STATE OF OHIO)
) SS.
COUNTY OF MONTGOMERY)

COURT OF COMMON PLEAS

EDNA CLARK, etc., :

Plaintiffs, :

vs. : Case No. 878-2602
Judge Meagher

SOUTHVIEW HEALTH AND FAMILY CENTER, ET AL., :

Defendants. :

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Deposition of BRUCE D. JANIAK, M.D., a Witness herein, called by the Plaintiffs as if upon Cross Examination under the Ohio Rules of Civil Procedure, taken before me, the undersigned, Megan Gallagher, a Notary Public in and for the State of Ohio, taken pursuant to Notice and stipulations of Counsel as hereinafter set forth, at The Toledo Hospital Emergency Center, 2142 North Cove Boulevard, Toledo, Ohio, on Friday, June 2, 1989, commencing at 11:10 a.m.

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APPEARANCES:

On behalf of the Plaintiffs:

ROBER G. TURRELL & ASSOCIATES
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On behalf of the Defendant Southview:

MILLER, FINNEY & CLARK
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On behalf of remaining Defendants:

JENKS, SURDYK & COWDREY, L.P.A.
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MS. STOCKLIN: Dr. Janiak, we've met; my name is Valerie Stocklin and I represent the family of Kimberly Sierra Sparks in this case.

We're here pursuant to the Ohio Rules of Civil Procedure through agreement of counsel, as well as Notice to you. Could you swear the witness, please.

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BRUCE D. JANIAK, M.D.,

a Witness herein, being first duly sworn, was deposed and testified as follows:

CROSS EXAMINATION

BY MS. STOCKLIN:

Q. Doctor, would you please state your full name and address?

A. Bruce David Janiak; would you like my home or professional address?

Q. Give me both.

A. Home is 30267 Hickory Hill Drive, Perrysburg, Ohio 43551; and the hospital is 2142 North Cove, C-o-v-e-, Boulevard, Toledo, 43606.

Q. And your age, Doctor?

A. Forty-six.

Q. I was handed just previous to beginning here at copy of your curriculum vitae which may speed things up a little bit as far as background.

It indicates here that in addition to a rotating internship at Cincinnati General Hospital you also had a residency in emergency medicine; is that correct?

A. That's right.

Q. And that was two years?
A. Yes.
Q. Have you taken residencies in any other specialties?
A. I have not.
Q. After that residency then you went into some military with the Navy?
A. Correct.
Q. And it appears that you have been here as director of the emergency hospital at Toledo Hospital ever since?
A. Since --
Q. Since your release from the Navy?
A. That's right.
Q. Doctor, are you a member of a group of emergency practitioners?
A. That's correct.
Q. Looking at the last page of --

MS. STOCKLIN: Well, why don't we stop and mark this and attach it.

(Plaintiff's Exhibit A was marked by the Notary.)

Q. Doctor, for identification purposes this

curriculum vitae which I've been provided has been marked as Plaintiff's Exhibit A at this deposition.

Would you identify that for me, please, and tell me if it's your present current curriculum vitae?

A. Right, it is the present one with only one minor addition.

Q. Why don't you tell me about the addition?

A. The child whose picture you see behind you on the wall.

Okay; so it's an addition regarding your personal life?

A. That's right.

Q. Looking at the last page of your curriculum vitae, Doctor, it appears to be several affiliations; partner in Emergency Management Consultants, president of Professional Emergency Services, Inc. and president of EMB Professionals, Inc.

A. Correct.

Q. Would you explain all that for me, what those groups are?

A. Well, the first one, partner in Emergency Management Consultants was a consulting firm that actually has been dissolved. As you can see, it says 1988 at the time. It was a -- my partner in that was Michael Irvin who is director of the Miami Valley Hospital in Dayton and he and I had done consultations for hospitals with regard to their emergency services, and both of us have gotten too busy and so we dissolved that activity.

Q. Sure.

Professional Emergency Services is the professional corporation that has the contract to provide services in the emergency department at The Toledo Hospital and I am president of that group.

Q. And that is current?

A. That is current. President of EMB, which is Emergency Medicine Billing, EMB Professionals is also current; that is a billing company which is headquartered in the Dayton, Ohio area.

Q. And are you one of the owners of that company?

A. Yes, I am.

Q. Does that company do billing for emergency services all over the State?

A. Yes; we have several contracts. There are some areas of the State where we don't have activity, but we do mainly in the Toledo and Dayton area.

Q. How many owners are there?

A. Three.

Q. Are any of the owners Dayton people?

A. Yes; two of them.

Q. Who are they?

A. Michael Irvin owns part of it and Marty Gillespie owns part of it.

Q. Is Marty Gillespie a physician?

A. No; she is the manager.

Q. How many shareholders or owners are there in Professional Emergency Services, Inc.?

A. One; I'm the sole owner.

Q. All right; and is that the sole corporation that services this hospital as far as emergency service with physicians?

A. That's right.

Q. How many physicians do you employ, Doctor?

A. Six full-time emergency physicians and a variable number of part-time pediatricians. Currently it's about 13 or 14.

Q. Six full-time emergency physicians plus some pediatricians?

A. That's correct.

Q. Are you the one, Doctor, who determines the requirements for the emergency room services that you hire?

A. The prerequisites for hiring?

Q. Uh-huh.

A. Yes, but in conjunction with the medical staff. I would have to have those approved by the appropriate medical staff committee.

Q. Is one of those requirements that the emergency room physician be board certified?

A. It is not.

Q. It is not?

A. It is not.

Q. Tell me a little bit about what the requirements are.

A. Requirements for any new hire would be board certification but it would not be required

to be board certified to maintain the position. The reason for that is that back in the early 70s when I started board certification was not available and most physicians who have performed adequately but not board certified have been maintained.

Q. That's a grandfather clause, more or less?

A. With our department; yes.

Q. Is there a requirement on those particular physicians who are, so to speak, grandfathered in that they do attempt the board certification at some point?

A. Yes, there is.

Q. And that's within a couple of years or three years or something like that?

A. The original rule was that it had to be done by the first of June, 1988 and all of the physicians have either completed boards or have begun to take the boards by that time.

Other requirements for new hire would be obviously the completion of an emergency medicine residency program satisfactorily. Otherwise, the requirements would be those rather vague and

nebulous; good performer, nice person, high, upstanding moral character, et cetera, et cetera.

Q. Are you the one then who makes the initial decision as to whether to hire a position?

A. Yes.

Q. And then do you go to the hospital board or something with it?

A. No; I make the initial decision. Then I discuss the person with each member of the group and if there's unanimity for a particular candidate then that person would make an application to the medical staff.

And if they pass the medical staff process then they would be hired.

Q. How many beds is your emergency room here?

A. Twenty-four. I hesitate because we just finished construction; I had to remember how many are out there.

Q. Is this a level I trauma center?

A. We have no trauma center designation officially in the State of Ohio, so if you would use the level I category from other States I would say no, because we do not have a trauma surgeon on

the premises 24 hours a day; we have to be a level II, if that's what you mean by levels.

Once again, in Ohio there is no official statements by any kind of agency within the government about this.

Q. Isn't there a national one?

A. There are some national guidelines that are put out both by the American College of Surgeons and the American College of Emergency Physicians. Those are suggested guidelines and categorizations

The AMA committee on trauma, I think, also has endorsed those but nothing in our State that we have elected to, I guess, deal with. Except, this year the legislature is looking at the issue. Whether or not it will come to pass I have no idea.

Q. Do you have care flight program here?

A. Not at this hospital. There is one in Toledo.

Q. Which hospital?

A. St. Vincent's Hospital.

Q. Beyond your residency, Doctor, have you had

any further training of any sort in any kind of medicine?

A. Other than attending courses; no

Q. And those having to do with emergency medicine?

A. Right; all of them.

Q. What year were you board certified?

A. 1980.

Q. I note, Doctor, on the last page of your curriculum vitae several publications that you have either done alone or in conjunction with someone else; is that correct?

A. That's right.

Q. And there seems -- let's ~~see~~ — ~~eight~~ of those. Are those your total publications since you've been a physician?

A Right.

Q. Would any of those publications, Doctor, contain any information relevant to the case we're here on today, in your opinion?

A. In my opinion they would not; most of the articles that I have done have dealt with management activities and not with clinical

activities.

There are two articles that are clinical; both of them have been done in conjunction with residents who did a lot of leg work and I reviewed the article and made suggestions and changes.

Q. Which two articles deal with clinical?

A. The one that says Spontaneous Rupture of the Sigmoid Colon in a patient with Ehlers-Danlos syndrome; that would be a colon case and intestine, certainly not a chest problem

And Interposed Abdominal Compression and CPR, Its Effect on Parameters of Coronary Profusion in Human Subjects was a research project that almost all of us were involved in here and dealt with a new method of CPR and it obviously has not been terribly successful since it has not become the standard way of doing CPR.

Q. What is the -- is this a book, What To Do Until the Real Doctor Comes?

A. No; that's a title of an article I wrote while I was a resident and it -- well, I'm glad you're smiling because when I wrote that article there always used to be a joke in

emergency medicine that we are not real doctors. We were putting ourselves on.

And when I wrote the article, since everyone said that about emergency physicians, I thought I would put my tongue in my cheek and say that That's when I learned a great many people don't understand humor in any form and get angry about it.

Q. That's interesting, Doctor, because it brings me to a point.

What do you see as the role of the emergency room physician when a patient comes in, you know, in serious condition, as far as consulting or calling in a specialist or another physician? How do you determine that role?

A. Well, it's an easy question to ask and a hard question to answer since there are a number of variables.

One of the variables is the experience and training of the emergency physician with specific reference to that specific problem. All of us are not as good at everything as we are at some things.

The other variable is the kind of backup that emergency physician might have and the timeliness of that backup.

And then a third variable is the facilities available in the entire building. For instance, if I had a great deal of experience with trauma cases and heard that a patient was coming in that would almost certainly need surgery and knew that surgeons were not immediately available, in that case, even if I were totally capable of handling the initial resuscitation myself, it would be prudent to call a surgeon in even before the patient got there so that the patient wouldn't be harmed by the time delay.

On the other hand, if I had surgeons available it might be prudent to not call them immediately but to start managing the case by myself until such point as I thought it was reasonable to get the surgeon involved.

Generally, the emergency physician's role is the assessment of a problem, the stabilization of the problem and the determination as to whether the patient is a candidate for discharge to go

home, is a candidate for admission.

And then a branch of that is admission to what service and a branch of that is how fast do we have to move with this particular patient's problem.

Q. Let's assume for a minute that you find it prudent as an emergency room physician to call in a specialist, whether it's a surgeon or infectious disease or whatever it is.

How do you see that physician's role once he has been called in?

A. Once a specialist has been called in to manage a case the majority of the care and most of the time all of the care and direction for that care will be taken over by the specialist.

The only exceptions would be when, for instance, a specialist was called to care for severe facial laceration in a patient that also had a minor leg laceration there might be two physicians taking care of that patient at once to speed up the care of the patient.

But in general, for instance, when you call a surgeon to see a patient, for example for a case

of possible appendicitis, once the surgeon arrives that care is transferred to the surgeon and that's the last the emergency physician will deal with the case.

Q. Did you form Professional Services, Inc. in 1974 when you began here?

A. Yes, I did.

Q. How much time, Doctor, do you spend in the -- how much of your professional time do you spend in the clinical practice of emergency medicine?

A. That's a question that I put to my own mind quite frequently. My guess is that I work about half the time actually seeing patients and then another 30, 40 percent of the time on activities that are related to that, like quality assurance activities, chart review, making sure that the equipment is appropriate, reviewing problems that occur in the department with clinical care.

