IN THE COURT OF COMMON PLEAS
CUYAHOGA COUNTY, OHIO

CHRISTOPHER S. LONG, etc.,)
)
Plaintiffs,)
)
vs) Case No. 321518
)
CLEVELAND CLINIC FOUNDATION)
)
Defendant.)

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DEPOSITION OF JEAN-PIERRE P. YARED, M.D.

MONDAY, FEBRUARY 8, 1999

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The deposition of JEAN-PIERRE P. YARED, M.D., the Witness herein, called by counsel on behalf of the Plaintiff for examination under the statute, taken before me, Vivian L. Gordon, a Registered Diplomate Reporter and Notary Public in and for the State of Ohio, pursuant to agreement of counsel, at the offices of The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio, commencing at 10:00 o'clock a.m. on the day and date above set forth.

APPEARANCES:

On behalf of the Plaintiff
Becker & Mishkind
BY: JEANNE M. TOSTI, ESQ.
Skylight Office Tower
1660 West Second Street
Suite 660
Cleveland, Ohio 44113

On behalf of the Defendant
Roetzel & Andress
BY: JOHN V. JACKSON, III, ESQ.
INGRID KINKOPF-ZAJAC, ESQ.
1375 E. 9th Street
Cleveland, Ohio 44114

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JEAN-PIERRE P. YARED, M.D., a witness herein, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, was deposed and said as follows:

EXAMINATION OF JEAN-PIERRE P. YARED, M.D.

BY-MS. TOSTI:

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

A. John-Pierre Yared, Y-A-R-E-D.

Q. And your home address, please?

A. 2595 Butternut Lane, Pepper Pike, Ohio, 44124.

Q. Is that a single family home?

A. Yes.

Q. And in August of 1996, was your business address here at the Cleveland Clinic?

A. Yes.

Q. And currently, is your business address here at the Cleveland Clinic?

A. Yes.

Q. In August of 1996, were you an employee of the Cleveland Clinic Foundation?

A. Yes.

Q. And in that same time period, were you

providing professional services for anyone other than the Cleveland Clinic?

A. No.

Q. Have you ever had your deposition taken before?

A. No.

Q. Now, I am sure Mr. Jackson has had an opportunity to talk with you in regard to the usual rules of a deposition, but I just want to review those with you.

This is a question and answer session and it's under oath and it is important that you understand the question that I am asking you.

If for any reason you don't understand it, or you would like me to repeat it because I have phrased inartfully, just ask me and I will be happy to repeat it or to rephrase it. Otherwise, I am going to assume that you understood the question that I asked you and that you are able to answer.

I would also ask that you give all of your answers verbally because our court reporter cannot take down head nods or hand motions.

If at any time you wish to refer to medical records, you may do so. Also, at some point in

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time, Mr. Jackson may enter an objection. You are still required to answer my question unless he instructs you not to do so.
Do you understand those?
A. Yes, I do.
Q. Okay. Have you ever been named as a defendant in a medical negligence case?
MR. JACKSON: Object, but go ahead and answer. You may answer that.
A. No.
Q. Have you ever had your hospital privileges called into question, suspended or revoked?
MR. JACKSON: Objection, but you may answer.
A. No.
Q. And in August of 1996, were you licensed to practice in the State of Ohio, practice medicine?
A. Yes.
Q. And has your medical license in Ohio or any other state ever been suspended, revoked or called into question?
MR. JACKSON: Objection, but you may answer.
A. No.
Q. Are you currently licensed in any other

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state other than Ohio?
A. New York state.
Q. Have you ever been licensed in any other state besides Ohio and New York?
A. No.
Q. Have you ever acted as an expert in a medical/legal proceeding?
MR. JACKSON: Objection, but you may answer.
A. No.
Q. Have you ever given testimony in any case of a medical/legal nature?
A. No.
Q. Now, doctor, counsel has provided me just a few minutes ago with a copy of your curriculum vitae. I am going to ask that this be marked as Plaintiff's Exhibit 1 and then I will have you look at it and tell me if there are any corrections or revisions that you would like to make to it.
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(Thereupon, YARED Deposition Exhibit 1 was mark'd for purposes of identification.)
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A. That's all right.
Q. It's up to date?
A. Yes.
Q. No revisions.
Do you have any publications that are currently pending that are not on your curriculum vitae?
A. No.
Q. Okay. Doctor, are you currently a United States citizen?
A. Yes.
Q. When did you first become employed with the Cleveland Clinic?
A. In 1988 I was employed on the staff. I did a Fellowship earlier, though, in 1980.
Q. Now, you have listed here a clinical Fellowship at the Cleveland Clinic in critical care medicine from 1995 through 1996; is that correct?
A. Yes.
Q. And you also have listed that you were director of the cardiovascular intensive care unit from 1994 to the present; is that correct?
A. Correct.
Q. So you were director of the cardiovascular

