
1993 [2] 8:24 24:24
1994 [3] 8:4 11:24 13:16
1997 [3] 7:1 12:11 42:17
1998 [5] 15:2 16:10 47:3 75:17 76:16
19th [1] 54:13
1:00 [1] 91:21

-2-
2-23 [1] 98:9
2-4-98 [1] 78:5
2.84 [1] 80:2
2/23 [4] 72:15 72:23 72:24 73:5
2/27 [2] 72:16 72:24
20 [2] 84:10 95:3
2000 [3] 1:14 105:21 106:14
2004 [1] 106:18
2051 [1] 85:22
20th [1] 76:21
216 [3] 2:6 2:15 2:20
21st [1] 77:1
22nd [4] 76:16 76:17 76:18 76:25
23rd [12] 54:14 55:14 55:21 59:17 64:15 64:17 65:5 65:25 66:16 76:7 76:10 98:5
24 [1] 88:18
241-2600 [1] 2:6
24th [2] 60:5 62:9
25.9 [1] 80:2
26th [1] 64:1
27th [9] 53:25 62:9 64:15 70:4 70:19 71:9 71:16 76:8 102:9
29.1 [1] 77:3
2:00 [1] 91:21
2nd [1] 2:5

-3-
3-18 [2] 76:13 76:14
3-18-98 [1] 78:7
30 [1] 1:14
30.5 [1] 64:3
30025 [1] 2:9
30th [1] 42:17
3305 [1] 3:13
388614 [1] 1:10

-4-
419 [1] 2:10
43551 [1] 2:9
44113 [1] 2:5
44114 [1] 2:19
44114-1491 [1] 2:15
44120 [1] 3:16
44128 [1] 3:25
44130 [1] 4:5
49-year-old [1] 43:5
4th [7] 45:14 52:22 53:24 92:25 93:1 93:2 93:4

-5-
5-10-98 [1] 83:8
5-11 [1] 85:22
5-12 [1] 85:23
526 [1] 2:14
58 [1] 84:9

-6-
60 [2] 29:6 29:16
623-0150 [1] 2:20
660 [1] 2:4
666-3417 [1] 2:10

-7-
7 [1] 106:18
7.1 [1] 80:1
70 [1] 101:23
7th [7] 47:17 48:5 75:17 78:8 78:12 78:14 106:14

-8-
8.8 [1] 80:2
80 [1] 101:23
875-2767 [1] 2:15
8th [7] 47:18 48:5 48:12 50:10 50:14 55:4 75:17

-9-
9.4 [1] 55:7
9.7 [1] 77:3
90 [1] 25:3
94 [1] 13:18
98 [6] 12:11 72:5 75:20 77:1 83:24 84:7
99 [1] 69:13
9:35 [1] 1:24
9:45 [2] 82:4 85:23
9th [2] 2:19 55:10

-A-
a.m [3] 1:24 82:4 85:23
Aaron [4] 86:21 86:24 86:25 87:13
ability [3] 34:18 34:25 35:1
able [2] 5:16 14:13
above [2] 1:25 106:8
abscess [13] 32:9 38:3 65:7 65:11 65:19 66:14 67:7 67:12 67:22 68:11 73:22 74:2 98:8
abstract [7] 13:22 14:1 14:6 14:11 14:17 25:13 25:18
abuse [2] 9:11 9:21
accepted [1] 19:13
According [1] 22:3
accuracy [2] 17:10 24:7
accurate [1] 16:21
action [6] 35:14 85:24 94:11 94:12 94:15 106:12
active [1] 33:18
actual [4] 32:24 33:24 41:25 101:3
acuity [1] 24:10
acute [1] 101:11
add [1] 34:17
addition [5] 32:15 44:15 64:23 76:8 76:11
additional [6] 38:23 55:11 63:12 64:12 82:24 86:7
additionally [4] 32:7 49:6 61:8 79:3
additions [1] 11:2
address [3] 3:12 3:23 4:3
adjacent [2] 32:21 32:21
adjournment [1] 106:11
administration [1] 97:22
ADMINISTRATOR [1] 1:4
admission [27] 24:1 42:23 45:13 52:7 52:23 53:21 55:15 57:7 59:17 64:17 65:6 65:12 65:15 65:19 65:23 65:25 66:4 73:5 73:12 75:14 78:4 81:14 86:5 88:9 88:19 93:8 98:9
admissions [2] 15:8 15:9
admit [1] 87:25
admitted [8] 16:15 55:13 56:22 58:15 72.15 72:23 83:15 95:25
admitting [2] 12:14 12:19
advice [6] 41:2 69:13 69:14 85:11 85:12 85:16
advise [1] 87:24
advised [2] 87:25 88:6
AFFIDAVIT [1] 105:1
affixed [1] 106:14
aforesaid [1] 106:8
afternoon [2] 91:17 91:20
afterwards [1] 106:8
again [14] 25:17 39:1 41:3 41:12 42:5 54:22 62:25 78:11 81:12 83:3 91:1 91:7 91:21 99:1
against [1] 37:15
age [1] 3:1
aggressive [1] 99:6
agree [16] 17:13 27:1 31:16 39:21 40:3 40:5 50:24 58:10 61:13 64:3 66:18 66:24 67:4 67:12 69:22 77:9
agreed [1] 24:10
ahead [24] 4:23 12:24 13:6 16:23 17:9 17:14 18:14 19:18 20:3 22:11 23:4 23:9 27:5 27:21 36:21 58:21 67:18 68:18 75:14 77:13 83:10 93:17 93:18 100:20
AL [1] 1:10
allegation [4] 7:15 7:17 8:7 9:7
alleged [1] 7:19
analysis [1] 84:6
anchored [1] 32:18
anchoring [1] 66:20
Andress [1] 2:18
anemia [14] 30:17 30:21 64:7 64:9 64:11 65:4 75:2 77:10 80:18 80:20 80:23 81:2 81:8 82:12
anemic [1] 64:4
anesthesia [1] 46:3
angioplasties [2] 26:15 48:1
angioplasty [2] 46:21 47:4
ANNA [1] 2:18
annular [1] 32:21
annuloplasty [1] 45:23
annulus [3] 32:19 33:9 60:12
Anorexia [1] 31:1
answer [20] 4:24 5:16 6:4 16:24 25:16 40:22 40:23 40:24 41:1 41:3

41:8 41:11 41:14 42:4 51:4 68:5 68:20 73:10 73:13 101:20
answered [10] 13:6 40:16 40:22 40:25 41:14 58:23 62:2 68:4 68:6 77:13
answers [1] 5:18
anterior [1] 60:12
anti-coagulation [1] 44:2
antibiotics [3] 37:14 39:23 88:4
anticoagulants [1] 80:22
apparatus [1] 34:2
APPEARANCES [1] 2:1
appeared [1] 61:7
appetite [1] 58:1
appreciable [1] 78:9
appreciate [1] 35:22
appropriate [7] 31:10 36:11 36:22 36:23 83:7 93:15 99:17
April [6] 76:16 76:17 76:18 76:20 77:1 98:5
area [1] 39:3
argument [1] 29:17
arrange [1] 44:5
arranging [2] 91:3 102:23
arrest [1] 96:8
arrival [2] 90:14 91:13
aside [4] 45:25 86:8 97:16 102:24
assess [2] 27:19 42:25
assessed [1] 87:20
assessing [1] 27:7
assessment [6] 43:2 43:4 43:20 78:4 81:6 86:17
associated [6] 30:5 30:16 30:17 31:22 77:10 81:9
assume [1] 5:15
atelectasis [1] 48:24
atenolol [1] 43:25
atrial [6] 43:9 43:10 43:12 44:1 44:21 75:2
attendance [1] 95:9
attending [3] 11:22 57:6 86:25
attorney [3] 7:23 8:15 106:12
attorneys [2] 6:3 18:10
audiotape [1] 13:21
authoritative [1] 17:1
authors [1] 29:23
available [6] 37:20 39:18 61:9 63:1 85:16 95:2
Avenue [1] 2:14
await [1] 85:17
aware [10] 38:23 46:1 65:11 65:18 66:14 77:21 78:2 82:3 82:7 82:7
away [1] 18:25

-B-

background [2] 9:24 11:12
bacteremia [4] 36:15 37:15 38:1 49:8
bacteria [2] 26:25 33:7
bacterial [16] 13:3 13:12 24:20 27:2 27:10 27:18 30:9 30:17 31:4 31:18 36:18 40:6 49:18 69:22 72:25 98:4
base [1] 91:21
based [5] 44:14 51:7 58:6 73:6 76:5
basis [5] 23:25 51:13 53:10 63:16 70:9
Becker [1] 2:3
become [3] 32:19 32:25 33:1
becomes [1] 29:5
becoming [1] 43:16
began [1] 48:7
beginning [3] 66:15 72:23 80:6
begins [1] 72:15
behalf [4] 2:2 2:7 2:11 2:16
benefit [1] 45:23
benign [2] 60:14 61:7
best [1] 35:14
between [7] 28:21 53:24 74:11 74:16 76:7 91:22 98:5
biggest [1] 102:6
bit [5] 3:18 9:24 11:15 35:19 38:16
blame [1] 102:25
block [4] 32:10 34:9 38:5 72:20
blood [45] 30:14 31:12 36:12 36:14 36:24 37:6 37:16 49:7 49:23 49:25 50:6 50:17 51:13 51:21 55:6 55:7 55:10 55:11 64:18 64:21 64:22 64:23 71:7 71:12 71:21 71:24 75:23 76:6 76:9 76:10 79:21 79:25 80:1 80:21 83:17 88:3 88:10 102:14 102:15 102:25 103:5 103:10 103:14 103:16 103:20
board [3] 10:10 10:13 10:16
body [11] 57:25
Bonezzi [2] 1:22 2:12
border [1] 75:5
bottom [2] 72:14 72:20
Braunwald [1] 17:4
Braunwald's [5] 15:2 15:5 16:20 16:20 17:7
break [4] 21:5 68:19 68:22 70:15
briefly [1] 66:2
bring [2] 9:25 99:19
broad [1] 78:22
broke [1] 99:8
brought [1] 56:22
Building [2] 1:24 2:14
business [2] 3:22 4:2
bypass [1] 45:18