The other 10 to 15 percent of the time would be spent on budgetary activities and totally non-clinically related materials.

Q. Is there teaching involved in your practice?

A. Yes; we have residents in emergency medicine with us at all times.

Q. So all of your clinical practice then involves teaching at the same time?

A. With the exception of Tuesday mornings when our residents are not around; they're on rounds. And on Mondays they go to a journal club; and if I'm working then, I have no residents.

But with those exceptions it is not -- there is no time when you don't have residents with you.

Q. Does your teaching also involved lectures, lecturing to students?

A. Yes. I lecture three or four times a year at our hospital and also do some national talks.

Q. So they're individual teaching settings, they're not a course for six months or something like that?

A. That's correct. It would be a narrowly focused topic lectures I would give.

Q. Have you reviewed medical negligence cases in the past, Doctor?

A. Yes, I have.

Q. Can you give me an estimate of how many you have reviewed?

A. Well, since 1974 I would guess I've probably reviewed somewhere around fifty or sixty cases.

Q. Have you ever reviewed a case for the Jenks, Surdyk and Cowdrey firm before?

A. Yes, I have.

Q. How many times have you reviewed a case for them?

A. In looking that up this would be the third case.

Q. How many cases would you say, Doctor, you have reviewed in the last year, medical negligence cases?

A. Probably five or six.

Q. Do you review cases for Plaintiff as well?

A. Yes, I do.

(ive me an estimate?

A. Probably pretty close to 80-20 defense client.

Q. How recently have you reviewed another case

for the Jenks firm?
A. Currently.
Q. So you're currently involved in more than one case for them?
A. Yes.
Q. All three?
A No; the first case or the third case has been quite a while ago now.
Q. Did that case go to trial?
A. No.
Q. Can you tell me something about the facts of that case?
A. Yes; it was a young lady who was in an auto accident and suffered a transected aorta. She was seen in a small hospital and then transferred to, I believe, the Miami Valley Hospital, by helicopter; ended up paralyzed.
Q. Were you deposed in that case?
A I remember something fairly official; I think it was an arbitration panel, I think it was
Q. It did go to arbitration?
A I think it went to arbitration
Q. Do you remember the name of the case?

A. No, I cannot; I've been trying to; I can't remember that.

Q. Do you remember approximately when it went to arbitration?

A. About a year and a half ago, I think. It seems to me that was in Springfield, Ohio Court.

Q. Can you tell me a little bit about the other case you are currently reviewing for the Jenks firm?

A. This is a case of a black gentleman who was driving his car and ran into a pole and suffered a chest injury. You may be familiar with this case, you may not. And he subsequently died.

Q. Is it your intention, Dr. Janiak, to offer expert testimony in that case as well as this case at trial?

A. Yes.

(Off the record.)

Q. Did you say yes?

A. Yes, I did.

Q. Doctor, approximately how many times have you had your deposition taken when you have

reviewed a case as an expert witness?

A. No one has ever asked me that question before; I don't know why. That's good; you're doing your job.

The answer -- I don't have the exact answer, but I would guess I have given probably fifteen depositions.

Q. Do you recall ever giving a deposition on behalf of the Plaintiff?

A. Yes.

Q. About how many times?

A. I went to trail once for a Plaintiff so I must have given a deposition for that one. And then there was another one just a couple of weeks ago so I would say there were three.

Q. How much of your time do you spend, Doctor, in reviewing cases in litigation or getting ready for litigation?

A. It's got to be around 3 to 5 percent.

Q. Can you give me something in -- estimate for me hours per month that you may spend doing that?

A. I can't imagine it's more than 3 or 4 hours

a month because I rarely do it at the hospital. I do it instead of reading a murder mystery at night before I go to bed, the depositions sit on my bedstand.

Q. Have your services as an expert witness ever resulted in testimony at trial?

A. Yes, they have.

Q. About how many times?

A. Three.

Q. Have any of those three trials taken place in Montgomery County?

A. No they have not.

Q. What counties?

A. Well, I think one was in Broward County in Miami; another one was in Green Bay, Wisconsin. I have no idea of the name of the county. And the third one was in Defiance County in Ohio; that would be just west of here.

Q. In your role as an expert witness on behalf of the Defendant, Doctor, have you ever advised settlement in a case?

A. Yes, I have.

Q. Have you, yourself, ever been sued for

medical negligence or malpractice?

A. Technically the answer is no, not for something I did personally; although, as president of the corporation, the corporation would get named if one of the other physicians had a problem, and that has happened a couple of times.

And interestingly enough, one of my partners just got a notice for a case that he never saw and I did. And I can't explain why the legal system did that to him.

Q. Was that your patient?

A. It was my patient; he wasn't even around. He wasn't even in the country, I think, at the time.

Q. Doctor, have you ever served as an expert witness on a case in any involving an asthma condition, besides this one?

A. Let me think for a moment. No, I can't remember, I can't remember any asthma cases.

Q. Do you recall how you were first contacted with regard to this case?

A. No, I have no direct knowledge of how I was contacted, but I presume it was a phone call.

Q. Do you remember who made the phone call?
A. No, I do not.
Q. Or who first contacted you?
A. No, I do not.
Q. Do you remember when you were first contacted?
A. I believe it was early last year, 1988.
Q. And when you were first contacted, Doctor, what were you asked to do?
A. I would have been asked to review materials on behalf of an emergency physician in the case in which there was alleged malpractice.
Q. And were you then initially provided some materials to review?
A. Yes.
Q. What were you provided?
A. I don't have a chronological listing of what came first and what came second, but I have written down the materials that I reviewed.
Q. Okay; that'll help.
A. And so the first one was a co-oximeter operator's manual. That I just got; that's why I'm saying they're not in order.

Deposition of Donald Burns, D.O.; Russel Field, D.O.; Russ Zumwalt, James Gadek, Bruce Rank and James Muchee. And then a Complaint and then the final document was the emergency records from Southview Hospital.

Q. The emergency records of August 25th, 1986?

A Correct

Q. Obviously you didn't receive all of these depositions initially because they hadn't been taken.

A. That's correct.

Q. And you said you just received the co-oximiter manual?

A Right

Q. Do you recall initially receiving the emergency room records from Southview and the Complaint?

A. Those would be, obviously, the first things that would come through.

Q. When you -- and I assume you did review those two things when they came to you?

A. Yes.

Q. When they came to you, Doctor, do you

remember if there was any accompanying correspondence?

A. Yes, there was a letter that says enclosed are the records.

Q. Did you retain the letter?

A. I'd have to go back and look through the files. Some are here, some are home.

That letter I don't have; I have another one, but not that one.

Q. Do you recall whether the initial letter you received, Doctor, contained any recitation of the facts in this case?

A. I don't recall, but I'm pretty sure I've never seen a summary of the facts other than what the materials were that were given.

Q. After your initial review, Doctor, did you provide to counsel in this case any written report or letter reciting your opinions in the case?

A. No, I've never given a report.

Q. Have you reviewed any X-rays in this case?

A. No.

Q. You've never seen any X-rays?

A. I've never seen any X-rays.

Q. I take it you have not reviewed the deposition of Mrs. Clark, Kim Sierra's mother?

A. That's correct

Q. Have you reviewed the depositions of any nurses?

A. I don't believe so.

Q. Have you reviewed the deposition of Dr. Fisch?

A. No, I have not. Let me say I may have; I may have. I'm not sure because it seems to me that he may have been -- and you can correct me if I'm wrong -- a physician who was also a Ph.D. in something?

Q. Uh-huh; I think that's correct.

A. Okay.

Q. Dr. Fisch is serving as an expert witness in emergency medicine on behalf of Plaintiff in this case.

A. Right; that's the reason I'm hesitating. I can't -- I looked and I can't find that deposition but somehow that's familiar to me. I don't know why it would be familiar to me if I had not seen it.

Q. There's no reason then why you would particularly have not reviewed that deposition?
A. That's correct.
Q. Have you reviewed an autopsy report in this case?
A. Yes, I have.
Q. Have you reviewed any other hospital records of either ER visits or admissions of Kim Sierra, other than the one on the date of her death?
A No I don't remember seeing anything else, but let me look through again, just to be sure. I don't think I have anything other than that date of death admission. No.
Q. You've never seen any records, say, from New Jersey or from Middletown, Ohio?
A. No; that's not familiar to me.
Q. Have you reviewed any physicians' office records? For instance, Dr. Field's office records.
Q. No; but I believe in his deposition he referenced those; I remember seeing them.
Q How about Dr Burns's office records?

A No; some comment though

Q. Have you reviewed at any time, Dr. Janiak, any written policies or procedures or protocols of Southview Hospital?

A No, I have not

Q Is there an emergency room manual containing protocols at Toledo Hospital?

A Clinical protocols?

Q Uh-huh.

A No.

Q None exists?

A. None exists.

Q. Are there any written protocols, to your knowledge, Doctor, at Toledo Hospital regarding blood pressure monitoring, recording of vital signs or anything like that?

A. No. There is a request, written request from the emergency physicians that gives guidelines for taking of vital signs for our patients. So it's not a protocol but it's a document that was generate from an emergency physicians' meeting which gave direction to the nurses about how we would like vital signs taken.

Q. And is that provided to the nurses?
A. Yes, through the director of emergency nursing, then, that policy is passed down to the nurses and becomes departmental policy, but it isn't in a policy book.
Q. Okay; is that the way departmental policy, as far as clinical care, is developed?
A. That's right.
Q. And that's always the case?
A. That's always the case.
Q. Has there been any procedure developed in that fashion regarding technical procedures done in the emergency room?
A. Are you referring to what may or may not be done in the department, or how they are done?
Q. Both.
A. There are documents that state what kinds of things can and can't be done in the emergency department.
There are no documents that state how -- if they are going to be done how they should be one or describing how they should be done.
Q. Uh-huh. In this hospital do nurses do

central venous pressures?

A. Yes, they record central venous pressures; that's right.

Q. Is there any protocol or direction for the nurses in a nursing manual as to that sort of thing, central venous pressures, recording blood pressures?

A. I would think there would be in the nursing manual that would tell them; probably a review of central venous pressure lines and how to set them up and how to read them. I would think

Q. And the nurses can in fact set up central venous pressure lines?

A. Oh, yes.

Q. And are your emergency room nurses here trained and capable of doing that?

A. With the exception of people who are just hired and orienting, yes, they all are.

Q. Is that a requirement for them here?

A. I don't think it's a written requirement. I think that it just happens often enough so that the nurses are trained in how to do that.

Q. Are there any technical skills, to your

knowledge, Doctor that the nurses in this emergency room are required to meet? In other words, before they start working here full-time are they required to meet certain skill levels on technical procedures?

A. No, because I think in order to evaluate skill levels you have to observe performance. So prior to hiring, I think, the criteria would be softer than actually passing some kind of evaluation that determined performance levels or skill activity.

Q. So that's observed then by the physicians and the director of nursing, et cetera, once the nurse is here?

A. That's right.

Q. And if there's a problem, what happens?

A. If there's a problem then there's a counseling session that takes place, a retraining session that takes place and a reevaluation session that takes place. And if there's still a problem, then the nurse is advised to seek activity elsewhere.

Q. Doctor, do you know personally any of the

parties to this lawsuit?

A. No, I do not.

Q. You don't know Dr. Muchee, for instance?

A. No, I don't.

Q. Do you know personally, Doctor, any of the expert witnesses serving in this case?

A. Dr. Fisch is one of the expert witnesses, you told me?

Q. Uh-huh, and Dr. Gadek and Dr. Zumwalt.

A. No, I don't know any of them.

Q. Were you provided at any time during your analysis of this case over the last few months, Doctor, any medical literature to review at all?