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intensive care unit prior to finishing your clinical Fellowship in critical care medicine; is that correct?
MR. JACKSON: Say that again.
MS. TOSTI: He is listed under present professional appointments as being director of the cardiovascular intensive care unit from 1994 to the present, but his Fellowship in critical care medicine is listed as 1995 through '96.
Q. And my question is, did you hold that position as director of the cardiovascular intensive care unit prior to the time you completed a Fellowship in critical care medicine?
A. I completed the Fellowship in critical care medicine because I was not eligible for the board, because as you may have noticed, I have been trained in Lebanon, and I did a Fellowship in 1980 to '82 at the Cleveland Clinic. It included three months of critical care.
Now, the specialty of critical care has evolved over the years and at that time there was no formal Fellowship program, so I have been practicing critical care, although at that time there was no formal training program.

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Now, after I came back to the Cleveland Clinic, I felt that I needed to get certified, and then to be certified, I had to do training in a specialty where I was already trained, but I did not have the official training program. That's why I did one year of Fellowship.
Q. When did you complete that Fellowship in 1996?
A. It was in May or April. April, perhaps.
Q. And so at the time -- and I am going to go back to what my question was. At the time that you were director of the cardiovascular intensive care unit, you had not completed your Fellowship at Cleveland Clinic in critical care medicine; correct?
A. I had not completed the Fellowship program.
Q. At the Cleveland Clinic?
A. At the Cleveland Clinic.
Q. Doctor, you are board certified in several areas; is that correct?
A. Anesthesiology.
Q. And in critical care also?
A. Critical care, yes.
Q. Did you pass those board certifications on your first try?

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A. Yes.
Q. Doctor, the publications that you have listed on your curriculum vitae, do you feel any of those have particular significance for this case?
A. Nothing directly related to the case.
Q. And in regard to the research that you have that's in progress, any of that research have particular significance to this case?
A. No.
Q. You also have listed a number of lectures. Any of those lectures deal specifically with complications following cardiothoracic surgery?
A. There is one general lecture that talks about post operative management. Complications are part of that lecture.
Q. Which lecture is that, doctor?
A. It says, the third one, post operative care of the cardiac surgical patient.
Q. Has that particular lecture ever been reduced to a videotape, audiotape or written form?
A. No. Just a lecture.
Q. Would you tell me what you have reviewed for this deposition.
A. I reviewed parts of the record.

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Q. Would you tell me what parts of the records you have reviewed?
A. Parts that relate to the presence of the patient in the ICU after surgery.
Q. So you reviewed the ICU record?
A. Yes.
Q. Any other part of the medical record?
A. The admission and discharge summary.
Q. Did you review the anesthesia sheets from the OR?
A. That was reported to me, yes.
Q. Did you review the records?
A. Yes.
Q. Anything else in the records?
A. No.
Q. Have you referred to any textbooks or articles in preparation for this deposition?
A. No.
Q. Have you consulted with any physicians in preparation for this deposition?
A. No.
Q. And since the filing of this case, have you discussed this case with any other physicians?
A. No.
Q. Other than with counsel, have you discussed

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this case with anyone else?
A. No.
Q. Do you have any personal notes or a personal file on this case, other than what is in the medical records?
A. No.
Q. Have you ever generated any personal notes or personal file in this case?
A. No.
Q. Doctor, is there a textbook in your field of anesthesia or intensive care medicine that you consider to be the best or the most reliable?
A. There are several textbooks.
Q. Which would you consider to be the best in the field of anesthesia?
MR. JACKSON: When you say the best, what do you mean the best?
MS. TOSTI: What he considers to be the best, if there is one.
MR. JACKSON: The best in what regard?
Is there a best in your mind, doctor?
THE WITNESS: No, there is no best.
Q. Are there several?

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A. There are many books. I have seven, eight books in my office.
Q. Is there any that you refer to more often than the others?
A. No.
Q. How about in critical care?
A. The same applies to critical care books.
Q. Is there any particular publication that you feel has particular relevance to the issues in this case?
MR. JACKSON: You mean an article, particular article?
MS. TOSTI: Article or book or book chapter.
Q. If you think it has particular significance to this case.
A. A specific article?
Q. Yes.
A. I don't know a specific article or book that directly related to that case or that complication. There are many that are available. I know they exist.
Q. But you have none in mind at this particular point in time?
A. No, nothing specific.