-C-

calls [4] 59:25 84:23 86:21 87:5
candidate [1] 45:10
capacity [1] 4:21
cardiac [13] 7:21 22:13 26:14 26:17 26:20 26:24 34:19 35:2 44:6 44:11 47:5 62:21 90:15
cardiologist [8] 12:9 23:24 40:15 45:2 46:10 71:1 71:4 89:21
cardiologists [2] 41:16 47:8
cardiology [8] 10:14 11:24 12:2 23:24 26:7 26:12 46:16 70:25
cardiopulmonary [1] 45:17
cardiothoracic [10] 39:2 46:22 46:24 47:1 53:1 53:5 53:14 89:13 90:4 90:20
cardiotomy [2] 74:5 74:7
Cardiovascular [1] 15:5
cardioversion [1] 76:25
care [13] 4:1 4:6 15:16 65:15 66:1 66:19 87:15 87:19 88:25 89:5 90:15 91:13 102:1
cared [2] 26:10 42:14
careful [1] 52:4
caring [2] 41:20 57:6
CARULAS [3] 2:18 63:21 103:25
case [40] 1:8 6:24 7:2 7:3 7:5 7:6 7:9 7:23 8:1 8:2 8:8 8:12 8:15 8:21 9:8 9:11 9:14 9:18 9:21 11:10 17:4 17:7 17:22 17:23 18:1 18:5 18:8 19:23 29:11 29:18 48:19 48:21 49:10 52:6 52:20 58:11 61:3 61:19 88:13 96:18
cases [4] 6:21 28:12 28:15 91:22
catastrophic [1] 69:2
cath [3] 44:11 48:3 91:22
catheter [4] 52:16 52:22 66:20 66:21
catheterization [2] 44:6 47:6
catheterizations [2] 26:14 26:17
catheters [1] 52:12
caused [3] 22:15 80:17 101:7
causes [2] 48:14 80:20
causing [6] 64:9 74:23 78:18 78:23 80:13 84:11
caution [1] 69:4
CBC [4] 50:9 51:5 78:25 79:5
cc's [1] 67:13
cell [7] 50:1 50:6 55:7 80:1 80:3 80:25 81:1
Center [5] 12:1 12:15 14:23 25:1 25:24
central [4] 52:12 52:16 52:21 66:20
cerebral [1] 32:4
certain [2] 35:21 60:14
certainly [1] 49:9
certainty [1] 101:21
CERTIFICATE [1] 106:1
certifications [1] 10:17
certified [3] 3:4 10:10 10:13
certify [2] 106:6 106:10
chance [1] 101:24
change [8] 48:25 61:23 62:12 63:6 78:9 85:14 85:19 105:5
changed [1] 61:11
changes [2] 60:19 68:2
chapters [1] 15:3
character [1] 63:14
characteristic [2] 30:13 31:14
Charms [1] 7:24
chart [4] 14:22 25:2 66:6 86:12
chatted [1] 99:3
checkup [1] 28:2
chest [9] 51:21 55:4 79:2 79:6 79:8 79:9 85:4 85:6 85:9
chief [1] 89:24
child [2] 9:11 9:21
chills [2] 57:20 85:10
choose [1] 6:3
chordae [1] 34:5
Circle [1] 3:24
circulation [1] 32:4
circumstances [4] 39:7 81:2 96:7 98:24
City [1] 8:1
Civil [1] 3:3
claim [1] 39:3
clarify [2] 34:11 82:6
clarity [1] 35:20
classic [1] 29:5
clear [2] 61:20 63:17
cleared [1] 38:1
clearly [1] 67:24
Cleveland [29] 1:24 2:5 2:7 2:15 2:19 3:24 12:13 12:17 14:20 14:23 15:7 15:11 15:12 15:18 15:20 45:2 45:13 46:7 53:6 71:8 71:16 75:21 78:4 92:20 96:10 96:18 96:20 97:22

106:14
clients [1] 15:25
Clinic [21] 2:7 12:13 12:17 14:20 15:7 15:18 15:21 45:3 45:13 46:7 53:6 71:9 71:16 75:21 78:4 81:13 92:20 96:11 96:18 96:20 97:22
clinical [29] 21:19 22:5 22:9 23:17 23:19 24:10 28:6 28:9 29:9 31:9 31:10 31:18 36:7 36:11 36:16 36:23 43:6 44:15 46:12 46:13 48:2 62:7 62:22 72:7 72:12 76:12 88:24 92:8 100:1
clinically [6] 22:6 22:16 24:8 29:6 46:8 83:18
c:loser[1] 17:19
Co [3] 1:23 2:3 2:12
co-joint [1] 46:25
code [1] 3:15
coffin [1] 96:17
collagen [1] 79:7
collection [1] 49:7
Colvin [61] 1:4 1:6 4:2 4:7 14:21 14:22 14:24 14:25 15:8 16:4 16:14 19:16 19:24 20:14 20:24 21:3 21:6 21:8 21:11 21:15 23:25 26:10 29:17 42:10 42:14 42:19 45:11 47:12 48:7 48:19 52:9 53:19 55:12 57:19 57:22 58:4 58:5 60:17 61:13 65:6 70:1 74:10 75:3 76:15 77:15 81:11 84:17 87:6 87:16 87:20 93:7 94:4 96:23 97:2 97:6 97:18 98:4 98:17 102:1 103:1 103:3
Colvin's [12] 18:20 20:12 29:11 47:3 49:10 52:5 52:20 53:8 58:11 64:1 98:13 101:14
combination [1] 74:25
commencement [1] 11:23
comments [1] 50:22
commission [2] 105:25 106:18
commissioned [1] 106:6
common [3] 1:1 28:24 29:1
communicate [1] 54:14
communicated [1] 92:7
communications [1] 21:1
Community [2] 12:1 12:15
compare [1] 63:5
compared [2] 25:6 34:14
complain [1] 78:15
complaining [1] 74:20
complaint [1] 97:21
complaints [1] 83:9
complement [1] 35:18
complete [6] 49:22 50:17 51:13 79:21 79:25 103:8
completed [2] 88:8 106:11
completion [1] 11:19
complex [1] 34:18
compliance [2] 49:1 103:8
complications [7] 31:21 37:21 37:23 45:15 46:1 46:5 103:1
comply [1] 102:10
complying [1] 103:6
components [1] 50:1
computer [1] 18:24
concern [2] 33:14 80:16
concerned [9] 78:24 79:3 79:7 79:13 80:14 80:19 80:22 81:4 81:7
concerns [1] 54:20
concluded [1] 104:5
conclusion [4] 42:24 44:19 80:12 93:24
conclusively [1] 96:19
concur [1] 24:13
condition [9] 24:11 41:22 43:1 44:12 45:5 86:8 89:14 94:2 99:22
conduction [3] 32:9 34:8 38:4
confidence [1] 101:22
confirmed [2] 44:15 92:6
confused [1] 23:10
congestive [5] 32:1 37:24 37:25 89:6 101:11
conjunction [1] 65:3
consequences [1] 96:1
consider [3] 16:25 29:12 79:16
consideration [1] 45:4
considerations [1] 49:9
considered [7] 22:9 29:15 29:25 68:24 68:25 73:22 73:23
considering [3] 51:9 69:1 78:19
consist [2] 33:7 46:20
constitutional [1] 31:15
consult [1] 41:22
consultant [1] 73:8
consultation [1] 42:22
consultative [2] 23:25 46:15
consulting [1] 23:23
consults [1] 46:16
contact [3] 55:22 85:7 91:14
contacted [1] 86:3
contacting [1] 92:16
contain [1] 16:20
contained [2] 15:12 17:1
content [2] 95:15 98:20
contention [1] 69:8
contiguous [2] 32:8 32:20
continue [2] 43:25 44:1
continued [5] 11:25 38:6 69:8 73:1 78:15
continuing [3] 6:14 18:19 77:6
continuous [2] 36:15 38:1
conversation [12] 20:10 20:15 20:22 23:5 23:12 24:9 55:15 55:18 91:10 97:16 98:20 98:22
conversations [10] 18:7 18:12 18:13 18:17 18:22 19:3 19:6 20:19 22:23 99:11
copy [7] 10:22 14:11 14:17 15:1 15:14 16:8 50:20
coronary [1] 45:3
correct [40] 6:11 8:19 10:8 10:11 10:25 36:9 41:23 48:4 51:7 52:10 52:14 52:18 53:11 54:17 55:16 58:25 60:8 60:15 60:16 61:16 61:25 63:15 65:2 69:24 72:5 72:9 73:12 74:21 75:5 75:21 78:12 89:22 90:1 92:13 92:14 93:11 93:12 100:7 103:21 106:9
:orrection [1] 93:3
:orrections [2] 11:2 105:4
:orrelated [1] 98:12
:ounsel [5] 1:22 6:5 14:14 17:25 41:3
:ount [10] 49:22 49:23 49:25 50:6 50:17 51:4 55:7 79:21 79:25 80:1
:ounter [1] 39:18
:ounts [1] 51:13
County [5] 1:2 6:17 6:20 6:24 106:3
:ouple [2] 84:3 95:7
:ourse [3] 35:14 37:14 94:4
:ourt [2] 1:1 5:18
Craig [2] 18:15 19:3
:ritically [2] 100:21 101:5
:riticism [3] 101:25 102:6 102:8
:ulture [1] 36:25
:ultured [1] 67:8
:ultures [29] 30:15 31:12 31:13 36:13 36:14 37:6 37:16 51:22 55:6 55:10 55:11 64:23 71:7 71:12 71:15 71:21 71:24 75:23 76:6 76:9 76:11 83:17 88:3 88:10 102:15 103:5 103:14 103:17 103:21
:urrent [3] 3:22 4:9 26:6
:urriculum [5] 9:25 10:22 11:8 13:2 13:23
:ustom [1] 53:12
Cuyahoga [4] 1:2 6:17 6:24 106:3
CVP [3] 52:9 53:3 65:8

-D-

iaily [1] 52:3
lata [3] 36:25 59:11
59:11
date [10] 1:25 11:5 19:24 20:18 23:18 50:12 50:13 78:10 94:1 97:3
dated [1] 78:5
days [18] 20:18 29:6 29:16 47:12 47:13 47:16 47:21 47:22 47:23 48:3 48:6 48:9 48:10 55:1 81:11 83:21 84:3 95:7
deal [2] 13:2 13:8
dealing [1] 24:19
death [11] 7:18 18:20 20:12 20:13 24:2 32:2 98:13 98:18 99:9 101:7 102:5
decision [2] 42:8 61:11
decompensation [1] 22:14
decreased [2] 58:1 85:14
Defendant [7] 1:17 2:7 2:11 2:16 4:25 5:6 6:9
Defendants [1] 1:11
defense [3] 6:2 9:5 39:17
define [6] 20:5 26:13 27:6 29:2 48:10 94:12
defined [2] 29:8 67:24
definition [3] 29:5 29:14 29:22
definitions [1] 29:4
degeneration [1] 36:1
degree [3] 27:2 44:17 101:22
degrees [1] 69:13
dehiscence [7] 22:20 31:25 32:12 32:13 34:3 101:10 101:11
demonstrate [1] 103:8
demonstrated [1] 43:12
demonstration [1] 36:15
denied [1] 79:20
Denies [1] 85:9
density [10] 60:11 60:19 61:24 62:13 63:3 63:6 63:8 63:14 67:23 68:13
department [3] 11:13 46:17 89:24
deposed [1] 3:4
deposition [10] 1:13