A. None whatsoever.

Q. Did you in fact refer to any medical literature during your review of this case?

A. Yes, I did.

Q. Can you tell me what you referred to?

A. I looked up one article on complications of pulmonary resuscitation.

Q. What is the name of the article, please?

A. That's the name of the article.

Q. Would it be possible for me to a copy of

that?

A. Certainly; I'll have it copied for you right now.

Q. That'd be great.

A. Hold on just a second.

Q. Now, other than the article you've just referenced that's being copied did you refer to any other medical literature whatsoever?

A. No; that was it.

Q. You went looking for this article?

A. Yes, I did.

Q. Why did you do that?

A. Well, it was my feeling that mediastinal hemorrhage is very common with -- as a secondary event any time you try to resuscitate a patient, and I wanted to be sure the literature backed me up on my feeling.

Q. And is it your opinion the literature did back you up?

A. Yes; it did.

Q. And what significance, Doctor, does that have to any opinions you may have formed in this case?

A. Well, since it met with what I already thought it really has very minor significance; it was just, I guess, a minor reassurance.

Q. Was that the only thing about that particular article that you were specifically interested in?

A. That was it; nothing else.

Q. I take it then, Doctor, your intention is to testify in this case that you have formed opinions regarding Kim Sierra's treatment in the emergency room at Southview Hospital; is that correct?

A. That's correct.

Q. Do you want to tell me what those opinions are?

A. Well, they include but may not be limited to, since we're not done with the case, the fact that the emergency physicians and the nurses and the hospital and the consultant all performed well within the standard of care in managing this case.

Q. Anything else?

A. Well, I don't think any of the things that they did in any way related to the fact that she

eventually died.

(Off the record.)

Q. Just to identify this, Doctor, the article that you did reference in your review is entitled Complications of Cardiac Resuscitation; correct?

A. Correct.

Q. And this article was found in Chest; is it a digest or periodical?

A Right; it's a journal of chest diseases.

Q And it was found in the August, 1987 publication?

A. Correct.

Q. Doctor, are you aware that this patient drove herself in to Southview emergency room the morning of August 25th, 1986?

A. I guess I wasn't sure that she drove, but I do remember a nurse's note that says she presented with her child in her arms, so I assume she somehow managed her own way there.

Q. Does that surprise you at all?

A. No, not particularly.

Q I'd like you to describe for me if you would, Doctor, your understanding from yowr rewiew

of the records as to how this patient presented to the emergency room that morning.

A. Well, she presented, as I said before, with a child in her arms, appearing quite ill, looking to be in severe respiratory distress. And I guess that's all I have to say about it.

Q. So basically that sums it for you, that she presented in severe respiratory distress.

Doctor, does your experience include the treatment of patients undergoing asthmatic attacks in this emergency room?

A. Yes.

Q. Can you estimate for me about how many patients per year or per month undergoing asthma attacks you see in this emergency room?

A. Oh, a very gross estimate would be between five and ten a day.

Q. What is status asthmaticus?

A. Well, simply put it's a state of shortness of breath caused by spasm in the airway, in the tubes in the lungs, which is consistent; it does not stop. And I've forgotten the exact definition but there's a time definition of how long it

lasts

And it also implies to the physician that it is not responsive to at least simply therapy.

Q. What do you mean by simple therapy?

A. Simple therapy would be the medications the patient is usually on at home. So I guess to rephrase that, an asthmatic attack which is not relieved by home medications usually. Although in a new asthmatic that's never been on medications if it's persistent activity that doesn't stop it could be status asthmaticus.

It does not imply that hospital therapy is functional or doesn't work or does work; that definition is not related to that.

Q. So under your definition that you have just related to me, Kim Sierra was suffering status asthmaticus; correct, on that morning?

A. Right.

Q. Doctor, from your review of these records and your understanding of Kim Sierra's presentation that morning what, in your opinion, would be the important things to be done initially?

A. Well, the initial activity would have to have been a very brief history and physical examination, if she could talk. If she couldn't talk then the history could be deleted. But one would have to at least listen to the chest for a second to determine whether or not she indeed had mirror sounds and what their characteristics might be since you could use that for a baseline for improvement or worsening.

That would be have to be followed almost simultaneously by the beginning of intravenous access and the treatment with medications to reverse the asthmatic problem.

The medications would have to be given parenterally. By parenterally I mean other than orally.

Q. Why is that?

A. Because they act faster, at least for asthma they act faster if you give them by injection.

Q. How about if they were given through an endotrach tube or a nasal tube?

A. That would be fine.

Q. That would be as good as IV?

A. Well, I think the literature is variable on that. There would certainly be no criticisms on my part for giving it via an endotrachial tube. The absorption is extremely rapid for drugs like epinephrine and it is one of the recommended ways to give it.

I think there can be demonstrated minor differences between for instance IV sites and via the endotracheal tube but I don't think any of those differences have been shown to be significant one way or another.

Q. So it wouldn't have bothered you if -- in this case if the medications, including epinephrine, were being administered through a nasal trach or an endotracheal tube?

A. Unless that were the only way all the medications were given.

Q. What do you mean by that?

A. What I mean is if the patient came in and all medications were given via the endotrachial tube and no other sites were accessed or attempted, then I would have a problem.

Q. Why?

A. Well, because as I said, the literature is variable and if I had a patient that was not responding to one route of giving medication I would want to try another route.

Also the volume amounts of some of the medications would be -- especially in giving repeated doses -- might be too high for via endotrachial tube.

Q. So in your opinion it was very important to start an IV as soon as possible in this patient?

A. Yes.

Q. What kind of IV?

A. Are you asking the type of fluid or the tubing or the needle sites?

Q. Needle sites and tubing.

A. It doesn't make any difference to me as long as it's sterile.

Q. So it could have been in the wrist or hand or --

A. Oh, sure.

Q. That would have been fine?

A Right.
Q And would the sole purpose of that IV have been to administer medication?
A. That's right.
Q. Doctor, you felt it would be important to take a history, if possible, do at least a cursory physical to try to find out about the chest sounds, at the minimum; correct?
A. Correct.
Q And get an IV started somewhere?
A. Right.
Q. Anything else that would have been important in your opinion to do initially with this patient?
A. Well, I think you left out giving some medication; starting that and giving medication?
A. What medications?
A. Well, that's variable, too. It would be perfectly reasonable to use epinephrine for a patient like this. It would be reasonable even to use Tributaline for a patient like this. It would certainly be within the standard to simultaneously give Aminophylline, although that

would usually be IV; that's one reason I said not an endotrachial tube because there's a higher volur

ose would be the medications you'd start with

would also be reasonable to give aerosol treatment to a patient like this assuming that could be tolerated.

Q. When you say it would be reasonable to give ph hylline, et cetera, are any of those medications such that in your opinion it would have been unreasonable not to give them?

A. Yes. In a patient like this it would be unreasonable to not give either the epinephrine or the Tributaline.

Q. One or the other?

A. One or the other.

Q. How about the Aminophylline?

A. That would require judgment based on the response to the first medications, which would usually be the epinephrine or the Tributaline.

Q. Let's assume you didn't get much response with the epinephrine.

Q. Then it would be very appropriate to simultaneously begin the Aminophylline.

Q. Would it be unreasonable to not begin the Aminophylline under those circumstances?

A. Not in all cases. There could be a time when it would be a consideration that the patient had enough Aminophylline already or enough Theophylline product and you could be concerned about toxicity; that would be part of the history.

It also could be that you, in certain cases you would feel that you'd get a better response if you used an inhaled mist of a bronchodilator agent, Aminophylline-like agent, Alupent or something like that There's many, many different types.

Q. All right; as I said, you've listed about four things now that in your opinion were important to be done initially.

Is there anything else?

A. Not initially; no.

Q. Given your review of this chart did it become rather quickly apparent to you that it was important to get this patient some respiratory

assistance?

A. It looked -- yes, it looked as if she were not responding very well to the medication continued to be short of breath and further intervention in her airway was appropriate.

Q. And in your opinion what kind of further intervention?

A. Well, the most likely course I think the majority of physicians would take would be to intubate the patient.

Q. Would it in your opinion, Doctor, at some point in time have become a deviation from appropriate standards of care not to intubate this patient?

A. Yes, it would be my opinion that if the patient had not been intubated that would have been a deviation.

Q. At what point in time would it have been a deviation not to intubate this patient?

A. Well, sometime probably within the first hour, hour and a half. But the exact time is a judgment call based on the patient's -- the way the patient looks, the vital signs and responses

to the medications.

Q. In your opinion, Doctor, was a subclavian catheter necessary for this patient?

A. Any patient that is not getting better and seems to be in extremis, like this one was, a central venous line is indicated. Whether that is a subclavian or internal jugular is not relevant.

Q. Why is a central venous line indicated?

A. It is imperative that there is a more secure access to the venous system to give medication. We know that the venous lines that are called peripheral lines, that is lines that are in the arms and legs, can be bumped and dislodged and not function appropriately.

So for reasons of having more secure line, a central venous line is more appropriate.

The second reason is that the central venous system is closer to the heart and the lungs than the peripheral venous system, so medications given centrally will reach their site of action a little bit faster than medications given peripherally because of the distance and also there'll be a little bit less dilution so the

larger amount, relatively speaking, will arrive at the site of action.

Q. So in -- if I'm understanding correctly, and correct me if I'm wrong, Doctor -- if I'm understanding correctly, the reason in your opinion a central venous line was indicated is to provide medications at the most optimal, in the most optimal way?

A. Correct; that's a simple way of putting it.

Q. Okay. Is there any other reason why a central venous line is indicated in this patient?

A. No I can't think of any other kind of reason.

Q. You indicated you can put it in the jugular or you can put it subclavian?

A. You put in a right or a left subclavian line; yes.

Q. Is there any other way to get a central venous line in?

A. Well, you could use a femoral line in the groin and thread the catheter up through the abdomen and into the chest. That could be done, but it s certainly not an accepted way of doing it

in patien like this.

Q. Ar there risks, Doctor, to su lavian lines?

A. Ye there are.

Q. Wh : are the risks?

A. Tw major risks are puncturing the ing causing a pneumothorax; and puncturin a bloo vessel, c sing hemorrhage.

Th re's a minor risk of infect n but certainly is not a consideration in a acute situation

Q. In your opinion, Doctor, was t e value of the subcl vian line -- did that make t worth taking th risks with this particular patient

A Th absolutely no questio that it was worth it. As matter of fact, I think it wo ld have been less than the standard to not do th t.

Q. Doctor, do you know what kind of X-ray were taken in this case and how many?

A. I frankly do not remember. I'm sure there are X-rays of the chest; I remember seeing X-ray reports that related to placement of various tubes, but not what they were in number.

Q. Do you know whether they were PA or lateral?

A. I can't remember that.

Q Doctor did this patient in your opinion have tension pneumothorax?

A. I don't remember seeing any evidence for a tension thorax.

Q In your opinion did she have pneumothorax?

A Yes, she did.

Q What is pneumothorax?

A Pneumothorax is air within the chest cavity that is external to the surface of the lung. I guess that's the best way to put it.

Q. And what is tension pneumothorax?

A Tension pneumothorax refers to the same entity but in the case of tension there's increasing pressure with each breath in that space so that the ability of the lung to stay expanded is lost; external pressure collapses the lung. That's opposed to a passive collapse of the lung where it just, I guess, collapses like a balloon that one lets air out of.