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Q. Doctor, what is a cardiac tamponade?
A. It's when a patient bleeds and the bleeding is contained around the heart and causes compression of the heart.
Q. And what does that do to the pumping action of the heart?
A. The heart is unable to maintain cardiac output.
Q. What are the signs and symptoms associated with cardiac tamponade?
A. The blood pressure may go down, the cardiac output may go down. The CVP may go up and the pulmonary artery pressure may go up. The urine output may go down.
Q. Does anything happen to the cardiac contour or silhouette on chest X-ray?
A. There can be a widening seen on the chest X-ray.
Q. And does the cardiac tamponade have any effect on pulse pressure?
A. It can affect the pulse pressure.
Q. How can it affect the pulse pressure?
A. It can become smaller.
Q. Does hypovolemia have any effect on the signs and symptoms of cardiac tamponade?

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A. It may.
Q. Would it mask, tend to mask the symptoms?
A. It may exacerbate the symptoms. It may make cardiac output go down even further.
Q. Would hypovolemia make it more difficult to discern those changes that you just mentioned?
A. It is very difficult to pinpoint one specific determinant, but certainly if there is hypovolemia, the cardiac output is expected to decrease and the urine output is expected to decrease. But does this happen all the time? I mean, I cannot answer that as a definite answer, yes, all the time, no, but usually this is what would be expected.
Q. Would you agree that cardiac tamponade requires immediate treatment?
A. Yes.
Q. Doctor, in a post-op cardiothoracic patient, what factors do you look at to determine if a patient is having bleeding from an aortic suture line after valve replacement?
A. This is a surgical question. I cannot tell you what criterion is used to look at the bleeding from the suture line.
Q. Doctor, in the cardiac thoracic unit, do

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you, as the director, watch patients for post-op bleeding?
A. No. I watch them. I am informed -- I take that answer back.
I manage the medical aspect of the patient in regard to their ventilation, sedation, and I coordinate patient care between consultant services and nursing, as well as ancillary services. The surgical management is not my responsibility.
However, my decisions in terms of the respiratory management, sedation management do take into account the hemodynamic stability of the patient, including whether the patient is bleeding or not, or having a low cardiac output.
Q. And, doctor, in regard to your duties and responsibilities to the patient -- and I understand that you are not a surgeon -- what parameters are you looking at to evaluate whether or not a patient is having a problem with bleeding?
A. Chest tube output, the cardiac output, blood pressure, CVP, pulmonary artery pressure, urine output, whether the patient appears to be well perfused.

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Q. Do you have an independent recollection of James Long as you sit here today aside from what you have reviewed in the medical records?
A. Nothing specific. I remember the patient, yes. No specific events that are not here.
Q. Did you see James Long at any time prior to his first surgery when the aortic valve was implanted?
A. Say that again, please.
Q. Did you see James Long at any time before his surgery? And I am speaking of the first surgery --
A. No.
Q. -- with his aortic valve.
No?
A. No.
Q. Did you have any anesthesia responsibilities during James Long's first surgery? And I am speaking of anesthesia responsibilities in a surgical suite.
A. No.
Q. Were you present in the surgical suite for any part of the aortic valve replacement surgery?
A. No.
Q. Did you have any conversations with Dr.

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Cosgrove or Dr. Meullbach or Dr. Hearn at any time about the course of James Long's first cardiac surgery?
A. I had conversation with whoever brought the patient up to the ICU from the anesthesia team. I don't know whether this was Dr. Hearn or a resident -- I don't know who it was. But I did have a conversation with them.
Q. That was at the point when Mr. Long was being admitted to the cardiothoracic intensive care unit?
A. Correct.
Q. Prior to James Long's surgery, had you ever provided anesthesia on an aortic valve replacement case where they were doing the procedure via minimally invasive procedure?
A. I did not provide anesthesia to that patient.
Q. No, I understand that. I am asking you if at the time when James Long had his surgery, had you ever provided anesthesia in that type of a case?
A. I don't remember.
Q. Have you ever provided anesthesia services at any time on a minimally invasive aortic valve

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replacement surgery?
A. Probably. I don't know. I mean, I cannot answer this question with precision. I don't recall.
Q. Over the course --
A. Probably, yes.
Q. Have you seen the procedure done before?
A. While I was providing anesthesia, I have seen the procedure.
Q. Do you recall how many times you have seen this procedure done?
A. No.
Q. Was it more than once?
A. Perhaps.
Q. Do you know how many minimally invasive aortic valve replacements had been done at Cleveland Clinic prior to the one that James Long had done?
A. No.
Q. Are there any differences in anesthesia management of a patient having aortic valve replacement via mediastinotomy as compared to one that is done minimally invasive through a transverse stinotomy?
A. Anesthetic management varies from patient

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to patient.
Q. But is there any differences just based on the type of procedure that is being done?
A. Simply because it's a minimally invasive procedure?
Q. Yes.
A. No.
Q. When is the first time that you came into contact with James Long?
A. After he was admitted to the ICU, after his first surgery.
Q. And you did a cardiothoracic anesthesia ICU admission note; is that correct?
A. Correct.
Q. And how is it that you were the one that did that note? Why is it that you did that particular note that day?
A. Because I was in the unit on that day.
Q. Now, in August of 1996, what were your duties and responsibilities in the cardiothoracic unit?
A. To oversee management of patients in the entire ICU in terms of their respiratory management, sedation, getting them off the ventilator, extubated. If there were any need for