1:16 4:15 4:20 4:22 10:2 14:19 60:7 104:5 106:10
depositions [1] 5:8
describe [1] 11:14
destruction [6] 31:24 31:24 32:23 33:25 34:1 34:4
detail [4] 11:15 34:18 35:3 102:20
details [1] 102:18
determine [4] 60:18 61:22 62:12 68:1
determined [1] 68:14
developed [1] 98:4
development [2] 34:8 98:10
diagnose [3] 7:21 8:9 36:6
diagnosed [1] 29:23
diagnoses [1] 68:25
diagnosis [25] 14:5 25:5 25:9 27:15 29:15 31:7 31:9 31:18 33:18 36:4 36:11 37:2 37:7 40:4 48:16 49:12 51:19 54:23 63:10 68:23 78:23 79:17 80:18 88:1 98:6
diagnostic [2] 26:17 43:18
DIANE [1] 1:4
diary [1] 70:2
died [4] 20:14 21:6 94:8 99:6
differ [1] 31:4
different [1] 44:13
differential [15] 48:15 49:12 49:22 50:10 50:21 50:21 50:25 51:7 51:18 54:23 78:22 79:1 79:5 79:16 80:18
differentials [1] 51:14
direct [4] 32:7 34:6 34:7 38:2
directed [2] 37:15 51:17
directions [1] 6:6
directly [1] 90:20
disagree [2] 69:7 75:18
discerned [1] 73:15
discharge [20] 15:14 53:9 53:14 53:20 59:9 62:10 63:25 70:3 70:18 71:2 71:8 71:12 71:16 73:7 74:12 74:16 75:20 83:7 102:9 102:16
discharged [5] 51:15 54:10 62:9 64:4 65:17
diischarging [1] 71:23
diiscuss [1] 97:18
diiscussed [4] 17:23 18:1 68:7 83:2
diiscussion [3] 42:16 95:4 95:15
diisease [11] 15:4 27:14 32:9 38:4 43:6 43:11 44:18 44:20 71:18 73:8 73:20
diseases [3] 15:5 79:7 101:20
diisposition [1] 87:22
diisruption [1] 101:12
diistinct [1] 84:16
diivided [1] 46:14
dioctor [56] 3:8 3:17 3:20 5:3 6:8 7:25 9:23 10:7 11:7 13:1 16:24 20:2 24:18 26:6 27:1 27:21 32:11 34:10 38:23 40:12 40:20 40:23 41:1 41:4 41:9 41:12 42:18 43:3 49:21 51:9 55:12 56:24 58:18 58:22 58:24 63:3 65:24 66:18 67:20 68:10 68:18 68:21 69:1 70:15 72:4 72:11 75:15 75:23 77:9 77:13 82:5 83:11 83:22 84:13 100:8 103:23
dioctor's [2] 16:17 19:2
document [7] 10:20 11:3 56:8 56:9 56:13 56:15 69:11
documentation [4] 15:24 31:11 31:11 56:10
documentations [1] 14:25
documented [3] 22:20 75:9 75:16
doesn't [3] 16:5 38:6 81:2
don' [1] 62:5
done [30] 13:15 25:23 35:17 38:17 38:25 50:10 52:7 54:24 54:25 57:2 57:12 58:15 58:16 59:17 60:6 64:21 71:8 72:2 74:15 75:24 76:20 76:21 76:23 76:24 77:2 79:15 79:21 82:15 83:16 83:23
Dorchester [1] 3:13
dose [1] 43:25
down [7] 3:19 5:19 21:5 36:13 64:2 77:6 80:9
Dr [69] 18:15 18:17 19:6 19:11 19:13 19:20 20:11 20:20 21:2 21:7 21:14 22:3 22:25 23:2 23:12 23:23 24:4 24:13 29:20 30:2 45:1 57:4 57:8 63:24 70:24 75:18 85:7 85:15 85:17 89:12 90:8 90:10 90:11 90:12 90:13 90:19 90:22 91:1 91:16 92:1 92:3 92:4 92:7 92:15 92:16 92:17 92:19 92:23 92:23 93:14 94:7 94:19 94:20 94:21 94:25 95:1 95:4 95:10 95:12 95:13 95:16 95:17 96:21 96:25 97:17 97:20 97:23 98:1 99:11
drainage [3] 65:9 67:7 68:8
draw [3] 102:14 102:25 103:11
drawn [4] 64:19 64:24 64:24 83:18
draws [2] 64:21 64:23
drop [1] 65:2
due [2] 73:17 89:6
duly [3] 3:3 106:5 106:7
duplicate [1] 15:19
during [24] 11:18 12:2 24:1 52:7 52:22 54:2 57:6 64:14 64:14 64:25 65:5 65:11 65:15 65:19 65:22 65:24 66:14 73:5 73:11 90:24 91:9 93:7 98:8 102:18
duty [1] 91:23

-E-

E [1] 2:9
early [9] 7:1 28:23 29:12 29:18 29:21 29:25 75:4 91:17 91:20
East [1] 2:19
echo [38] 34:12 34:15 35:16 44:10 58:11 58:25 59:3 59:16 60:2 60:5 60:10 60:11 60:15 60:19 61:22 61:23 62:11 62:11 62:12 62:21 63:3 63:4 63:6 63:8 63:12 63:14 63:17 67:23 67:24 68:1 68:12 68:13 68:16 69:5 82:15 83:15 83:20 83:23
echocardiogram [20] 25:4 25:9 25:20 25:21 35:4 35:23 35:24 36:3 36:17 36:20 43:24 44:14 45:19 51:22 62:8 62:15 62:17 88:5 88:16 88:17
echocardiograms [2] 26:18 74:15
echocardiographer [1] 63:20
echocardiographic [1] 31:17
echocardiography [11] 14:4 25:8 25:15 30:15 33:13 34:24 36:9 59:14 62:19 63:9 88:11
edition [1] 15:4
effusion [2] 49:3 55:5
either [11] 6:21 15:17 33:8 33:18 47:4 71:24 72:2 80:21 100:24 102:9 106:12
EKG [2] 76:20 76:22
elevated [3] 49:24 51:3 84:11
elevation [2] 48:8 51:10
emboli [1] 32:3
embolic [2] 32:2 38:5
embolism [2] 33:22 33:24
embolization [1] 32:5
embolize [1] 32:4
emergency [28] 11:14 11:19 11:22 12:5 42:22 42:23 55:13 56:22 56:25 57:3 57:5 57:7 76:9 81:13 81:15 81:18 82:2 82:8 82:16 84:8 84:18 86:5 86:14 86:16 87:1 87:6 87:21 88:11
emergent [3] 24:12 24:15 89:7
Emin [1] 45:1
emitting [1] 67:13
emphasizing [1] 52:1
employer [2] 4:7 4:9
encounter [1] 56:11
end [2] 3:19 85:11
endocarditis [83] 13:4 13:13 14:5 15:3 24:20 25:5 25:10 25:15 26:22 26:23 27:3 27:10 27:19 27:24 28:5 28:9 28:17 28:24 29:1 29:3 29:5 29:8 29:10 29:13 29:19 29:22 29:23 30:1 30:9 30:12 30:16 30:18 31:4 31:8 31:19 31:22 33:4 33:19 33:20 34:14 35:14 36:4 36:7 36:19 36:24 37:3 37:7 37:10 37:22 37:23 39:10 39:13 39:22 40:4 40:7 40:13 41:5 41:21 49:9 49:19 56:23 58:8 58:13 61:14 63:7 63:11 67:6 69:3 69:23 72:25 73:4 77:11 81:5 81:8 81:10 83:25 84:14 86:6 88:2 98:4 98:11 101:13 101:15
entailed [1] 11:16
enter [1] 6:3
entertained [2] 36:5 80:19
entirety [1] 64:18
entity [2] 4:12 27:14
ER [4] 81:22 81:24 83:8 84:22
Ernest [2] 7:10 7:12
err [1] 69:4
erroneously [3] 21:22 21:23 95:24
error [2] 66:25 96:2
erythryocyte [1] 30:23
ESQ [4] 2:4 2:8 2:13 2:18
essentially [2] 32:23 57:11
ESTATE [1] 1:5
ET [1] 1:10
etiologies [1] 78:25
ETS [1] 85:16
Eugene [1] 15:2
evaluate [2] 95:25 97:2
evaluated [6] 24:8 91:11 91:12 92:22 96:22 97:6
evaluation [5] 45:7 57:2 57:7 58:12 63:1
evening [1] 92:12
event [1] 106:12
events [1] 86:4

eventually [2] 84:3 85:20
evidence [2] 38:2 43:6
evidenced [1] 38:4
evident [1] 83:25
exam [2] 57:16 57:18
examination [7] 1:18 3:2 3:6 52:4 57:12 57:14 87:13
examined [1] 75:3
example [3] 35:21 39:8 102:15
excepting [2] 57:17 97:20
exclude [1] 79:9
exclusively [2] 46:9 50:4
excuse [2] 47:11 79:8
Exhibit [3] 10:3 10:5 10:25
expansion [1] 49:2
expectancy [1] 101:17
expert [7] 5:1 5:5 8:18 8:23 9:9 39:3 101:19
expertise [1] 38:19
expires [2] 105:25 106:18
explain [2] 35:19 38:22
expressed [1] 65:10
extended [1] 43:15
extremely [1] 96:6

-F-

fact [8] 9:10 29:20 39:16 60:23 62:18 66:23 67:20 68:10
facts [2] 68:9 68:16
fails [1] 37:18
failure [10] 7:21 8:9 21:3 22:20 32:2 34:6 37:24 37:25 89:6 101:11
fairly [3] 27:13 53:16 63:17
fall [1] 64:13
false [1] 95:22
falsely [2] 21:20 21:22
family [5] 21:2 21:8 81:20 84:24 98:14
far [4] 11:5 46:11 57:13 91:3
fascitis [1] 8:10
fashion [2] 83:17 102:7
fatigue [3] 40:8 73:1 74:20
favor [1] 3:17
February [38] 15:1 16:8 16:10 45:14 47:17 47:18 47:18 50:10 50:14 52:22 53:24 53:24 54:14 54:17 54:20 55:10 55:11 55:13 55:21 60:5 64:1 64:14 64:17 65:5 65:25 66:16 70:4 70:19 75:17 75:17 75:20 76:7 76:7 76:10 93:1 93:2 93:4 102:9
fellowship [2] 11:24 12:3
felt [6] 29:20 41:22 43:9 45:22 99:17 99:19
fever [25] 30:14 31:11 38:6 40:8 48:9 48:13 48:15 48:16 48:21 56:5 57:20 60:24 61:24 67:4 67:21 68:12 68:14 69:13 73:14 73:19 74:7 79:20 82:9 83:9 85:11
fevers [3] 61:16 69:8 69:11
few [3] 5:7 10:21 99:3
fibrillation [6] 43:9 43:10 43:13 44:1 44:22 75:2
fibrin [1] 33:7
field [1] 26:7
file [5] 14:24 15:12 15:13 15:19 18:5
filed [6] 6:25 8:1 8:2 17:22 17:24 18:2
films [1] 59:14
finding [4] 7:7 34:20 62:23 75:7
findings [10] 25:11 30:13 31:14 57:15 57:17 57:18 59:2 60:1 61:7 79:24
fine [3] 62:21 70:16 80:7
finish [2] 58:21 87:17
finished [2] 44:10 81:21
first [16] 3:3 10:17 30:10 42:13 42:18 45:20 50:16 63:16 66:3 69:7 72:14 72:20 82:18 82:22 91:15 106:7
five [1] 101:24
flu [1] 85:10
fluctuations [1] 69:23
follow [3] 46:8 70:20 70:23
followed [1] 51:12
following [11] 11:19 18:20 20:16 42:22 45:18 53:14 77:16 83:8 100:3 102:8 105:3
follows [1] 3:5
followup [17] 46:12 60:14 60:18 60:20 60:25 61:21 63:2 63:20 68:15 69:4 71:1 71:5 71:15 76:13 78:7 102:11 102:22
Foote [1] 11:20
foregoing [2] 105:2 106:9
form [2] 13:20 33:7
formal [1] 13:11
formation [2] 32:9 38:3
forms [1] 37:12
forth [2] 1:25 106:8
found [6] 15:20 18:7 31:13 31:15 75:4 94:8
Foundation [5] 2:7 12:13 12:17 15:7 78:4
four [5] 22:21 28:21 37:17 44:19 53:13
free [3] 5:25 43:3 68:21
frequency [1] 34:25
Friday [2] 1:14 95:18
frustration [2] 96:9 96:12
full [3] 11:20 19:14 95:25
full-time [1] 11:22
fulminant [1] 22:19
function [1] 79:15
functioned [1] 47:8
fungus [1] 26:25
FUO [1] 72:25
future [1] 85:7