Q. So if tension pneumothorax is present then

has the lung already collapsed or is it in the process of being compressed or --

A. Either one. When you first get a tension thorax the first second of it there is a small amount of air external to the lung and each breath the pressure in the space external to the lung increases so there's a constant pressure within the lung and within a variable amount of time, whether it's seconds or minutes, there becomes a complete collapse of the lung.

And then after that happens the lung starts to be pushed over to the opposite side of the chest.

Q. And then you get a midline shift?

A. You get a midline shift and by that time the patient is in serious trouble, if not dead.

Q. And you indicated you saw no evidence in the record that this patient had tension pneumothorax?

A. Correct.

Q. You indicated that one of the causes of -- you're going to have to help me here -- one of the risks of a subclavian line is that you can

puncture the lung?
A. Correct.
Q. And you can cause a pneumothorax or a tension pneumothorax?
A. You could cause either one. Most likely it's a plain pneumothorax.
Q. Do you think that occurred in this case?
A. No, I don't
Q. Why not?
A. Because I think the pneumothorax in this case was secondary to the positive pressure that was necessary to keep the lungs inflated.
Q. Does pneumothorax cause a drop in blood pressure?
A. Simple pneumothorax itself will not affect the blood pressure.
Q. Will tension pneumothorax affect it?
A. Yes, it will, eventually.
Q. How is pneumothorax treated?
A. It depends on the size of the pneumothorax and the cause of the pneumothorax. There are several methods of treating it.
Q. Well, let's take this patient and this --

what caused the pneumothorax in your opinion in this case. How would you treat that?

A. You have to put in needles in both sides of the chest. Well, actually, holes in both sides of the chest.

Whether those holes are small plastic catheters which allow air to escape or whether those holes are larger, called chest tubes, is not relevant. Either one will work.

Q Okay. When you say the smaller one, would that be like a McSwain dart?

A. It's one of the brand names of that kind of activity; right.

Q. And in your opinion it makes no difference which one it is?

A. Not at all.

Q So the size of the outgoing pathway from the chest makes no difference?

A. Makes no difference. Well, with the exception of it being microscope, if we're dealing in absolutes, it could be such a small needle that it wouldn't be functional.

Q. Doctor, you know in this case that McSwain

darts were put in at some point?

A. Correct.

Q. By Dr. Muchee?

A. Correct.

Q. And then when Dr. Rank came in chest tubes were put in?

A. Correct.

Q. Do you know the purpose of that why they did that?

A Well yes I think I do

Q. Why?

A. My impression from the records is that the patient still was not doing well and they had a feeling well, she's not doing well, then let's try something else. Maybe we're missing something, maybe McSwain darts are not functioning appropriately. Let's put in chest tubes and see how they work.

This could be because Dr. Rank was more comfortable with chest tubes than McSwain darts. I mean, it's a personal thing with physicians about the modalities they like to use to relieve and treat certain conditions.

There are many thoracic surgeons who are more comfortable with chest tubes than McSwain darts.

The other thing is that in the case of chest tubes the McSwain dart is going to relieve air. If there's blood it's not going to do much for you.

The chest tube, though, will allow drainage of both air and blood and you'll be able to see immediately if you've missed something else, if there's another problem.

So it made good sense since the patient is still not doing too well to put in the chest tubes and perform a therapeutic function, that is to relieve any air; and to perform a diagnostic function and that is to see if we're missing some bleeding in the chest.

Q. Do you think that's what was occurring here, do you think that was the purpose for putting in the chest tubes, to see if there was bleeding?

A. No; I think the purpose was they were just not convinced. They had a dying patient. They

were not -- they wanted to try everything they could and they felt gee, maybe the McSwain darts are not working, let's try something else.

I think, secondly, it was not specifically because they thought blood was in there, but it certainly would be a consideration to say if we do find it we'll know there's another problem.

Q. If blood does not come out a chest tube, Doctor, is that -- does that necessarily mean to you that the patient has no bleeding in the chest?

A. No; it's possible to have some bleeding in the chest and not have any blood come out a chest tube. For instance, you can have a few teaspoons of blood on either side of the chest and not be able to pick it up with a chest tube because it will not sweep the entire free area in the chest. So it's possible to have some blood in there; certainly.

Q Well, doesn't part of it depend on where the chest tubes are placed?

A. Not really.

Q. How they're placed?

A. Yeah, it does, if they're placed in the

wrong place then they won't pick up the blood So if you insert the chest tubes in the wrong area or even insert them in the right area but thread them inappropriately I supposed you could be in a situation where you would not pick up the blood.

Q. Does the record reflect, Doctor, for you how and where these chest tubes were placed, with any specificity?

A I d have to look at the record for that If anybody can help me I'd appreciate that.

Q Is your copy of the record numbered at the bottom right-hand corner of the pages?

A No.

Q Doctor, just to make things simpler here I am going to hand you a clean copy of this chart that has been numbered coinciding with my numbering, 1 through 34, and if you could reference when you find something.

(Recess taken.)

Q. Back on the record, Doctor. Were you able to find something regarding the chest tubes in the chart?

A. Yes, I was On page 26 of the records that

you handed me there is a note that the chest tubes were inserted, and this is written by Dr. Rank. If you put that together with the autopsy report and the diagram from the autopsy report there are lines which indicate chest tube holes are basically underneath each breast laterally. And this would be the lateral midchest area is the area that you would insert a chest tube to evacuate both air and blood

So assuming this is right and the tubes were in those areas and that no blood came out, I would say there was no significant amount of blood in the chest on either side.

Q. So that is your opinion, that there was no significant amount of hemorrhage; correct?

A. That's right.

Q. There was hemorrhage, however, of some sort into the mediastinal area; correct?

A. That's what that pathologist noted; that's correct.

Q. And that bleeding was going on while Kim Sierra was alive; correct?

A. It occurred prior to the time that they

pronounced her dead which is -- I guess it's the same way -- we're saying the same thing, I guess.

Q. Do you have an opinion, Doctor, as to what caused that bleeding?

A. Oh, sure. That bleeding could occur from CPR, pushing on her chest and that's what I think happened.

Q. So it's your opinion to a reasonable medical probability that she had bleeding in the mediastinum due to CPR on the chest?

A. Correct

Q. Doctor, in your opinion was there anything else at all going on with this patient in addition to a severe asthma attack between 6 a.m. and 8 a.m. on that morning?

A. The only thing that was going on was the attempts to resuscitate her.

Q. In your opinion, Doctor, did this patient suffer from subcutaneous emphysema?

A. Yes.

Q. Can you give me a definition of that?

A. Air under the skin.

Q. In your opinion what was the cause of that?

A. The patient had an endotrachial tube inserted and air was being forced down that tube into her lungs, but because of the resistance of the lungs, because of the asthma, the resistance comes from both spasm and all the mucus and materials in the lungs, you have to use fairly high pressures to push.

When you use the high pressures you can create, and you frequently do create, pneumothorax and when you continue to use the high pressures, even if you evacuate the hemothorax the air flows up under the skin from the chest and dissects, usually first up the neck and around the face, but if it keeps going it can dissect all the way down to the hips.

Q. And that was the cause in your opinion in this case?

A. Yes.

Q. In your opinion, Doctor, did that subcutaneous emphysema in any way play a role in her death?

A. No, I don't think it had anything to do with it.

Q. Is it a condition, Doctor, that in your opinion must be addressed?

A. If you --

Q. In and of itself?

A. In and of itself? Yes.

Q. It's important to address it?

A. Right.

Q. In what way is it addressed?

A. it is addresseci bv the insertion of chest tubes.

Q. Why is it important to you to address that condition in and of itself?

A. If you see a patient that comes in with subcutaneous emphysema you have to know why they have it.

Q. I understand that; it's important to know why they have it. Is it important to alleviate it in and of itself?

A. Well, you have to make an assumption when you see it that there's an underlying problem, so it's important to find the underlying problem and then make a determination as to whether that problem has to be alleviated.

Q. So if we're following each other here, the important thing is to determine the underlying problem, hopefully alleviate it and in that way the subcutaneous emphysema will in and of itself go away eventually?

A. That's exactly right.

Q. But as far as this subcutaneous emphysema in and of itself being life threatening or anything like that, would you agree that that's not a problem?

A. That is not a problem in this patient.

Q. Doctor, are you aware that there were two bronchoscopes conducted in this case?

A. Yes.

Q. Do you know what the purpose of those bronchoscopes was?

A. Well, as I said with an insertion of the chest tubes the patient wasn't getting any better; they were doing all the things they could think of to do; and so they said why not look into the lungs and see if we can see something which is causing this patient's inability to oxygenate, something else wrong in her chest.

And in this particular case I assume they were looking for mucus that could be suctioned out, so it was a -- I suppose one could term it a desperation maneuver, certainly not something you do with every asthmatic, but when they're not getting better it certainly is justified.

Q. Is it your understanding that both of these bronchoscopes were conducted after the chest tubes were in; or do you recall?

A. I don't recall that.

Q. I believe the first one by Dr. Rank was conducted prior to the chest tubes going in.

Q. But after the McSwain darts?

A. I don't know; let's pin that down, okay? I believe that that information's contained in the nursing notes, page 7.

Q. McSwain darts, 6:48, I think; and then bronchoscopy at some later time. I see a note, call for bronchoscope after that, so the McSwain darts were in first and then the bronchoscope called for; bronchoscopy about 7 -- something around 7:15, I think.

Q. It appears does it not Doctor, from the

purpose in mind that he would come and do a bronchoscopy?

A. No. I didn't see that. I saw that somebody called Dr. Rank. I don't know whether they asked him to do a consult and help in any way he could, or asked him only to do a bronchoscopy. I can't tell that from the records.

Q. Well, let's assume they called him for the purpose of doing a bronchoscopy, okay?

A. Okay.

Q. At least one of the purposes of calling him. In your opinion Doctor was that an appropriate action?

A. Yes.

Q. For the purpose of looking down in her chest to see what was there?

A. Sure.

Q. For any other purpose?

A. For the bronchoscopy, for any other purpose?

Q. Uh-huh.

A. No; that would be it

Q. In your opinion, Doctor, would it have been inappropriate not to do a bronchoscopy at that time?

A. I would -- no I guess you used two negatives there so you tripped me up a little bit. But --

Q. Let me change it, make it easier for you.

In your opinion was the bronchoscopy necessary?

A. In retrospect I don't think it made any difference. Let me put this another way.

If they had not done a bronchoscopy I would not feel that they mishandled the case.

Q. Would you have done a bronchoscopy?

A. I am not qualified personally to do bronchoscopes?

A. Well, would you have determined to do a bronchoscopy or have one done?

A. In a patient like this I would certainly think about it and I would call for someone else to come down and see if they wanted to do one.

If they decided to do one I would say terrific; if they decided that they felt it was

not necessary I would say terrific, also.

Q. You wouldn't feel it was in our bailiwick so to speak to make that determination?

A. That's correct.

Q. Regarding the bronchoscopy?

A. Personally; that's right.

Q. Are you aware, Doctor, that this young woman had a rather severe injury to her larynx historically?

A. Yes.

Q. Do you recall how you're aware of that?

A. From reading the records and I've forgotten which record but apparently she'd been in an

that occurred with Kim Sierra in August, '86?

A. In my opinion it was unrelated.

Q Doctor in your review of the record did you note that there is no notation of blood pressure on this patient from 6:02 a m when the blood pressure was 122 over palpated until 7 05 a.m when the blood pressure was noted as zero?