-G-

general [5] 36:12 39:4 39:18 46:13 47:2
generalized [1] 57:25
generally [7] 17:2 17:11 35:18 36:6 39:11 39:14 69:25
generated [1] 15:17
genitourinary [1] 80:21
gentleman [1] 43:5
ghost [3] 14:24 15:12 15:13
GI [1] 80:21
given [16] 9:13 13:11 60:22 61:14 61:19 61:24 67:4 67:20 68:4 68:10 68:16 69:13 82:10 86:16 102:19 103:10
Glick [2] 57:4 57:8
gone [10] 19:17 19:24 80:9 82:2 94:9 94:14 100:7 100:22 101:2 103:4
gradually [1] 43:15
great [2] 35:20 101:20
greater [4] 29:6 29:16 35:2 101:23
Greg [3] 99:6 99:19 100:21
Greg's [1] 98:18
Gregory [43] 1:5 4:2 4:7 16:4 19:16 26:10 29:11 42:10 42:14 42:19 45:11 48:7 48:19 52:5 52:9 52:20 53:8 53:19 55:12 58:10 60:17 61:13 64:1 65:6 74:10 75:3 76:15 77:15 81:11 84:17 87:15 87:19 93:7 96:22 97:2 97:6 97:18 98:3 98:13 101:14 102:1 103:1 103:3
ground [1] 5:7
group [10] 2:17 4:8 4:10 4:13 12:6 12:9 23:24 30:3 30:6 47:7
guarantee [1] 100:24
guy [1] 65:17

-H-

H-81 [1] 89:5
hand [3] 5:19 17:5 106:14
handwriting [1] 72:8
handwritten [1] 72:17
happy [1] 5:14
head [1] 5:19
headache [1] 85:10
Health [2] 12:1 12:15
hear [8] 3:19 5:4 30:19 40:22 42:5 56:7 74:5 83:3
heart [26] 13:8 15:4 22:19 27:3 27:11 32:1 32:10 33:12 34:6 34:8 37:24 37:25 38:4 43:6 43:11 44:18 44:20 53:20 54:11 64:12 75:1 89:6 89:8 99:7 99:8 101:11
heightened [2] 27:18 80:16
Heights [5] 3:13 3:25 14:23 15:11 15:13
helpful [3] 16:21 31:17 51:22
hematocrit [7] 64:3 64:13 77:2 77:3 77:6 80:2 80:8
hematologic [1] 79:3
hemoglobin [6] 64:2 77:2 77:2 77:5 80:2 80:8
hemoglobin/hematocrit [1] 65:2
hemolysis [1] 80:23
hemolytic [2] 80:23 81:8
hereby [1] 106:6
herein [1] 1:17
hereinafter [1] 3:4
hereunto [1] 106:13
high [7] 27:2 40:6 58:7 61:14 67:5 67:14 101:1
higher [2] 34:25 35:10
Hillsdale [2] 12:1 12:15
himself [4] 57:23 95:25 96:23 97:2
history [15] 11:13 28:6 31:10 36:12 36:23 43:5 57:23 58:2 61:15 61:19 61:24 80:24 80:25 82:10 87:14
holds [1] 32:25
home [5] 3:12 3:20 14:12 83:7 85:7
hospital [25] 11:21 12:21 14:21 15:14 16:15 46:6 46:12 51:11 53:14 54:11 54:17 59:19 59:22 61:22 62:6 64:1 65:5 66:15 67:1 67:9 70:3 70:18 88:20 96:22 96:25
hospitalization [7] 47:3 59:10 64:14 64:25 76:5 82:14 102:18
hospitals [1] 12:11
host [1] 39:17
hour [2] 85:13 100:4

hours [1] 88:18
Howard [1] 70:24
husband [1] 99:12
hyperthyroidism [1] 79:14

-I-

ICU [2] 52:10 91:19
idea [1] 64:6
identification [1] 10:3
identified [1] 52:7
identify [1] 10:19
ill [2] 100:21 101:5
illness [2] 58:3 98:24
imagine [1] 9:14
immediate [2] 37:19 99:9
immediately [1] 62:25
implantation [1] 26:19
implies [1] 33:17
importance [1] 52:2
important [4] 5:10 5:17 36:10 42:2
impression [3] 64:10 73:7 92:11
impressions [2] 44:12 89:14
improperly [1] 7:20
improved [1] 76:12
inaccurate [3] 21:18 22:4 24:5
inaccurately [1] 21:21
inartfully [1] 5:13
incidence [1] 28:16
include [4] 31:23 32:2 51:20 51:21
included [8] 48:24 49:2 49:4 51:24 51:25 52:1 52:3 80:20
including [1] 37:23
increase [2] 31:25 43:25
increased [2] 30:23 62:18
indeed [1] 62:23
independent [1] 42:9
index [5] 27:18 40:6 50:7 51:6 58:7
indicate [1] 27:9
indicated [7] 8:17 15:6 41:23 47:22 55:14 61:4 102:22
indicates [1] 78:5
indications [2] 28:4 83:24
indicative [1] 63:7
indicators [4] 27:9 36:16 40:14 41:5
indices [1] 80:3
individual [3] 41:19 53:2 63:22
infected [3] 32:19 38:14 39:19
infection [17] 26:24 32:16 32:17 32:22 39:5 39:18 39:25 49:3 49:7 49:8 50:3 50:7 51:6 51:18 67:15 73:24 99:7
infectious [8] 54:21 54:24 71:18 73:8 73:20 78:25 84:14 101:20
infective [4] 14:5 15:3 25:9 32:6
information [27] 16:21 17:1 17:8 21:19 21:24 22:4 22:24 23:21 23:22 24:3 24:7 31:17 56:18 58:4 58:6 59:19 63:13 86:8 86:16 87:3 87:10 93:15 94:10 94:13 94:16 95:22 95:24
initial [2] 29:24 79:15
initiation [1] 88:4
inpatient [4] 46:13 46:16 46:18 47:11
inquiry [1] 19:8
inspection [1] 52:3
inspirometer [1] 52:2
instance [1] 84:13
instances [1] 35:6
instructed [2] 70:4 86:4
instructions [2] 56:17 56:20
insufficiency [2] 22:22 45:21
intensive [3] 89:5 90:15 91:13
interested [1] 106:12
intermittent [3] 57:20 78:15 78:18
internal [2] 10:11 88:1
intervention [4] 37:20 39:12 40:14 45:3
interventional [2] 45:2 47:25
intraoperative [2] 45:15 45:19
intraoperatively [1] 46:2
intravenous [1] 37:14
invasion [4] 32:8 34:7 34:7 38:3
invasive [3] 26:12 26:13 26:16
involved [4] 46:24 48:3 65:14 76:22
involving [1] 44:18
irreversible [2] 99:22 100:2
isolated [1] 37:15
issue [1] 11:10
issues [1] 19:12
itself [3] 32:17 33:11 63:10

-J-

Jackson [3] 6:20 8:1 11:21
Jeanne [4] 2:4 6:13 65:13 68:3
job [1] 102:22
JOHN [1] 2:13
joint [1] 42:7
Joyce [11] 21:19 22:24 23:13 23:16 23:17 23:20 23:22 24:4 90:11 92:6 97:11
judgment [2] 62:23 96:3
July [1] 106:14
June [1] 1:14
jury [1] 7:3

-K-

K-R-U-I-T-H-O-F-F [1] 3:11
Kaiser [10] 14:22 15:17 15:21 46:17 56:14 56:16 57:5 69:11 72:8 87:1
Kaiser/Cleveland [1] 81:13
Karen [3] 1:19 106:5 106:17
keep [3] 15:24 65:22 70:1
Keith [9] 1:9 1:13 1:16 2:11 3:1 3:6 3:10 105:18 106:6
kids [1] 99:4
kind [2] 17:17 82:19
King [2] 86:23 87:1
knew [2] 27:10 80:24
knowing [5] 62:14 62:15 62:16 62:17 62:20
knowledge [4] 26:4 45:14 71:9 72:1
known [1] 89:25
Kruithoff [12] 1:9 1:13 1:16 2:11 3:1 3:6 3:10 85:7 85:15 85:18 105:18 106:6

-L-

L.P.A [3] 1:23 2:3 2:13
lab [3] 48:3 50:11 91:22
laboratory [4] 25:4 64:21 64:22 71:25
last [8] 3:9 5:4 7:13 54:16 80:9 85:4 85:6 93:8
late [6] 28:23 28:25 29:2 29:8 29:12 29:15
lateral [1] 60:12
lawful [1] 3:1
lawsuit [1] 5:6
Leader [2] 1:23 2:14
learn [2] 82:1 94:6
learned [1] 94:3
least [4] 44:17 90:24 100.10 101:23
leave [1] 96:19
leaving [1] 96:18
led [1] 22:5
left [13] 49:22 49:24 50:5 50:22 50:24 51:4 84:25 85:2 85:3 85:22 90:22 91:15 92:2
Leonard [1] 3:10
lesions [1] 30:15
licensed [1] 10:7
life [1] 101:17
life-threatening [1] 37:22
likely [8] 39:24 43:14 62:23 73:25 74:2 83:22 84:13 99:8
limited [1] 26:7
line [6] 6:14 18:19 52:9 53:3 65:9 105:5
listed [4] 11:8 11:12 13:2 13:23
listen [2] 42:3 58:18
litigation [2] 6:10 18:8
lived [1] 100:24
living [1] 101:24
log [2] 15:25 16:3
longer [2] 37:17 95:4
look [6] 5:22 28:3 36:7 50:9 60:4 77:22
looking [4] 27:8 27:15 56:13 66:6
loss [13] 31:1 77:9 77:16 77:21 78:2 80:21 82:13 82:19 82:20 82:21 82:23 82:25 83:1
louder [1] 3:18
low [2] 17:18 62:8
lower [5] 25:22 34:20 35:9 62:20 77:4
lung [2] 48:25 49:1
lymphoma [1] 79:4