A. Yes, I did notice that.

Q In your opinion Doctor, does the lack of surveillance of this patient's blood pressure for approximately one hour meet a reasonable and ordinary standard of care in those circumstances?

A I will say that the lack of documentation is inappropriate, that there should be documentation of blood pressures, two, three four more during that time period. So I didn't see that I don't think that that's good.

Q. In this emergency room, Doctor, are the nurses or the staff or the physicians or someone required to record blood pressures when they're taken on a rather sewerely ill patient?

A. Yes. Let me answer that maybe another way. We would think the nurses were not doing their job and had violated their standard if they had not recorded all the blood pressures they had taken

with some exceptions.

And those exceptions would be you would not expect them to record if they took ten blood pressures in 20 minutes, all ten blood pressures. We would like to have a picture of change but we would not demand that they record every possible thing that occurred, especially in a critical situation.

Q. In this situation, Doctor, how often should the blood pressures have been taken, in your opinion, in that first hour?

A. Oh, I think every 15 minutes at a minimum would be expected.

Q. That would be the minimum to meet the standard of care in your opinion?

A. That's right; that's right.

Q. Do you make any assumptions, Doctor, as to whether or not blood pressures were taken on this patient between 6:02 and 7:05?

A. Well, I didn't really make an assumption. As I remember I did discuss this issue with defense attorneys and they indicated that the nurses had indicated that they took blood

pressures and verbalized them to the physician and I still feel they should have recorded them.

But it's my understanding they were taken and there was knowledge of what the blood pressure was in between these two times you pointed out.

Q. And that's your understanding from defense counsel?

A. Well, I also may have read something about that in the deposition.

Q. Did you ever read any of the nurses' depositions that have been taken in this case?

A. No.

Q. Doctor, let me have you assume for a minute that there were no blood pressures taken on this patient between 6:02 and 7:05; let's just make that assumption.

Would that in your opinion meet an ordinary reasonable standard of care under these circumstances?

A. With no blood pressures taken?

Q. Right.

A. No, it would not.

Q. Doctor, on page 7 of the nurses' notes at

6:44 a.m. a bradycardia is indicated, is it not?

A. Yes.

Q. With that indication in the record, Doctor, would you expect blood pressure to be anywhere near normal, with a bradycardia at that point?

A It certainly could be; sure

Q It could be?

A Oh yeah I wouldn't be able to make a statement about the blood pressure. I think the fact that brady is recorded there does indicate that they were paying attention to the vital signs because that number would have been known, it was right on the monitor. Once again, the violation is not recording it and I certainly agree with that.

Q. It would have been right on what monitor?

A See CM dash brady?

Q Uh-huh.

Q Cardiac monitor dash brady. Well, the number, the brady 51, 48, whatever that number is, would have been known. You can't look at a monitor and see that it's a bradycardia without also knowing the approximate rate.

Q. Well, let's look at the strips. Are these in here?

A. I don't remember seeing any.

Q. It looks like there's something on page 21.

A. Yeah; those are strips; it's not a regular cardiogram

Q. What is it?

A. What is what?

Q. What is this if it's not a regular caraiogram?

A. Those are monitor strips.

Q. And if it's not a regular cardiogram, what is it?

A. It's one-twelfth of a cardiogram; it's one of the twelve leads on a cardiogram. It can be any one of them that's appropriate for the time, but a monitor strip shows one of the twelve leads that taken on a full electrocardiogram.

So electrocardiogram looks at the heart electrically from twelve different directions and a monitor looks at the heart electrically from one direction at a time.

Q. Let's look at page 22 of the chart. Is

that the same kind of strip as the one you just described?

A. Right; it's a monitor strip. I don't know what I ɜd iʇ ɪs bwt I don t think that s rɒlewant

Q. Any of these strips indicate bradycardia to you?

A. Yes, they do.

Q. Which ones?

A. Page 21, the bottom one; and page 22 -- I guess I'd have to measure it, but certainly the third one down. The second one down is a relative bradycardia.

Q. And where is the readout on this strip you're talking about?

A. I guess I don't know what you mean by readout.

Q Would there bɒ a rɒadout aɔ 58 or something like that?

A. The personnel in the room could look at a monitor screen, a television screen, in which this would also appear and frequently on there is a number that appears which indicates the heart rate. I don't know what brand they have; I'm not saying

for sure that that is there, but it usually is.
Q. So it depends on the brand. There may be a brand that doesn't produce that number on the screen?
A. Right.
Q. And there may be brands that do?
A. Right.
Q. Or there are brands that do?
A Right.
Q And you have no way of telling from this chart which kind of monitor this was?
A. No. I have no way of knowing that.
Q. Doctor, sometime before 7:05 this patient lost blood pressure; correct?
A. Well, it's possible that coincidentally it could have been exactly at 7:05, so we don't know the answer to that question.
Q. Is there any reason in this chart that you know of to expect that this patient would have lost blood pressure exactly at 7:05?
A. No.
Q. Is there any way, Doctor, for you to presume or assume any blood pressure values at any

time between 6:02 and 7:05?

A. Oh, certainly.

Q Okay; what?

A. At 6:33 she said please stop.

didn't she?

A Sure.

Q What does that remark indicate to you if anything, Doctor?

A. She was verbalizing something. I really can't interpret what's going on in her head. She is hypoxic at the time and hypoxic people say all kinds of things; and anxious. She could have been saying please stop the problem with my breathing. I don't know.

Q. That's the approximate time they were attempting the right subclavian, isn't it, according to the record?

A. Well, it's on the line above; it says 6:33 she said please stop. 6:36, right subclavian IV.

There's no way to know. It could have been exactly as they were sticking her with the needle and she said please stop.

It could have been two minutes before. The process of recording, itself, takes time and nurses do more than just record, so I can't answer your question.

Q. Doctor, do you know whether or not any central venous pressures were taken at any time?

A I don't remember seeing any CVP report

Q. Are those recorded in much the same way that blood pressures are recorded by the nurses?

A. Are they written down?

Q. Uh-huh; they're not in a chart or something other than just handwritten by a nurse?

A. No, they would appear on the notes intermittently, just like blood pressures do or pulses do; you're right.

Q. What's the purpose of taking central venous pressures?

A. Well, the idea of it is to give the clinician some sense of the total blood volume in the patient. If the central venous pressure is exceedingly low normally it's safe to give the patient more fluids, you're not going to overload their system.

It also may be an indication of the fact that that's the patient's problem. If the central venous pressure is too high it can give you an indication of impending heart failure or the fact that the amount of fluids that are being given should be decreased before you do the patient into heart failure.

Q. In your opinion, Doctor, would central venous pressure readings have helpful in treating this patient?

A. No; I don't think they would have in this case.

Q. Doctor, did you note anywhere in the record that there was a complete blood count done on this patient? Well, I haven't been able to find one; I wondered if there's anything in there that indicates that a complete blood count was done, to you.

A. Let me check one place first.

Q. Okay.

A. And I tend to agree with you. I don't think there was. No. I would say no.

Q. Would it in your opinion have been

appropriate to do a complete blood count on this patient?

A. No. It would be inappropriate.

Q. Inappropriate? Why is that?

A. It doesn't add anything to the case; it just increases costs and is a waste of time and money.

Q. Well, from our discussion thus far, Doctor, I'm safe in assuming, I think, it's your opinion this patient did not suffer hypovolemic shock; is that correct?

Absolutely correct

Q. Doctor, I'm sure you have noted and discussed -- well, let's say I'm assuming you have -- the co-oxiymetry hemoglobin readings on page 20B and 20C of this chart. Are you familiar with those?

A. Yes; I see those: 20B and 20C.

Q. Have you seen those before?

A. Yes.

Q. What if anything did those readings indicate to you?

A. Well, there's two parts to them. The blood

gas part is consistent with her acute respiratory --

Q. Well, for right now I'm just talking about 3.2 hemoglobin on 20B and 3.9 hemoglobin reading on 20C.

A. That indicates, if that's accurate, that the hemoglobin on whatever patient's being tested is very, very low.

Q. Do you think the hemoglobin in this patient was very, very low at 10:36 a.m. and 10:40 a.m. respectively?

A. No.

Q. So you do not think those are valid results?

A. Completely invalid; right.

Q. And what is the basis for your opinion, Doctor, that those are invalid?

A. The patient came in with a reasonable blood pressure at the beginning. The patient did not have a history that I could get from anywhere in the records that she had been losing blood anywhere i.e. vomiting of blood or black, tarry stools. There wasn't any history of her being

treated that I could remember of any severe anemic problem.

And there's no evidence that I could see anywhere in the record from any of the documents I reviewed that there was any significant bleeding anywhere during anytime in this case. And the autopsy didn't show any bleeding.

So all this is not consistent with a bleeding problem. There's no evidence for bleeding.

Q. What is inconsistent in this record with a bleeding problem?

A. What is inconsistent in this record?

Q. Uh-huh. What would rule it out in your opinion in this chart?

A. Nothing in this chart; the autopsy.

Q. What is the autopsy would rule it out in your opinion?

A. There was no major collection of blood anywhere. She had a mediastinal hemorrhage, which is common in CPR cases. And as I remember from the X-ray readings, the patient did not have a massive giant mediastinum which would indicate

there was three or four liters of blood in the mediastinum.

Q. Can the mediastinum hold three or four liters of blood?

A. Not and retain the same shape.

Q. But it can if it doesn't retain the same shape?

A. If it occupies most of the chest then it's possible for the mediastinum to retain lots of blood. And we're talking about more than blood; we're talking about fluid that was given.

See, if there's a theory that the patient had an Iatrogenic, that is that a physician induced laceration of an artery, causing hemorrhage, there is no evidence that that existed.

Q. I understand, Doctor, it's your opinion there's no evidence of that in this chart.

I'm asking you what in this chart or in the autopsy report or anywhere else would rule that possibility out?

A. Would rule it out?

Q. Uh-huh.

Q. There wasn't any significant blood found on

autopsy.

Q. Doctor, are you aware that this autopsy was performed after embalming?

A. Uh-huh.

Q. And you would still expect to find blood on autopsy after embalming?

A. Well, we found blood in the anterior mediastinal hemorrhage. Are we saying that that isn't true now?

Q. Doctor, you were talking about collection of blood, you know, like a pooling of blood is what I assumed. Is that correct?

A. Correct.

Q. Is it your understand that that's what was found in the mediastinum on autopsy, a pooling of blood?

A. No, not at all.

Q. It was blood in the tissues; right?

A. Blood in the tissues; right. But there wasn't any blood in the chest wall because we put in chest tubes and we didn't get any blood out, any significant blood out. It might have been a drop or two, but no significant blood.

So I don't find any source of blood in the right chest cavity or the left chest cavity.

I don't consider the blood in the mediastinum to be significant. And there was no evidence of intra-abdominal bleeding.

And there would not have been enough possibility to bleed in her brain enough to cause that kind of low hemoglobin.

So I think the hemoglobin tests are erroneous

Q. Doctor, you just said you don't consider the blood in the mediastinum to be significant. Can you tell me why that is?

A. Because, once again, the X-ray reports didn't indicate a mediastinum that was wide.

And secondly, it is a very, very common finding in patients like this. You do a little CPR, you get a little mediastinal hemorrhage.

Thirdly, as I remember, the pathologist didn't even say he thought it was a significant amount of blood in the mediastinum.

So in this case it is a totally normal mediastinum and with nothing in the chest and

nothing in the abdomen I find it very difficult to manufacture a place where the blood could have gone.

Q. Doctor, let's back up just a minute if we could. I want to clear this up about the autopsy.

This patient had been embalmed prior to autopsy?