-M-

M [3] 1:19 106:5 106:17
M.D [8] 1:9 1:13 1:16 2:11 3:1 3:6 105:18 106:6
malignancy [1] 79:4
malpractice [3] 5:1 5:6 6:10
management [8] 19:7 37:19 38:8 38:13 42:7 46:25 57:13 66:7
manifest [1] 29:6
March [18] 15:1 16:8 16:10 54:7 54:13 54:15 61:10 66:10 66:13 69:9 69:14 69:17 72:4 74:13 74:17 74:19 75:24 103:3
Marek [1] 63:24
mark'd [1] 10:3
marked [1] 43:12
mass [1] 33:8
material [4] 17:6 32:23 32:24 67:14
matter [5] 13:3 13:12 17:5 19:5 24:19
maximum [1] 37:17
may [56] 6:3 13:16 13:17 15:2 16:10 19:9 19:15 19:17 19:21 20:15 20:16 21:15 23:18 24:1 28:4 31:14 33:17 33:19 34:20 35:10 35:22 36:18 43:2 47:19 54:15 73:17 77:10 78:8 78:11 78:14 82:2 82:3 83:23 84:7 84:18 84:20 84:22 84:25 86:15 88:19 88:23 92:25 93:22 95:7 95:18 96:23 97:1 97:6 98:6 98:12

100:2 100:7 100:23 101:2 101:5 102:7
mean [8] 4:21 20:5 20:8 35:19 39:25 49:21 84:2 100:17
meaning [1] 45:17
means [2] 32:13 32:15
meant [1] 21:22
mechanical [4] 31:23 33:24 37:21 101:12
medical [20] 2:17 4:8 4:10 4:13 5:22 6:9 12:6 12:9 14:23 18:9 18:9 25:1 25:24 30:3 30:6 37:13 37:18 38:2 38:7 56:11
medically [1] 70:20
medicine [4] 10:11 11:14 46:17 88:1
meet [1] 95:2
meeting [5] 94:20 94:22 94:24 95:10 95:16
member [2] 23:24 81:20
members [1] 21:8
Memorial [1] 11:21
memory [1] 25:18
mentioned [14] 6:8 7:25 9:21 15:11 15:23 16:7 31:5 32:11 33:23 34:11 49:11 51:19 69:16 102:24
Merit [1] 1:19
message [12] 84:25 85:2 85:3 85:5 85:15 85:21 85:22 85:23 85:25 86:9 86:13 91:16
messages [2] 90:22 92:3
metastatic [1] 32:6
Michigan [8] 6:20 8:2 9:3 9:17 10:8 11:21 25:1 25:24
might [2] 27:9 38:17
Miller [17] 23:23 24:4 24:13 29:20 30:2 89:16 89:21 90:8 90:10 90:11 90:13 90:19 91:1 92:1 92:16 94:7 97:20
mind [2] 81:3 96:19
mindset [1] 63:22
minimum [1] 37:17
minute [5] 20:2 53:23 68:3 87:4 95:4
minutes [2] 99:3 100:4
misdirected [1] 21:25
Mishkind [1] 2:3
misinformation [1] 23:14
Mistry [1] 75:18
mitral [16] 22:21 43:7 43:7 44:3 44:4 44:16 44:17 44:20 45:4 45:4 45:9 45:10 61:15 89:8 101:10 101:13
moderate [1] 44:17
moderately [1] 45:21
Monday [5] 22:7 94:4 94:6 95:5 97:17
month [1] 53:10
months [5] 16:9 16:12 16:13 16:14 16:18
moonlighted 111 11:18
MOORE [1] 2:18
morning [4] 88:23 91:18 94:9 96:7
mortality [2] 101:1 101:4
most [4] 36:10 62:23 74:2 99:7
motions [1] 5:20
move [1] 36:19
Mrs [2] 58:5 98:17
MS [21] 3:7 6:15 14:16 16:2 16:16 19:1 23:7 30:21 48:22 50:14 54:1 59:23 63:21 65:16 65:21 68:6 80:6 84:5 84:21 103:23 103:25
multiple [4] 31:23 38:5 48:14 88:3
murmer [1] 75:5
murmur [2] 30:12 75:10
murmurs [2] 53:22 75:19
Murphy [2] 1:22 2:12
muscle [1] 34:4
must [1] 37:20
myocardial [2] 38:2 38:3
myocardium [3] 32:8 32:22 34:7
myxomatous [1] 35:25

-N-

nail [1] 96:17
name [8] 3:9 3:9 3:10 7:8 7:13 8:11 8:14 97:14
named [2] 6:9 106:6
nature [3] 46:16 60:14 69:2
nausea [1] 85:10
necessarily [3] 36:4 61:2 61:5
necessary [3] 61:21 62:5 103:7
necessity [1] 24:15
neck [7] 65:8 65:19 67:7 67:13 67:23 68:8 68:11
necrotizing [1] 8:9
need [3] 25:17 57:9 83:3
negative [4] 25:7 76:3 76:6 76:11
negligence [4] 7:16 7:17 8:8 9:8
neutrophil [1] 51:3
never [4] 21:13 23:8 68:14 94:9
new [3] 43:8 43:10 75:7
next [4] 54:5 54:11 66:9 76:15
nice [1] 17:18
night [15] 40:9 56:5 57:20 61:24 67:22 69:10 78:15 78:18 78:24 79:12 79:17 83:9 85:4 85:6 92:10
nine [1] 76:6
nods [1] 5:19
nonconfrontational [1] 96:6
normal [2] 64:20 69:20
Notary [4] 1:20 105:24 106:5 106:17
note [10] 29:21 46:4 53:21 55:2 55:3 63:21 72:7 72:12 75:16 105:3
noted [5] 46:5 55:5 55:6 65:6 69:9
notes [8] 18:4 18:6 18:11 18:21 18:23 18:25 60:11 73:1
nothing [1] 106:7
notice [1] 1:21
notified [1] 81:14
notify [1] 59:6
now [46] 8:17 15:23 16:19 18:11 26:6 38:8 42:18 45:11 46:6 48:6 51:9 52:9 53:5 53:8 53:19 55:12 56:8 56:24 60:6 63:25 65:5 67:20 68:10 71:7 72:4 72:11 72:14 73:1 73:3 74:19 75:3 76:14 76:19 77:1 78:11 79:21 81:11 84:7 85:8 88:9 88:19 89:10 89:20 92:3 93:6 93:25
number [1] 78:24
nurse [1] 69:14
nurses [1] 47:21

-O-

o'clock [3] 1:24 91:19 104:5
oath [1] 5:9
object [2] 27:20 68:17
objection [42] 4:23 6:3 6:14 12:24 13:5 16:23 17:9 17:14 18:14 18:18 19:18 20:3 20:7 22:1 22:11 23:4 27:5 27:12 36:21 40:2 40:10 61:1 61:17 62:1 63:21 67:2 67:10 67:16 67:17 69:6 77:12 83:10 84:15 93:17 93:18 97:8 99:23 100:9 100:19 101:18 102:2
obtained [3] 76:7 76:9 79:1
obviously [1] 16:4
occasion [3] 8:18 65:10 66:2
occasions [1] 6:10
occurred [7] 46:2 55:19 82:13 91:9 91:18 94:24 96:7
October [3] 42:17 43:9 106:18
odd [1] 22:12
off [2] 42:15 42:16
office [7] 2:4 79:22 91:15 94:19 95:3 95:12 106:14
offices [1] 1:22
often [2] 28:8 28:11
Ohio [25] 1:2 1:21 1:24 2:5 2:9 2:15 2:16 2:19 3:2 3:14 3:25 4:5 4:8 4:10 4:12 8:25 10:8 12:5 12:9 30:2 30:5 106:2 106:5 106:14 106:17
once [5] 5:1 5:5 44:10 88:21 94:13
one [27] 6:2 6:18 8:18 9:14 11:23 20:18 20:21 20:22 27:14 27:24 28:21 29:10 35:18 46:15 47:8 63:5 65:10 66:2 70:12 70:16 73:23 78:24 86:21 86:22 89:23 96:16 100:4
one-half [1] 85:13
one-over-six [1] 75:4
ones [1] 31:5
onset [2] 43:8 43:10
onto [1] 32:19
open [4] 72:11 75:1 89:7 96:6
opening [1] 74:9
operate [2] 92:18 95:18
operating [3] 91:25 92:5 92:9
operative [2] 46:4 101:1
opinion [26] 21:21 21:23 38:20 45:1 48:8 71:14 73:3 73:6 73:11 75:25 76:2 77:5 78:17 83:6 83:12 83:13 83:19 84:10 98:3 98:7 99:21 99:25 100:1 100:10 101:6 101:16
opportunity [7] 21:7 42:25 43:19 57:1 60:6 100:5 101:3
order [2] 27:15 43:18
orders [1] 47:21
organism [3] 31:12 36:14 37:16
organs [1] 32:5
origin [6] 40:8 60:24 61:16 67:5 67:21 68:12
original [1] 92:24
otherwise [2] 5:15 106:12
outcome [2] 19:25 39:24
outpatient [1] 53:10