A. That's my understanding.

Q. You would not under those circumstances expect to find collections of blood in the body; correct?

A. You wouldn't find a pool of blood, usually. Although I'm not an embalmer, as I understand it you usually would not find just a pool of blood sitting somewhere.

Q. So even in a patient who had had hemorrhage, even massive hemorrhage, you still wouldn't expect to find pooling blood as evidence of that on an autopsy after embalming; correct?

A. No; you're right. That's why the chest tube not retrieving any blood makes the autopsy report as regards the right and left chest irrelevant.

Q. You're talking about the chest tubes during the hospitalization?

A. Sure.

Q. You did indicate to me earlier that it's possible to have chest tubes and not have them draining blood; isn't that right?

A. That's right; and we discussed the position of the chest tubes and the pathologist showed that the positions were appropriate.

But to elaborate on my first comment, if you put chest tubes in the front part of the chest, anteriorly, you probably won't get blood down in the bottom of the chest. That's why the chest tubes should be put on the side, where they were put, so those will get blood; if there's blood there, they will get it out.

Q. If it pools in the back?

A. Yes; absolutely.

Q And the patient's lying in a supine position?

A. Correct; correct.

Q Have you ever seen that not happen, Doctor?

A. No.

Q. Doctor in your opinion did this patient require administration of fluids?

A Well, in my opinion the patient required an IV with some fluids. Beyond that I m not sure what you mean.

Q. Well, did she receive adequate fluid administration in your opinion?

A. In my opinion yes, she did.

Q. Doctor, do you have an opinion as to whether or not the ventilatory resuscitation or respiratory care in this case met a reasonable and ordinary standard of care?

A. Yes, I do.

Q. What in your opinion, Doctor, caused this patient's death?

A. The patient died from status asthmaticus. She came in acidosis and had a basically refractory acidotic state. Her lungs were so bad that her bronchospasm couldn't be reversed.

She was so bad she had to be intubated right away. The literature supports the fact that quite a number of patients with asthma who present in this condition die, a high percentage die.

Q In hospitals?

A. Either in the emergency department or right after admission. Now, that doesn't mean that every asthmatic dies. It doesn't mean I've seen ten today, because most asthmatics do not require intubation.

But those that do require intubation, there is a significant and well known and well documented mortality. They just don't get better.

And the reason for that is that their cells are not receiving enough oxygen and there's a vicious circle: not enough oxygen produces an aerobic metabolism, which is a nonoxygenated metabolism, which produces more acid, which is aggravated by the fact that it's harder to breathe and exchange oxygen then, which produces more bronchospasm, which produces less oxygenation, which produces more an aerobic metabolism.

And you just can't reverse it in some patients; and in this case it couldn't be reversed and she died.

Q. Do you have any statistics, Doctor, that you're aware of as to mortality rate on asthmatic

who require ventilation?

A. The statistics that I've heard are somewhere between 10 and 20 percent, depending on which study was done.

Q. Uh-huh. Can you give me an estimate, Doctor, of how many asthmatic patients you have treated who required intubation?

A. Probably five or ten over the years.

Q. Over your career?

A. Right.

Q. And how many of those five or ten didn't make it?

A. I don't -- I can't giwe you that information. I can give you information on the last -- for my group, for the last year -- and that is what as near as I can tell from anecdotal evidence -- I didn't review every chart in this hospital -- of the two patients that had to be intubated one died.

Q. Did you treat that patient?

A. No, I didn't.

Q. Do you know anything about the patient?

A. Yes, I do.

Q Tell me about the patient.

A. An 11-year-old black girl with asthma who did not take her medicines very well who for approximately a day prior to admission was more and more short of breath and kept treating herself with her inhaler again and again and again. And then finally came in.

She presented to the emergency department much like this patient presented. She was intubated in the emergency department. We were able to maintain her blood pressure She was given all the medications.

She was admitted to pulmonary intensive care and was dead the next day. Nothing worked.

Q. How often did you monitor her blood pressure in the emergency room when she came in much like this patient?

A. I don't remember that particular part of the chart. I don't even remember the patient's name, but I would guess her blood pressure was taken no less than every 15 minutes.

Q. And written in the chart?

A. That I don't know. I'd be happy to look it

up we can mistakes, too but I don't know.

Q. If you'll give me your notes just a minute, Doctor

Doctor, just as so r of an aside here or a hypothetical, in light of your opinions, which I understand, how do you treat hypovolemic shock when you do think it's there?

A. Assuming the hypovolemia is from blood loss which we're almost always talking about, you need to have intravenous access. You want the most effective, most appropriate access you can get, which varies from patient to patient.

And you want to replace fluids immediately with -- basically we use either Ringer's lactate or normal saline -- and at the same time request some blood product as fast as you can request it, and that depends on the patient's condition.

If they're really dying right then you give them O negative blood, if you have it. If they're -- if you have some time you might be able to get their blood typed and crossed so that you give blood that's compatible with their own blood. It really is a judgment based on how seriously ill

you think the patient is and how quickly they might or might not die.

Q. The important thing is to get blood back in if it's been lost; correct?

A. If it's been lost; right and to buy some time.

Q. Do you know why, Doctor, this particular patient was given plasminate?

A. No; that I can't really answer for you.

Q. You wouldn't have given this patient plasminate?

A. No, I can't answer that either. At the end of a case like this you will do almost anything, try most anything. Perhaps they felt that an extra burst of fluid would help her because she was losing -- you know, when you're having an asthma -- and the bronchoscopy showed all that fluid has a high protein in it they may have thought it might help to add some protein so that would be in the plasminate anyway that was their thinking I don't know.

Q Doctor, do you have an opinion on the blood gases we talked about on page 20 B and C and the

co-oximiter report as to whether those samples -- well, let me back up here a minute.

The information in the top half of the blond gas analysis is just that, an analysis of the gases.

Underneath, from the same blood sample, the machine tests certain other things; is that correct?

A. Yes.

Q. Do you have an opinion whether the blood gas result on page 20B was arterial blood or venous blood?

A. I would say on 20B it would be more likely to be arterial blood.

Q. Is it possible for it to be venous blood, for that particular result to be venous?

A. Well, I guess all things are possible, but I have never seen that high of a PO2 in venous blood.

Q. So it's highly unlikely, is it not?

A. Highly unlikely I would say; yes.

Q. What about 20C?

A. That one, which was just a few minutes

later, certainly could be venous because the PO2 is so low and the CO2 is so high and it occurred fairly close to the other one, not too long after.

Q. So is it more likely in your opinion than not that this is venous sample on 20C?

A. Yeah, I'd have to say the likelihood is that it probably was venous.

Q. Now, Doctor, you indicated that -- well, let's go back to 20B. You indicated that you don't think 3 2 hemoglobin is correct?

A. Right.

Q. What does the next figure, 97.8, what is that figure?

A. I think that refers to saturation.

Q. Do you think that's correct.

Q. That one could be. I think it's a different calculation so it doesn't have as much to do with the dilution of the hemoglobin that they measured, the saturation; I don't think it'd be relative to high or low hemoglobin.

Q. Was there any reason in this chart, Doctor, that would make you think -- is there anything in the chart that would make you think the 97.8

saturation is not correct?
A. No, not particularly; it's also consistent with the other test just above it.
Q. What about the 2.3; what is that designation for?
A. I think that's a percentage of carboxyhemoglobin.
Q What does that mean?
A. The hemoglobin -- of any hemoglobin found, how much of that hemoglobin has got carbon monoxide bound to it.
Q. Do you think that figure's correct?
A. It probably -- it's essentially zero and the answer is there isn't any and the machine happened to print out 2.3. I don't know what it means; I don't know why he would test for it and I don't know what its relevance would be. I have no experience with the machine; it could show 2.3 on every patient; I just don't know.
Q. What is the calculation they're doing when they get a zero on that test?
A. I don't know.
Q. Well, that makes me feel better. What is

the calculation they're doing when they get a 4.4?
A. Oh, I'm sorry; I thought you were back to carboxyhemoglobin. The zero just below that? That's methemoglobin.
Q. That's what?
A. Methemoglobin. m-e-t-h.
Q. Okay.
A. That's another abnormal kind of hemoglobin that you would get if you happen to be taking a lot of nitrates; it's a toxicology situation. It occurs in industry and in various bizarre circumstances and is a toxic result of the treatment for arsenic poisoning. But you would expect it to be zero on almost everybody. I didn't even know they were included on something like this.
And the last one, volumes per cent 02, I don't know exactly what that means.
Q. RR at the bottom, is that --
A. Respiratory rate?
A. -- respiratory rate?
A. Uh-huh.
Q. Now, how can ch t be measured through the

blood or is that just someone noted that the respiratory rate was 16 and wrote it down there?

n.

If 02 is 100 percent, somebody would write down that the patient was on 100 percent oxygen.

t

or this machine would spit out accurate information on everything but the hemoglobin level?

A. Sure. Machines do that all the time because it's an internal calculation and the particular one depends on dilution. I could see where, since the hemoglobin is the only one of these things that really depends on the dilution of it, it's certainly obvious to me that that could be the one that could be wrong.

Q. And it's wrong again on page 20C in your opinion on the venous sample as well?

A. In my opinion they're consistently wrong.

Q. Does that mean the machine is not operating properly in your opinion?

A. I can't answer that question. I don't know how the machine works.

Q. Well, would that occur if the machine were operating properly?

A. I would guess not if it's supposed to record hemoglobin. It doesn't record it in the same way that the other, the actual hemoglobin test does it. It's in a different kind of activity in the machine. I'm not sure of the physics of how the machine works, though, but I know it's different. So I would guess if the machine's working properly it's going to give you an accurate answer assuming, of course, that the sample's been taken accurately and the dilution's been made accurately. Human factors have to be good, too.

MS. STOCKLIN: If it's all right with everyone I'd like to take just five minutes and I think I'm about ready to finish up.

(Recess taken.)

Q. Doctor, do you have an opinion as to why this patient lost blood pressure?

A. Yes.

Q. What is it?

A. It is not uncommon to have precipitous or sudden blood pressure drops in patients that are essentially terminal because of a irreversible acidosis. All their cells don't function right, specifically their heart and blood vessel wall cells cause constriction of the blood vessels which maintains our blood pressure.

And with no cells able to perform appropriately then you don't have normal muscle in the blood vessel and you can have a sudden and precipitous relaxing of the blood vessels which causes the blood pressure to drop.

Occasionally you can temporarily overcome that by massive infusions of medications, so you'll see a situation where a patient has a fairly good blood pressure, suddenly no blood pressure, pressure comes up again, but in almost every one of those cases I've ever seen, if that's what's happening, demise is the end result.

Q. Doctor, obviously this patient did not make it. Do you have an opinion as to when -- well, let me ask you this.

Is it your opinion that when this patient

got to the ER that morning she was not going to make it?

A. No.

Q. No matter what?

A. No.

Q. You don't have that opinion?

A. I don't have that opinion; no.

Q. What if anything in your opinion done or happening differently would have made the outcome different?

A. Nothing. Let me explain those two statements.

Q I think you'd better

A. You ask when she came to the emergency room, and I would say, it would be my opinion that as soon as she did not respond to the first two medications given then that was now inevitable that she just wasn't going to make it.

So we're real close --

Q. So what time was that?

A. Oh I'll look that up for you but I will

[illegible]

I will tell you that a patient who comes in like this and does not respond quickly to bronchodilator medication and who needs an endotrachial tube is pretty much not going to make it.

Q. Well, Doctor, are most asthmatic patients administered an endotrachial tube if they're responding quickly to bronchodilators?

A. No, tney are nor

Q. There's no reason to put them on the ventilator or --

A. Right.

Q. if they're responding'?

A. Right.

Q. Well, if they're not responding then and they are intubated and bagged or ventilated, even by your calculations 75 to 90 percent of the make it: right?

A. I don't remember making any calculations like that. I said there was a high mortality rate in that group of patients.

Q. High. 10 to 20 percent?

A. Right.

Q. If I recall what you said?
A. Yeah; and that's true. But you asked me about this specific patient, when did I feel, in this patient, that it was inevitable that she was going to die. And I tried to go back and you said when she first arrived? And I said no. I wasn't sure it was inevitable then.
But once she didn't respond to the medication and had to be intubated, then it seemed that it would be inevitable and that's when -- if I could place a time on it, that's when I would.
Q. So in your opinion, Doctor, there was -- it was not -- why put her on a ventilator, why intubate her? I mean, your expectation is that that's going to help, isn't it?
A. Your expectation is that you need to do that next because you need to have better control of the airway. You want to be able to force air into the patient's lungs.
Q. Is there any evidence in your opinion, Doctor, whatsoever in this chart, is there any indication of hypovolemia in this patient?
A. No; I never saw any indication of any

evidence of hypovolemia.

Q. Why do you think this patient went into bradycardia at 6:30-whatever it was, 6:38?

A. Well, there's three possibilities and my answer would be probably a combination of all of those.

Number one would be the fact that she was acidotic and so the cardiac cells that control rhythm are going to be unstable and more sensitive to external stimuli.

Number two, I think by that time she had an endotrachial tube and it is well known that the insertion of an endotrachial tube can cause what's known as a vagal stimulus and slow the heart rate.

As a matter of fact, anesthesiologists on elective intubations pretreat patients for that problem.

Number three is that the patient may -- and I don't know this for sure -- may or may not have a subclavian inserted about that time and the pain response may have been enough to produce a bradycardia.

I guess this is a combination of all three.

If she was well and had had the IV inserted she would not have had a bradycardia.

If she was just lying there in acidosis and nobody was touching her she probably wouldn't have had the bradycardia, but all three stimuli at once predisposed her to a sudden slowing of heart rate.

Q. Would you expect epinephrine given on three different occasions prior to that bradycardia to cause the pulse rate to go up?

A. Well, one of the normal reactions to epinephrine is indeed to stimulate the heart rate to go up. But that is in an animal or human model that is not this terribly acidotic.

The reactions, the response to epinephrine can be variable. As a matter of fact, one of the concerns is how much of her own epinephrine was already in her system from her adrenal glands. And whether or not -- one of the reasons the epinephrine may not be as effective as you want it to is that she already has as much as she can get into her system from her adrenal glands

Now you certainly treat 'cause you don't know that. There's nothing wrong with treating;

you have to do it.

But that could be -- and we'll never know -- could be one of the reasons that she didn't respond very well to that.

If that's so then adding more is not going to change the heart rate. I guess that's a long, long answer to your short question.

Q. It appears that she was being bagged and receiving ventilatory support from about 6:20 on through a nasal --

A. Nasal tracheal tube.

Q -- tracheal tube; correct?.

A Yeah.

Q Do the blood gases, Doctor, on page 173, indicate to you in any way that she was responding somewhat to those ventilation efforts?

A. Well, the first is timed at 6:46 which shows a PH of 7.38, a PC of 2.21 and a PO2 of 257 indicates that she is responding positively to the therapy at that point.

Q. And turning to page 21, strip at the bottom of page 21, what does that indicate to you?

A. Well, it's a slow heart rate. I can't tell

you whether this rhythm is nodal, what s alled n
nodal hythm, or a sinus rhythm. I hink it's
robably nodal. I just can't tell whether that
ittle squiggle is a P wave or not. But it's a
ardycardic rate, probably around 40, 45 beats per
inute.

Q. Would that strip be consistent with
schemic changes in your opinion?

A. In my opinion that question is not relevant
because -- I'm not trying to be smart -- but
strips should not ever be interpreted as having
anything do or not do with ischemic changes.
Ischemic changes are read on ST segments and the
only valid testing for that is the 12 lead
electrocardiogram. The strips notoriously have no
relevance to ischemia or nonischemia

Q. We have no way -- correct me if I'm wrong
-- but I don't think we have any way of telling
what this young woman's blood pressure was at 6:46
or 6:50; do we? That's during the period of time
we don't have any notation.

A. We'd have to get anecdotal evidence for
that.

Q You mean you think there may be --
A. 6:45?
Q. Uh-huh
A. No, there's not even a note of any kind at 6:45, so no.
Q. Well, at any time around there, 6:50, 6:48; isn't that during the hour we don't have any recordings?
A. Yes; all we could say is her please stop comment indicates that she had a pressure that was high enough to profuse her brain and the literature indicates that's about 60 millimeters of mercury or above.
Q. When you say we'd have to get anecdotal comments, Doctor, you're assuming that someone who was there might remember three years ago what her blood pressure was at 6:45?
A. No, I'm not making that assumption. I'm just saying that's the only other way I know to get it if it's not down here is to ask somebody if they remember.
Q. There's a point here where her blood pressure reading, if I recall, on page 10 at 9:37,

her blood pressure reading appears to be 116 over 95; correct?

A. Right.

Q. Do you have any opinions, Doctor, as to why they were getting a blood pressure reading at that point?

A. Nothing other than what I already mentioned about the -- in patients who are in serous distress with very acidotic cells you will see appearances and disappearances of blood pressures and pulses just in the space of minutes and seemingly unrelated to any therapy.

Sometimes they show no blood pressure ace you give them some medication and it won't change; other times it'll jump up to normal within seconds and then disappear again

I guess it's part of our -- what we observe in patients that are dying. But I can't be specific on that.

Q. It's not your opinion then I take it that the fluid challenge that she had at the same time had anything to do with it?

A. Well, what I don't know is was this taken

right after the fluid challenge or not. If it were taken right after I would say that it would, even then it would probably not have anything to do with it.

Q. Wouldn't be related at all?

A. No; because we have zero beforehand and then 116 over 95, so I don't think it would have anything to do with it.

Q. So it's just sort of one of those unexplainable things that occurs in acidotic, dying patients?

A. Yes; it's explainable, but it's explainable based on cellular physiology.

Q. Why would it have been important to you, Doctor, as you said earlier, to monitor this blood pressure every fifteen minutes or less in this particular patient?

A. Well, for the same reason it would be in a very, very sick patient. You want to give the patient the best you can and you want as much information as you can that's reasonable about the patient that relates to what you re doing. And in a patient that's this sick the most important

parameters to follow are the vital signs, second only to the observation of the patient. Looking at the patient and seeing that she's changed may precede any vital signs.

Q. Seeing what -- happening clinically and then seeing if that's --

A. Good numbers' that's correct.

Q. Let's assume -- on top of, Doctor, just the individual blood pressure readings, isn't it true that if you have a chart of blood pressure readings written ever ten or fifteen minutes you can see a pattern --

A. That's correct.

Q. -- of what's going on with your patient, can't you?

A. Right, and single, isolated blood pressures should be taken with a grain of salt, so to speak. You need a pattern before you can decide you need to change your therapy.

Q. So that's an important consideration that you have to make before you make certain treatment decisions?

A. Right.

Q. Well, then that's even more important in a patient that's this ill, isn't it?
A. That's right.
Q. Is it your opinion, Doctor, that there was no laceration or sticking of any vessel with the attempts at subclavian lines and jugular lines, et cetera, in this patient?
A. You certainly can't put in a subclavian without sticking a vessel, so it's not my opinion that there wasn't any sticking of a vessel. There certainly had to be *or* you wouldn't have gotten a line in in the first place.
Q. Uh-huh.
A. It's my opinion that if there were extra puncture wounds or lacerations to any blood vessels that those did not cause any significant bleeding and had no relationship to the outcome of this patient.
Q. Do you have any opinion, Doctor, as to what her hemoglobin level probably was, since you don't think it was what was reflected here?
A. All I can say is that most asthmatics who are chronic asthmatics have a high hemoglobin

level

Q. A high hemoglobin level?

A. Uh-huh.

Q. Why is that?

A. It's the body's response to being chronically low on oxygen. Just as if you lived in Denver your hemoglobin level would be higher than if you live in Dayton or Toledo.

Q. What's the normal range for a female?

A. I'd have to look that up again.

Q. Can you tell me how much higher it would be normally in an asthmatic?

A. If a female normally would be, say, 14, in an asthmatic it would not be unusual to see one at 16

Q. So just one level or so?

A. Correct.

Q. Doctor, at 7:58 on the chart we see a blood pressure of 136 over 113?

A. Yes.

Q. Does that blood pressure have any particular significance to you and if it does would you tell me what it is?

A No, there's no particular significance to other than that it's significance to the physicians who were there watching the patient at that time having a reported blood pressure of 136 over 113 would have a feeling that they might be headed in the right direction for a few seconds. That's pretty subjective; I can't say anything more than that about it.

Q How long does it take to put in a chest tube?

A. Oh, five minutes, maybe.

Q. How is it done?

A. There is usually some preparation of the skin, depending on how fast you have to put it in and that's basically merthiolate or alcohol or something cleansing the skin. Then if the patient is conscious you inject a small amount of local anesthetic under the skin in the appropriate place. You make a nick with a scalpel blade to incise the skin and then you take an instrument to open up the hole bluntly and we call those either Kelly's or Coker's or any of the blunt suture-like

instruments that don't cut anything. Stick it in the hole and open it so it spreads the wound open.

And then either using that instrument and pushing, you pop into the chest wall by actually making a hole in the lining of the inside of the chest. Or some operators will take a chest tube and clamp it to the instrument and push it with the chest tube and the instrument at the same time. Others will do something even more barbaric and use a very, very sharp stilette which goes inside the chest tube and push with that and that'll pop through and then slide the chest tube over that piece of metal so the chest tube alone goes into the chest.

So there's a number of ways of doing it. It's not terribly complicated. It requires I guess a certain amount of gutsiness and being used to it before you do it.

Q. Do you have any opinions at all, Doctor, regarding the fact that Dr. Rank left the emergency room when this patient had no blood pressure at all?

A. No, not really. I wasn't there at the time

and I can foresee that at times that would be perfectly reasonable.

Q. Like when?

A. Well, if Dr. Rank felt that his role in that case had been fulfilled and he was only going to be the chest tube inserter and that the case was being handled by other physicians it certainly would be all right for him to leave, especially when the chest tubes did not drain blood. As a matter of fact, I think that's another supportive piece of evidence. The thoracic surgeon puts in a chest tube, finds no evidence for further thoracic surgical intervention, it's okay to leave.

Q. Doctor, back to the 6:45 blood gases, 173, I believe, it indicates at the bottom ambu?

A. Yes.

Q. Does that mean since she had the nasotrach in at that that someone's bagging her through the nasotrach?

A. At that time, yes; that's the way I would interpret that

Q. And you had said earlier these blood gases

do reflect that there was some response to that ventilatory therapy?

A. Right.

Q. Is it the response you would expect to see in a sick asthmatic patient who was being ventilated?

A. Well, in general, yes, I would expect to see that once you've ventilated a patient, if they were sick you'd see an improvement in the PH and I think there was something else going on at the same time, though, and let me double check that before I finish my answer.

This is 6:46 and at 6:44 there were two amps of bicarb given; the major thing to look for is a change in PH and giving the bicarb, if that had been in the circulation for a minute or so would have elevated the PH quickly, enormously, it would go right up. The blood gas taken two minutes later might be way back down again.