-P-

p.m [3] 85:1 91:21 104:5
pacemakers [1] 26:20
page [5] 50:11 50:16 50:18 105:3 105:5
pain [4] 49:1 85:4 85:6 85:9
papillary [1] 34:4

iiaravalvular[2] 22:21 34:3
parentheses[2] 85:11 85:12
Parma[1] 4:4
part[15] 5:4 11:25 15:20 24:24 33:10 36:10 46:9 46:15 46:18 54:22 56:14 56:16 58:12 59:8 60:12
participated[2] 24:18 24:23
participating[1] 88:25
iiarticular[9] 11:9 22:8 39:3 51:5 60:10 60:22 72:12 80:17 92:15
iiartners[1] 89:23
iiarty[1] 106:12
pass[1] 10:16
past[2] 28:12 28:14
patient[88] 19:7 19:8 19:14 21:19 22:6 22:15 22:19 24:8 24:10 24:14 24:16 27:3 27:7 27:9 27:11 27:16 27:19 28:1 28:2 28:4 29:13 29:21 33:17 36:18 37:5 37:18 37:21 38:5 39:21 39:23 40:7 40:12 41:4 41:20 43:8 43:23 45:8 47:7 49:13 51:10 51:23 52:1 56:4 56:6 56:11 56:21 57:6 58:14 59:14 60:22 61:10 63:2 64:19 65:18 66:1 68:2 69:5 71:19 71:24 72:15 72:23 72:24 73:9 73:21 78:6 80:22 80:25 81:6 83:14 86:3 86:17 87:23 87:25 89:4 89:7 90:5 90:21 91:12 91:24 92:8 92:9 92:18 92:21 94:8 95:18 95:23 95:25 96:3
patient's[17] 15:16 22:5 23:19 24:11 41:22 56:3 57:11 57:13 59:9 65:15 76:12 80:24 89:14 90:14 90:25 91:12 92:24
patients[12] 25:3 28:8 39:10 46:19 46:20 46:23 46:25 47:10 53:13 69:23 96:10 96:16
Patterson[3] 1:19 106:5 106:17
Paul[4] 23:23 24:4 89:16 89:20
pending[3] 6:22 8:21 55:6
people[6] 29:7 46:20 47:25 89:13 95:9 95:13
per[1] 85:11
percent[2] 28:22 101:23
perfectly[1] 61:20
perform[7] 26:17 26:18 26:19 79:6 88:2 88:4 93:5
performed[2] 25:2 80:3
pericarditis[2] 49:5 74:8
pericardium[1] 74:9
period[4] 12:2 43:15 54:2 82:20
permanent[1] 26:19
Permanente[9] 2:16 4:8 4:10 4:13 12:5 12:9 14:22 30:2 30:6
Perrysburg[1] 2:9
person[7] 30:11 36:22 47:4 47:24 62:16 62:17 70:19
personal[3] 18:4 18:5 56:15
personally[2] 24:6 92:4
personnel[1] 53:6
perspective[2] 40:15 70:25
pertaining[1] 15:15
pertains[1] 16:3
pertinent[1] 15:14
Peter[2] 86:22 87:1
phenomenon[2] 32:3 38:5
phlebotomy[3] 64:13 64:16 64:24
phone[13] 54:14 56:11 57:24 59:25 69:12 84:23 85:20 86:3 86:9 86:12 86:20 86:21 86:22
phrase[1] 5:13
physical[8] 52:4 57:12 57:14 57:16 57:17 57:18 87:12 94:1
physically[1] 47:22
physician[8] 9:12 11:22 30:3 57:6 70:24 86:25 92:20 92:25
physicians[7] 17:23 46:20 60:1 71:23 74:11 102:16 103:9
physics[1] 34:23
ilicking[1] 34:13
picture[1] 36:8
place[5] 20:16 32:25 52:10 64:14 106:11
placed[2] 45:12 67:14
l'laintiff[9] 1:7 1:17 2:2 4:25 7:7 7:8 8:12 9:4 9:6
l'laintiff's[4] 7:22 8:15 10:2 10:24
plan[2] 87:15 87:19
platelets[1] 33:7
l'LEAS[1] 1:1
pleural[2] 49:2 55:5
plus[2] 22:21 45:21
pneumonia[1] 49:3
pneumonitis[1] 49:4
point[11] 5:21 5:24 6:2 59:13 66:7 73:23 77:18 82:1 93:9 99:21 102:4
Polito[79] 1:23 2:12 2:13 3:17 4:23 6:13 10:5 12:24 13:5 16:6 16:23 17:9 17:14 18:14 18:18 19:18 20:2 20:7 22:2 23:5 23:8 27:5 27:12 27:20 36:21 40:2 40:10 40:18 40:21 40:24 41:2 41:8 41:13 42:3 42:15 47:16 48:20 50:13 50:15 53:23 54:7 57:10 58:18 59:21 61:1 61:17 62:1 63:23 65:13 65:20 65:22 67:2 67:10 67:17 68:3 68:17 69:6 72:18 75:13 77:12 77:18 77:22 80:4 82:18 83:10 84:1 84:15 84:20 89:17 93:1 93:9 93:18 97:8 99:23 100:9 100:19 101:18 102:2 104:3
polymorphonucleocyte[1] 49:25
poor[3] 49:1 96:16 102:22
position[1] 11:17
positive[15] 19:25 20:5 20:8 25:6 25:21 30:14 31:12 34:19 35:10 36:14 37:6 39:24 39:25 62:20 76:1
possibilities[3] 48:23 78:20 78:21
possibility[3] 79:13 81:5 84:16
possible[5] 34:20 36:24 38:13 80:20 88:12
possibly[2] 43:7 98:5
post[3] 46:21 46:22 46:23
post-pericardiotomy[1] 49:6
postcardiography[1] 74:3
postcardiotomy[2] 73:22 74:4
postoperative[8] 48:15 48:16 48:25 49:1 49:5 64:11 65:4 75:1
potential[1] 79:10
pounds[3] 78:6 78:8 78:10
practice[5] 16:22 26:6 28:10 47:2 53:12
preadmission[1] 76:24
preceding[1] 54:25
predicted[5] 25:7 25:22 34:19 35:10 62:20
predictive[2] 25:15 35:7
predischarge[1] 51:24
predisposition[1] 30:11
preface[1] 82:24
prepared[1] 10:23
prescription[1] 71:24
presence[3] 30:13 30:14 36:12
present[5] 32:16 32:17 37:2 58:3 95:13
presentation[3] 13:12 13:19 29:9
prescnted[1] 82:16
presents[1] 40:8
pressure[2] 66:20 85:9
presumptive[3] 25:5 37:6 37:16
previous[2] 33:18 87:9
previously[7] 15:16 40:17 66:11 75:9 82:12 83:2 97:14
primary[3] 46:19 59:10 70:23
privileges[5] 12:12 12:14 12:16 12:19 12:22
problem[7] 22:14 43:14 80:17 82:23 97:18 97:23 99:12
problems[2] 45:15 46:1
procedure[7] 3:3 39:13 53:16 56:5 58:15 85:8 85:16
procedures[4] 26:16 38:22 38:24 88:7
proceeding[1] 36:17
process[1] 54:21
profess[1] 101:19
professional[2] 4:11 11:13
progress[2] 72:17 75:16
project[1] 24:25
prolonged[2] 37:14 100:3
prompt[2] 83:16 83:20
prophylaxis[1] 44:3
prosthesis[1] 39:17
prosthetic[61] 13:8 26:21 26:23 26:24 27:3 27:11 27:17 27:24 28:3 28:9 28:17 28:23 28:25 29:3 29:7 29:9 29:12 29:18 29:21 29:25 31:4 31:7 31:22 33:10 34:13 37:3 37:7 37:10 38:10 39:5 39:5 39:12 39:19 39:22 40:7 40:13 41:4 41:20 45:12 51:11 56:23 58:8 58:13 60:23 61:14 61:25 67:6 67:15 69:2 73:4 77:16 80:24 81:5 81:7 81:9 82:10 83:24 88:2 89:8 98:10 101:14
provide[7] 14:13 21:24 63:13 71:5 71:23 87:3 87:11
provided[11] 3:2 5:21 22:25 23:14 56:18 58:4 58:6 59:19 83:17 87:12 93:15
providing[3] 12:4 24:4 46:16
PRT[1] 85:11
prudent[3] 60:25 67:25 69:3
Public[4] 1:20 105:24 106:5 106:17
publication[1] 14:7
publications[2] 11:7 13:1
published[2] 14:6 26:1
pulling[1] 38:24

pump [2] 45:17 45:20
purposes [1] 10:3
pursuant [1] 1:21
purulent [4] 65:9 67:6 67:14 68:8

-Q-

qualified [1] 106:6
cpestion-and-answer [1] 5:9
questions [6] 5:10 6:14 10:21 103:24 104:1 104:2
quite [1] 80:14
quote [2] 96:17 101:4

-R-

raise [1] 51:5
raises [1] 50:6
range [1] 84:9
rate [3] 30:24 84:9 84:11
rather [2] 77:6 98:19
RBC [1] 80:2
re-sent [1] 55:9
read [17] 22:17 22:18 41:14 42:6 43:2 62:3 62:4 62:17 72:22 77:23 77:24 80:4 83:4 93:21 100:12 104:3 105:2
reading [1] 73:6
readmitted [1] 72:24
real [1] 98:22
really [1] 17:16
reason [7] 79:4 81:8 88:12 92:15 92:23 93:13 99:15
reasonable [4] 83:18 88:14 101:16 101:22
reasonably [2] 83:16 83:19
recalled [1] 86:11
receive [6] 44:2 47:20 59:25 85:20 87:5 102:10
received [15] 21:18 22:4 23:17 23:21 23:22 55:9 62:8 85:23 86:20 86:21 86:22 94:10 94:13 95:21 102:14
receiving [1] 85:25
recent [2] 64:11 76:5
Recess [1] 70:17
recollection [1] 42:10
recommend [1] 44:23
recommendation [4] 45:8 71:17 96:24 97:7
recommendations [8] 41:16 89:2 89:3 89:11 89:15 89:25 90:5 91:2
recommended [11] 39:4 43:23 43:24 55:8 58:14 58:17 89:4 89:7 102:10 103:5 103:9
recommending [2] 40:14 41:6
recommends [1] 60:13
recontrol [1] 44:1
record [26] 10:20 14:21 14:24 18:9 18:10 22:18 39:1 42:6 42:15 42:16 45:16 46:3 47:15 55:20 56:12 56:16 57:9 62:4 64:19 69:15 77:24 83:4 92:25 93:19 93:21 100:12
records [13] 5:22 5:25 15:7 15:9 15:15 15:17 15:18 15:21 15:21 56:14 57:1 72:8 76:19
recovering [1] 75:1
Red [1] 80:3
redacting [1] 16:4
reduced [3] 13:20 13:22 106:8
refer [3] 5:24 47:15 55:2
reference [2] 16:19 84:9
referenced [1] 97:14
referred [5] 16:7 16:11 16:13 17:3 42:21
refemng [9] 10:24 38:9 48:11 56:8 56:9 56:10 64:16 64:20 64:22
refers [1] 49:24
refine [1] 35:1
reflected [3] 64:19 65:1 69:15
regard [22] 9:17 11:13 16:19 17:6 19:11 21:3 21:10 22:8 22:24 23:13 24:14 33:4 38:21 59:16 60:1 82:12 89:11 90:4 91:2 94:1 99:11 102:25
regarding [11] 9:10 23:18 42:25 44:12 46:23 63:14 86:17 90:25 92:7 95:23 97:23
regardless [2] 36:24 100:22
Registered [1] 1:19
regular [3] 28:2 51:13 70:9
regurgitant [1] 30:12
regurgitation [8] 32:1 34:1 34:3 34:6 37:25 43:7 44:4 44:16
reiterate [1] 40:20
reiterated [2] 87:13 92:2
relate [1] 16:5
related [3] 27:23 37:21 37:23
relationship [1] 98:9
relative [1] 106:12
reliable [3] 17:2 17:8 17:11
relied [3] 21:21 21:23 95:24
remains [1] 63:8
remarkable [2] 57:16 57:18
remember [2] 98:21 99:2
removal [4] 38:9 39:20 41:6 41:17
remove [3] 39:14 66:19 66:25
removed [6] 39:6 39:8 52:17 52:18 53:3 66:21
removing [1] 52:21
render [3] 4:11 38:19 89:1
rendered [3] 4:1 4:6 102:1
repair [2] 38:13 45:12
repaired [1] 39:9
repeat [6] 5:14 62:5 68:1 79:5 93:5 93:20
repeated [3] 62:11 79:2 100:11
rephrase [3] 5:14 20:4 54:9
replace [2] 39:14 89:8
replacement [7] 28:18 38:10 39:20 41:6 44:23 45:9 61:15
replacing [1] 38:25
replicated [1] 26:3
report [7] 59:11 59:18 60:5 61:8 61:9 61:11 62:25
reporter [2] 1:20 5:19
represent [3] 35:24 35:25 62:24
reputation [1] 62:16
request [4] 14:17 16:3 16:17 19:2
requested [8] 54:23 56:21 70:15 78:25 79:1 79:14 102:21 105:5
requests [1] 47:20
required [2] 6:4 24:12
requires [1] 39:19
requisition [1] 71:25
requisitions [1] 103:20
research [3] 24:19 24:23 24:25
reserved [1] 39:9
residency [2] 11:18 11:20
resident [1] 25:1
resolution [2] 7:4 7:6
resolve [2] 35:2 62:21
resolved [4] 7:2 7:3 8:5 40:1
respiratory [1] 49:3
respond [2] 38:6 95:20
responded [1] 95:21
responsibilities [2] 11:16 46:11
responsibility [4] 19:14 71:20 71:22 96:1
responsible [1] 52:21
restrict [1] 48:18
result [4] 32:20 45:6 85:24 94:15
resulted [1] 99:8
resulting [2] 74:8 101:12
results [2] 25:25 59:7
resuscitation [1] 100:3
retained [2] 65:7 66:24
retake [1] 85:12
retrospective [3] 25:2 84:2 84:6
return [2] 92:5 102:15
returned [1] 94:5
returns [1] 73:1
review [15] 5:7 15:8 17:5 25:2 25:13 25:17 55:20 57:1 57:9 59:10 59:11 59:18 60:7 61:9 61:10
reviewed [18] 14:18 14:20 14:21 14:23 14:24 15:1 15:2 15:6 17:7 18:8 54:24 59:4 59:8 59:13 80:10 82:12 86:4 86:9
reviewing [3] 45:16 46:3 66:6
revoked [1] 12:23
hematic [6] 15:3 43:6 43:11 44:3 44:18 44:20
right [8] 54:8 55:5 63:23 65:8 75:5 75:14 88:9 88:9
ring [1] 31:25
risk [5] 33:19 36:22 61:14 67:5 67:14
River [1] 2:9
Rotad [3] 2:9 3:13 4:4
Roetzel [1] 2:18
roles [1] 47:9
room [29] 11:22 12:5 42:22 42:23 55:13 56:22 56:25 57:3 57:5 57:7 76:10 81:13 81:15 81:18 82:2 82:8 82:16 84:8 84:18 86:5 86:15 86:16 87:1 87:7 87:21 88:11 91:25 92:5 92:9
rooms [1] 11:19
round [1] 47:6
rounds [1] 48:2
rule [2] 56:23 86:5
ruled [3] 72:25 73:4 73:11
rules [2] 3:2 5:8
run [2] 45:17 45:20
running [1] 48:7

-S-

S [1] 2:13
sarcoidosis [1] 79:10
Saturday [3] 47:17 96:7 100:2
Saunders [38] 18:15 18:17 19:4 19:6 19:11 19:13 19:20 20:11 20:20 21:2 21:7 21:14 22:3 22:25 23:2 23:12 89:12 92:4 92:7 92:16 92:17 92:19 92:23 92:24 93:14 94:21 95:1 95:4 95:10 95:14 95:16 95:17 96:21 96:25 97:17 97:24 98:1 99:11
Saunders' [8] 90:12 90:23 91:16 92:3 94:19 94:20 94:25

95:12
saving [1] 101:3
saw [38] 42:18 47:12 47:14 47:17 47:22 49:15 49:17 53:19 54:12 54:13 54:16 54:19 61:9 63:2 65:17 66:1 66:5 66:9 66:13 71:18 72:4 73:8 73:21 74:12 74:17 74:19 75:24 76:12 76:14 76:15 76:19 78:11 80:15 81:12 88:21 88:23 90:16 103:3
says [2] 50:22 72:22
schedule [6] 15:1 16:8 16:12 16:17 47:10 96:15
scheduler [7] 21:20 90:24 92:22 93:16 95:22 96:15 97:10
scheduling [4] 91:15 96:10 97:23 99:12
screening [1] 79:16
seal [1] 106:14
second [8] 15:4 45:1 45:16 45:18 50:11 50:17 63:4 66:3
secretary [9] 90:12 90:23 91:16 92:4 93:16 94:21 95:1 95:11 97:13
section [1] 72:15
secured [2] 33:3 52:13
sedimentation [3] 30:24 84:8 84:11
see [14] 28:1 28:8 35:20 36:2 47:10 50:22 51:3 53:12 54:2 54:5 65:24 72:16 72:19 88:20
seeding [1] 32:6
seeing [4] 23:25 42:19 47:23 62:6
send [1] 85:15
senior [1] 24:25
sensitive [3] 34:12 34:16 34:17
sensitivity [5] 25:6 25:19 35:9 62:14 62:18
sent [3] 25:4 55:8 85:6
separate [1] 46:14
separated [1] 33:1
septic [2] 33:22 33:24
septicemia [1] 49:19
sequela [2] 33:19 33:21
sequeli [2] 27:23 27:25
sequential [1] 25:3
series [1] 51:15
serious [2] 24:11 37:22
serve [1] 8:23
served [1] 8:18
service [7] 46:14 46:15 46:19 47:5 47:6 47:11 88:1
services [3] 4:12 12:5 46:14
session [1] 5:9
set [5] 1:25 5:22 68:8 106:8 106:13
sets [2] 76:6 88:3
settled [1] 8:6
seven [1] 47:8
several [5] 15:8 48:6 48:9 67:13 80:19
Severance [1] 3:24
severe [3] 22:21 37:24 45:21
severity [1] 31:25
sewed [1] 34:2
sewing [2] 31:24 32:19
Shaker [1] 3:13
sharing [1] 46:11
sheet [2] 50:12 72:17
shift [5] 49:22 49:24 50:5 50:22 50:25
short [1] 100:25
show [3] 6:13 18:18 30:15
showed [3] 25:19 45:20 55:4
sickle [2] 80:25 81:1
side [2] 65:8 69:4
Signature [1] 104:4
significance [1] 11:9
signs [7] 28:5 30:8 30:10 31:3 34:13 49:18 87:12
silk [1] 65:7
similar [1] 86:11
Simon [1] 70:24
simple [1] 36:1
simply [3] 35:25 39:7 74:8
single-family [1] 3:20
sit [2] 17:19 42:10
site [1] 65:8
skin [3] 30:13 31:14 52:13
Skiver [14] 2:8 3:18 5:3 17:16 17:20 22:1 22:11 23:4 30:19 67:16 67:18 93:17 100:20 104:2
Skylight [1] 2:4
slightly [1] 80:9
slip [1] 71:25
slips [3] 102:15 102:25 103:11
slow [1] 36:13
small [3] 55:5 60:11 62:21
Smith [4] 86:22 86:24 86:25 87:13
Snow [1] 4:4
SOB [1] 85:6
socially [1] 66:2
someone [1] 66:24
sometime [2] 91:20 98:5
somewhat [2] 77:4 91:16
somewhere [1] 91:19
soon [2] 82:16 88:11
sooner [1] 39:22
sorry [5] 5:3 7:11 14:9 30:19 87:17
sort [1] 100:16
source [2] 68:14 73:14
speak [3] 3:18 20:23 86:19
speaking [6] 17:17 36:6 39:11 39:15 69:25 93:22
specialist [2] 71:18 73:20
specializing [1] 45:3
specific [7] 30:11 61:8 70:11 92:23 95:8 100:13 102:14
specifically [9] 14:2 17:15 27:8 27:16 33:21 46:22 48:10 70:8 99:2
specificity [1] 25:6
specified [1] 106:11
spectrum [1] 27:23
speculations [2] 73:16 73:18
spell [2] 3:9 7:13
splinting [1] 48:25
spoke [11] 23:8 23:13 23:15 86:20 89:16 90:11 90:12 90:19 90:23 91:6 94:7
spread [1] 32:20
spring [1] 24:24
SS [1] 106:2
stable [1] 22:6
standard [2] 53:16 66:19
standpoint [1] 84:2
start [1] 88:10
state [8] 1:20 3:8 9:2 25:18 39:1 106:2 106:5 106:17
States [1] 85:6
stating [2] 56:3 69:12
status [14] 22:5 22:9 23:19 24:14 46:21 46:22 46:23 76:12 90:25 91:24 91:24 92:8 95:23 100:2
statute [1] 1:18
stenosis [4] 43:8 44:4 44:17 44:21
stenotypy [1] 106:8
STEPHEN [1] 2:8
sternal [1] 75:5
Steve [1] 7:24
still [11] 6:4 6:21 12:14 12:16 17:20 18:21 29:25 30:5 81:2 87:6 101:5
stipulations [1] 1:21
stitch [8] 65:7 66:14 67:7 67:22 68:11 73:21 74:2 98:8
Street [2] 2:5 2:19
structure [2] 32:18 33:2
structures [7] 32:21 33:6 33:9 34:19 35:2 35:21 62:22
struts [1] 33:10
study [5] 25:12 25:19 25:23 25:25 26:3
subject [6] 13:3 13:12 17:5 18:8 19:5 24:19
Subscribed [1] 105:20
subsequent [1] 53:21
subsequently [4] 18:25 23:16 65:20 96:5
subspecialties [1] 46:18
successful [3] 40:1 100:6 100:15
successfully [1] 101:15
such [1] 33:9
suffered [1] 103:2
suggest [2] 49:18 63:20
suggested [1] 36:14
suggesting [2] 29:23 60:13
suggestive [2] 34:13 36:23
suggests [1] 28:6
suit [1] 5:1
Suite [3] 1:23 2:4 2:14
summaries [1] 15:15
summarized [3] 18:9 58:2 86:10
summarizing [1] 85:5
summary [4] 18:24 19:2 59:9 73:7
Sunday [3] 20:15 47:18 94:8
superior [2] 2:14 25:20
support [1] 33:2
supporting [3] 32:18 33:9 34:1
supposed [3] 52:17 53:9 71:1
supposition [1] 40:3
surface [5] 25:7 25:21 35:3 35:23 88:5
surgeon [7] 38:18 39:2 42:1 89:18 90:20 92:17 93:4
surgeons [2] 47:1 89:11
surgery [62] 19:9 19:15 19:17 19:21 19:24 21:4 21:11 21:15 22:7 24:12 24:15 28:18 29:7 29:10 29:16 29:24 41:25 46:2 46:7 46:22 46:24 48:6 48:9 51:12 51:23 53:1 53:5 53:15 53:20 54:11 64:12 74:9 75:1 75:14 77:17 77:20 82:21 89:8 89:15 90:4 90:6 90:21 91:4 92:12 92:24 93:5 93:10 93:22 93:25 94:9 94:14 96:3 96:16 96:24 97:7 97:19 99:13 100:7 100:18 100:23 102:5 102:7
surgical [20] 19:7 21:20 37:19 38:8 38:12 38:19 39:12 39:20 40:14 41:6 41:17 41:21 90:23 91:15 92:22 95:22 96:10 96:15 97:10 101:4
survived [3] 20:1 20:6 100:17
suspected [2] 31:12 73:21
suspended [1] 12:22
suspicion [7] 27:18 31:10 40:6 44:16