So I guess I have to say putting everything all together it's not that surprising. 250 is a little high but it depends on how much dissolved, oxygen was dissolved in the serum and you can

dissolve more if you put it under higher pressure, so it all relates to how much ampule pressure there was. Certainly there had to be some or you wouldn't have had the pneumothoraces.

Q. Dr. Janiak, after the next most previous blood gases which were done at apparently 6:10 in the morning the blood gases that you see at 6:45 would have been reassuring to you, wouldn't they?

A. I would feel better; sure.

Q. And Doctor, the next blood gases which the printout at the top on page 17C says 6:54; again in those blood gases the oxygen level is remaining well up, is it not, and the CO2 level remaining low?

A. Very low; right.

Q. We don't know what the PH is there?

A. I think it's 8.

Q. Is that what that means?

A. My guess is that it's 8.

Q. That the PH is 8?

A. Yeah; that's the way I interpreted that.

Q. Well, how would you interpret an 8 PH?

A. [illegible]

amps of bicarb and the hyperventilation.

Q. So at least from the respiratory aspect at 6:54 you would still be reassured by these gases?

A. Yeah, keeping in mind that it's more important to look at the patient than it is to look at the numbers off a machine. So you'd have to put the two together.

Looking at the these, if I could not see the patient, if you wouldn't let me, well, I'd say it looks like we're doing better. If I were two miles away on the phone I'd say that.

But if I were looking at the patient, seeing a patient's in big trouble, then I would say that's neat that the numbers look good but -- you know, we have a saying in medicine, real, real sick patients last just long enough for us to get all the numbers right before they die. And I can't tell you how many times that's happened: lots and lots and lots.

Q. Well, Doctor, we have discussed a lot of your specific opinions in this case and we've discussed at least two general opinions you have that there were no deviations from reasonable and

ordinary standards of care in this case.

Are there any opinions that you intend to testify on at the trial of this case that we have not discussed that you hold?

A. No, I don't think so. I certainly don't have any now and if I get one I'll let you know. But I have nothing else.

MS. STOCKLIN: I don't think I've got anything else then. I certainly appreciate your time today, Doctor.

(Deposition concluded and signature waived at 1:30 p.m.)

C E R T I F I C A T E

STATE OF OHIO)
) SS.
COUNTY OF LUCAS)

I, Megan Gallagher, a Notary Public in and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named witness, BRUCE D. JANIAK, M.D., was by me first duly sworn to tell the truth, the

whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by him was by me recorded on audio cassette in the presence of said witness afterward transcribed upon a word processor, and that the foregoing is a true and accurate transcription of the testimony so given by him as aforesaid.

I do further certify that this deposition was taken at the time and place in the foregoing caption specified and was completed without adjournment.

I do further certify that I am not a relative, counsel, or attorney of any 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 Toledo, Ohio, on this 21st day of June, 1989.

MEGAN GALLAGHER
Notary Public
in and for the State of Ohio

My Commission expires January 29, 1994.

EXHIBIT A
6289 MC

CURRICULUM VITAE

Name:	BRUCE DAVID JANIAK, M.D.
Office Address:	The Toledo Hospital Department of Emergency Medicine 2142 N. Cove Blvd. Toledo, OH 43606
Office Phone:	(419) 471-4111
Home Address:	30267 Hickory Hill Drive Perrysburg, Ohio 43551
Home Phone:	(419) 666-3130
Date of Birth:	January 12, 1943
Place of Birth:	Cleveland, Ohio
Marital Status:	Married Wife: Michele Children: Tim, Tracy, Adam, Sarah, Matthew, Lauren

EDUCATION:

Undergraduate:	Marietta College, Marietta, Ohio - AB	1965
Medical School:	University of Cincinnati, Cincinnati, Ohio - MD	1969
Internship:	Rotating, Cincinnati General Hospital	1969-1970
Residency:	Emergency Medicine, Cincinnati General Hospital Cincinnati, Ohio	1970-1972

MILITARY:

United States Navy 1972-1974
Director, Emergency Medical Services
Pensacola Naval Hospital, Pensacola, Florida

PRESENT POSITION:

Director, Department of Emergency Medicine
The Toledo Hospital, Toledo, Ohio Since 1974

TEACHING APPOINTMENTS:

In Military:	Lecturer, EMT - Pensacola Junior College, Pensacola, Florida
	Lecturer, EMT - One week state approved course for corpsmen leading to an EMT certificate.

TEACHING APPOINTMENTS (CONT'D):

In Military: Preceptor - Student physician's assistant. Pensacola. Florida

Instructor - Family Practice Residency, U.S. Naval Hospital, Pensacola, Florida

Director of Medical Student Clerkships in Emergency Medicine
The Toledo Hospital, Toledo, Ohio — Since 1974

Clinical Instructor, EMS, Dept of Surgery, Medical College of Ohio at Toledo, Toledo, Ohio — 1975-1978

Clinical Assistant Professor, EMS, Department of Surgery Medical College of Ohio at Toledo, Toledo, Ohio — 1979-1984

*Clinical Associate Professor, EMS, Department of Surgery, Medical College of Ohio at Toledo, Toledo, Ohio — Since 1984

Associate Director, St. Vincent/Toledo Hospital Emergency Medicine Residency Program — 1979-1983

LICENSURE:

Ohio	August 1969	License #31814
Michigan	April 1984	License #47078
Florida	1972	Inactive

ACTIVITIES:

Miscellaneous:

Escambia County (Florida) Emergency Medicine Services Council — 1972-1974

American Trauma Society (Local Chapter inactive after Spring 1976)
1. Founding Member — 1975
2. Board of Directors, N.W. Ohio Chapter — 1975
3. Professional Education Committee, N.W. Ohio Chapter — 1975

Medical Advisory Board for Kidney Foundation — 1976-1980

Regional Emergency Medical Services of N.W. Ohio — 1977-1978

Paramedic Advisory of the School of Allied Health of the Medical College of Ohio at Toledo - Alternate Member — 1979

*Please do not use this appointment as a citation in any brochure.

ACTIVITIES (CONT'D):

Ohio Chapter ACEP:

1.	Member, Board of Directors	1975-1981
2.	Alternate Counselor from Ohio	-Ai/:
3.	Counselor from State of Ohio	1976-1980
4.	Asst. Program Director, Annual Scientific Assembly	1976-1977
5.	Secretary-	1977-1978
6.	President-Elect	1978-1979
7.	Legislative Committee	1979-1980
8.	President	1979-1980
9.	Chairman, Legislative Committee	1980
10.	Chairman, Ad Hoc Committee on Reimbursement	-1980
11.	Program Chairman, 1982 Scientific Assembly	1981-1982

National ACEP:

1.	Member	Since-1972
2.	Graduate/Undergraduate Education Committee	1977-1981
3.	Participant, President's Emergency Medicine Futures Workshop	1979-1980
4.	Liaison Residency Endorsement Committee, Residency Reviewer	1977-1979
5.	Vice-Chairman, Graduate/Undergraduate Education Committee	-1979
6.	Steering Committee of the Council	1979-1980
7.	Board Nominating Committee, Member	1980
8.	Chairman, Graduate/Undergraduate Education Committee	1980-1981
9.	Board Nominee	-1980
10.	Member, Board of Directors	1980-1986
11.	Chairman,-Section of Clinical Care	1980-1981
12.	Secretary-Treasurer	1981-1982
13.	Participant, 1982 Committee Chairman Workshop	-1982
14.	Vice-President	1982-1983
15.	Chairman, Section on Association Administration	1982-1983
16.	Chairman,-Ad Hoc Committee on Liaisons	-1983
17.	President-Elect	1983-1984
18.	President	1984-1985
19.	Chairman, Management Publications Editorial Board	1987-1989
20.	Member, Blue Ribbon Commission	1985-1987

American Board of Emergency Medicine:

1.	Board Examiner	1981-Present
2.	Oral Examination Test Development Committee	1981-1982
3.	Member, Board of Directors	1986-1990
4.	Member at Large, Executive Committee	1987-1989
5.	Member, ABEM ABIM Task Force on Joint Residency Training	1987-1988
6.	Member, ABEM ABP (Pediatrics) Task Force	-1988
7.	Secretary Treasurer	1988-1989

ACTIVITIES (CONT'D):

American Medical Association:	-
1. Member, Residency Review Committee in Emergency Medicine	1981-1983 Since 1986
2. Delegate, Section Council on Emergency Medicine	- 1983-1984
American Board of Medical Specialties:	-
1. Member, Bylaws Committee	1987-1988
Lucas County (Ohio) Emergency Medical Services Council	- 1974-1982
Ohio Hospital Association:	
1. Member	Since 1976
2. Secretary to Section on Emergency Medicine	- 1978-1979
3. President to Section on Emergency Medicine	- 1979-1980
4. Member, State Legislative Committee	1980-1981
*Society of Teachers of Emergency Medicine:	
1. Member	Since 1978
2. Officers Nominating Committee	1979
The Academy of Medicine of Toledo & Lucas County:	
1. Member	Since 1976
2. Commissioner Community Health Commission	1981
The Toledo Hospital:	
1. Member, Active Staff	Since 1976
2. Member, Executive Committee	Since 1976
3. Member, Medical Education Committee	Since-1976
4. Member, Safety Committee	1976-1982
5. Member, Quality Assurance Committee	1976-1987
6. Chairman, Disaster Relief Committee	1976-1981
7. Chairman, Kellogg Cost Containment Project	1981-1984
8. AMA Representative, Hospital Medical Staff Section	- 1983-1985
University Association for Emergency Medicine:	Since 1975
National Board of Medical Examiners, CBX Scoring Committee Member	- 1986-1987
American Heart Association:	
1. Certified Instructor/Trainer in Basic Cardiac Life Support	- 1977-1982
2. Certified Instructor/Trainer in Advanced Cardiac Life Support	- 1978-1982
3. National Affiliate Faculty Member	1979-1982

Engaged with University Association for Emergency Medicine in 1988.

MEMBERSHIPS:

American Medical Association
Academy of Medicine of Toledo and Lucas County
University Association for Emergency Medicine
American Academy of Medical Directors
American College of Emergency Physician
American Board of Emergency Medicine
Ohio Chapter, American College of Emergency Physicians

PUBLICATIONS

Janiak, Bruce D., "What to Do Until the Real Doctor Comes" Emergency Medicine, June 1972

Janiak, Bruce D., "Cost Effectiveness and the Emergency Physician" OSMA Journal, August 1980

Coordinating Editor, Practical Reviews in Emergency Medicine Since 1980

Janiak, Bruce D., "A hospital emergency department is still best for acute care" Patient Care, October 30, 1982

Spiro, Mark J., Janiak, Bruce D.,-"Spontaneous Rupture of the Sigmoid Colon in a Patient with Ehlers-Danlos Syndrome" Annals of Emergency Medicine, October 1984

Gray, B. K., Janiak, B., "Urgent Care Centers" Archives of Emergency Medicine, 1985, Vol. 2

Janiak, Bruce D., "Role of the Medical Director" and "Case Study F" The Hospital Emergency Department: Returning to Financial Viability, American Hospital Association

Howard, Mark, Carrubba Catherine, Foss, Frank, Janiak, Bruce, et al "Interposed Abdominal compression - CPR: It's Effects on Parameters of Coronary Perfusion in Human Subjects, Annals of Emergency Medicine, March 1987

MISCELLANEOUS

Partner, Emergency Management Consultants 1981-1988
President, Professional Emergency Services, Inc
President, EMB Professionals, Inc.
Medical Director, Northwest Ohio Region HMP
(Health Maintenance Plan & HMO) Since 1988