50:7 51:6 58:7
suture [10] 32:23 32:24 52:13 52:17 60:13 62:24 63:18 65:7 66:24 67:1
sutures [1] 66:19
sweating [1] 56:4
sweats [11] 40:9 57:21 61:24 67:22 69:10 78:15 78:18 78:24 79:12 79:17 83:9
Switzer [2] 1:22 2:12
sworn [3] 3:3 105:20 106:7
SX [1] 85:14
symptomatic [3] 43:12 44:21 75:2
symptoms [12] 28:5 30:8 30:10 31:3 31:15 49:18 74:24 77:10 85:14 85:17 85:18 86:10
syndrome [4] 49:6 73:23 74:3 74:4
system [7] 32:9 34:8 38:4 69:12 96:9 96:13 96:14
systems [1] 39:17
systolic [2] 75:4 75:10

-T-

T-O-L-A-R [1] 7:14
table [1] 3:19
taking [3] 19:14 52:2 70:9
tamponade [1] 7:21
taught [1] 13:11
TE [1] 43:24
technician [1] 76:21
Tedrick [11] 21:20 22:24 23:13 23:16 23:18 23:20 23:22 24:5 90:11 92:6 97:11
TEE [4] 60:18 60:21 60:25 85:8
telephone [5] 14:25 15:23 15:25 16:3 55:25
telling [1] 89:13
tells [1] 6:5
temperature [8] 48:7 51:10 69:17 70:2 70:9 79:18 85:8 85:13
temperatures [1] 69:24
temporary [1] 26:19
tendineae [1] 34:5
term [3] 74:6 100:25 100:25
terms [1] 26:16
terrible [1] 99:5
test [1] 79:15
testify [1] 106:7
testimony [5] 9:13 9:18 9:20 106:8 106:9
testing [2] 43:18 76:24
tests [1] 35:15
text [1] 17:1
Textbook [1] 15:5
Thank [2] 73:3 93:3
therapy [2] 38:2 38:7
Thereupon [1] 10:2
thickening [1] 35:22
thinking [1] 36:18
thinning [1] 36:2
thought [2] 19:20 48:21
three [15] 4:19 16:12 16:13 16:17 28:14 45:20 47:12 47:13 47:16 47:22 53:13 55:1 55:10 81:11 83:21
threw [2] 18:25 82:19
thromboembolic [1] 44:3
through [5] 15:17 15:18 72:16 72:24 105:3
thyroid [1] 79:14
timely [1] 102:7
times [5] 4:18 4:19 6:17 28:11 103:7
timing [1] 41:25
tiredness [1] 69:10
tissues [1] 32:7
title [1] 14:1
today [1] 42:11
together [1] 24:9
Tolar [2] 7:10 7:12
tomorrow [1] 85:18
took [5] 18:6 18:11 18:23 20:16 64:13
TOSTI [20] 2:4 3:7 6:15 14:16 16:2 16:16 19:1 23:7 30:21 48:22 50:14 54:1 59:23 65:16 65:21 68:6 80:6 84:5 84:21 103:23
touched [1] 91:21
towards [2] 51:18 51:18
rower [1] 2:4
ract [2] 49:7 73:24
ragedy [1] 99:5
rait [2] 81:1 81:1
ranscribed [1] 106:9
ranscript [1] 105:2
ranscription [1] 106:9
ranscriptionist [1] 85:5
ransducer [1] 35:1
ransesophageal [36] 14:3 25:8 25:14 25:20 26:18 34:12 34:24 35:8 35:16 35:24 36:3 45:19 58:11 58:24 59:3 59:16 60:2 60:5 60:10 61:21 62:11 62:15 62:19 63:4 63:12 63:17 67:24 68:1 68:13 68:15 69:5 82:15 83:15 83:20 83:23 88:5
ransfer [1] 91:18
ransferred [1] 89:5
ransmitting [1] 17:21
ransthoracic [5] 14:4 34:14 35:6 35:11 35:16
reat [3] 37:20 45:5 45:24
reated [4] 37:11 37:12 39:23 101:15
reating [2] 9:11 103:9
reatment [4] 37:13 37:13 40:1 100:6
riage [2] 96:13 96:14
riaging [1] 96:9
rial [5] 7:3 9:13 9:14 9:18 9:20
ricuspid [3] 45:13 45:21 45:23
rue [2] 26:9 106:9
ruly [2] 40:4 102:21
ruth [3] 106:7 106:7 106:7
ry [1] 10:17
uberculosis [1] 79:11
Tuesday [4] 20:17 47:19 95:6 97:17
urn [1] 47:24
ruzcu [1] 45:1
wice [6] 4:25 5:5 62:2 68:4 68:7 90:24
wo [17] 6:10 11:19 20:18 23:17 37:12 46:14 47:9 47:11 55:6 55:11 63:5 76:8 86:20 90:22 92:3 98:12 98:18
two-page [1] 50:11
Tylenol [1] 85:12
type [6] 15:24 31:21 54:21 78:1 97:21 103:20
types [1] 26:15

-U-

ultimately [1] 101:7
unable [1] 38:1
under [5] 1:18 5:9 11:12 50:21 81:1
undergo [2] 43:23 45:9
undergone [1] 51:23
understand [5] 5:10 5:12 6:6 27:22 35:5
understood [1] 5:15
unit [3] 89:5 90:15 91:13
University [2] 24:25 25:24
unknown [6] 40:8 60:24 61:16 67:5 67:21 68:12
unless [1] 6:4
unstable [3] 22:10 22:16 33:1
up [12] 3:18 11:5 17:17 29:24 34:13 42:1 42:1 70:23 77:7 77:18 87:4 96:19
updates [1] 23:17
urgency [1] 90:21
urinalysis [1] 51:25
urinary [2] 49:7 73:23
urine [2] 55:8 55:8
using [1] 52:2
usual [1] 81:1
usually [5] 26:24 39:9 48:17 52:13 53:13
utility [2] 14:3 62:7

-V-

vague [1] 100:16
validate [1] 17:10
value [5] 25:7 25:22 34:19 35:10 62:20
valve [92] 26:21 26:23 26:24 27:4 27:11 27:17 27:24 28:3 28:9 28:17 28:17 28:23 28:25 29:3 29:7 29:9 29:13 29:19 29:21 29:25 31:4 31:8 31:22 31:24 32:12 32:14 32:16 32:18 32:25 32:25 33:2 33:8 33:8 33:10 33:13 33:25 34:2 34:14 35:21 36:1 37:3 37:7 37:10 38:10 38:13 38:24 39:5 39:6 39:8 39:10 39:12 39:14 39:19 39:22 40:7 40:13 41:5 41:7 41:21 44:23 45:9 45:12 45:23 51:11 51:23 56:23 58:8 58:13 60:23 61:14 61:15 61:25 67:6 67:15 69:2 73:4 77:16 77:20 80:24 81:5 81:7 81:9 82:10 83:24 88:2 89:9 98:10 99:7 99:8 101:13 101:14 102:5
ralves [2] 13:9 44:19
ralvular [13] 22:20 30:12 31:25 32:1 33:25 36:1 37:1 37:24 43:11 44:18 64:11 101:10 101:10
/alvuloplasty [3] 45:4 45:5 45:10
/arious [2] 29:4 78:19
/ary [1] 28:21
/ascular [1] 79:7
regetation [3] 33:22 34:21 35:25
regetations [7] 32:3 33:5 33:6 33:12 35:7 37:2 39:7
/enous [4] 52:12 52:16 52:22 66:20
/erbal [1] 47:20
/erbally [1] 5:18
/erify [1] 24:6
/ideo [1] 13:20
/igilance [2] 27:2 27:6
/isceral [1] 32:5
/isit [10] 42:23 43:4 69:14 78:14 79:19 79:22 82:22 83:8 84:8 88:24
/isualize [1] 34:18
/itae [5] 9:25 10:22 11:8 13:2 13:24
/ital [1] 87:12
/oice [2] 17:18 17:20
/s [1] 1:8

-W-

wait [4] 20:2 22:7 53:23 68:3
waived [1] 104:4
walks [1] 52:3
warfarin [1] 44:2
warrant [1] 36:16
warranted [2] 58:12 71:15
weakness [3] 58:1 73:2 74:20
week [3] 20:16 20:17 58:1
weekend [2] 48:5 94:5
weeks [3] 37:17 53:13 98:18
weight [17] 31:1 77:9 77:16 77:21 78:2 78:3 78:5 78:7 78:9 78:10 82:13 82:19 82:20 82:21 82:22 82:25 83:1
West [1] 2:5
WHEREOF [1] 106:13
white [4] 49:25 50:5 55:7 80:1
whole [1] 106:7
wife [5] 56:3 56:7 56:17 81:20 84:25
window [2] 100:5 101:3
wish [3] 5:24 102:16 102:19
within [11] 20:18 29:24 49:12 53:13 83:21 88:12 88:18 95:7 106:5 106:6 106:17
without [1] 106:11
witness [9] 5:2 5:5 9:10 9:10 10:6 17:19 41:10 58:20 106:13
wondering [2] 76:22 92:19
words [1] 51:15
worked [1] 11:20
workup [4] 51:17 51:20 54:24 54:25
worse [1] 43:16
worsen [3] 85:14 85:17 85:19
worsening [3] 33:25 34:5 89:6
wound [2] 49:8 49:8
wounds [1] 52:4
writing [1] 72:20
written [2] 13:20 18:24
wrongful [1] 7:18
wrote [2] 18:24 72:12

-X-

)r-ray [6] 51:21 55:4 79:2 79:6 79:8 79:9

-Y-

year [5] 11:23 28:12 28:14 29:10 29:24
)rears [1] 101:24
'Yitzchak [1] 57:4

-Z-

zero [1] 84:9
zip [1] 3:15

AFFIDAVIT

I have read the foregoing transcript from page 1 through 104 anh note the following corrections:

PAGE	LINE	REQUESTED CHANGE
36	2	change "thinning" to thickening
39	10	change "a" to native
43	24	change "TE" to 2D
44	1	change "recontrol" to rate contr
45	1	Change "Emin" to MURat
56	22/23	admitted to (to the hospital) to rule out prosthetic valve endocard

Keith Kruithoff M.D.

KEITH KRUITHOFF, M.D.

Subscribed and sworn to before me this 5th day of Sept, 2000.

Notary Public

My commission ~~expires~~ No exp date.