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invasive lines, for catheter replacement.
Q. Doctor, was there anyone that was the surgical director of the intensive care unit at that time?
A. The surgical department is. I suppose the chairman of the surgical department.
Q. And who was that at the time of Mr. Long's surgery?
A. Dr. Cosgrove.
Q. But was there anyone -- you were there in the unit that particular day and were monitoring the things that you just identified, and you have indicated previously, I believe, that the surgical management was left to the surgical department?
A. Correct.
Q. Was there anyone that had responsibilities in the intensive care unit similar to what you had in regard to ventilation management, et cetera, that was part of the surgical department?
A. Yes. The surgical fellow, surgical resident. I mean, the surgeons do provide coverage all the time to the ICU.
Q. Okay. And on the day that James Long was in there, who was the surgical fellow or surgical resident?

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A. From the record, I see Dr. Meullbach's name, and there was someone else's name, but it's from the record.
Q. Now, doctor, did you spend your day in the cardiothoracic care unit? Were you in the unit on a continual basis?
A. Yes.
Q. Did you have any duties and responsibilities outside the unit?
A. My duties in the unit started about 12:00 noon, and right before that, I may have seen a patient on the floor, like a consultation, but after 12:00 I am in the ICU.
Q. And then how long would you remain in the ICU?
A. Usually until about 9:00 o'clock in the evening. It depends on the case load for the day or whether I am needed or not.
Q. And on the day that James Long was in the ICU, were you in there from approximately noon until about 9:00 p.m.?
A. I don't know that for sure, but most likely.
Q. Were you out of the unit for any extended period of time during the time that James Long was

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in the intensive care unit?
A. There are five ICU's, okay? So I was in one of those five ICU's, or perhaps in my office which is right next to the ICU's, but I did not have responsibilities in other places.
Q. But you did have in those five ICU's; correct?
A. Yes.
Q. The five ICU's that you are talking about, what type of intensive care unit are these?
A. Cardiothoracic intensive care unit.
Q. So there are five cardiothoracic intensive care units?
A. Yes.
Q. Do they have different types of patients in the units?
A. No. Just all patients who undergo cardiac or thoracic surgery.
Q. Is there any reason that a patient would be put in a particular intensive care unit or is it on a whatever the bed availability is?
A. There is a tendency to put the patients of specific surgeons in one or two close units, but it's just an attempt to make their rounds easier, but there is no strict rule.

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Q. And in regard to the unit that James Long was in, was that a unit that Dr. Cosgrove's patients were usually put into?
A. Yes.
Q. How many patients are in that intensive care unit? What is the maximum?
A. Ten.
Q. And what's the usual in 1996? What was the usual census in that unit?
A. I don't know.
Q. Do you recall if it usually was to capacity, to ten patients?
MR. JACKSON: Don't guess. If you can give her a fair answer, go ahead, but don't guess.
A. I don't know.
Q. Generally, was there a range as to how many patients would be in that unit?
A. I know that if you take all the ICU's together, we have an occupancy rate of somewhere between 70 and 80 percent, but that's all the units taken together.
Q. Now, if a patient developed a problem in one of the units, was there a policy or procedure that the nurses were to follow in regard to who

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should be notified first?
A. The nurses would be better at answering what their policies are about.
Q. Well, doctor, if you were director of the unit, I would think that you would know what the notification policy would be in regard to physicians.
A. Yes, I know that the nurses would notify the surgeons, but I don't know of the actual text of the policy.
Q. The nurses weren't instructed to call you first if there was a problem with a patient; is that correct?
A. No. They would call me if there is a problem with ventilation, oxygenation, or sedation.
Q. And then if there was a problem in regard to what might be considered a surgical problem, they would call someone on the surgical staff for that?
A. Probably.
Q. Okay. What I am trying to find out is if all of the problems went through you first --
A. No.
Q. -- and then to someone else or whether the

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nurses had options to call either you or the surgical department?
A. Okay.
Q. My understanding from what you said and correct me if I am wrong, is that if there was a problem with ventilation or oxygen, they would call you, and if it was another problem, they may call the surgeon?
A. Correct.
Q. And they have that option?
A. Correct.
Q. Now, doctor, when James Long was admitted to the intensive care unit, did you do an evaluation of him?
A. Yes.
Q. And would you tell me what your findings were in regard to your evaluation? I think I have provided you -- let's mark this as Plaintiff's Exhibit 2.

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(Thereupon, YARED Deposition Exhibit 2 was mark'd for purposes of identification.)

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Q. Doctor, if you would just identify what

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that document that's been marked as Plaintiff's Exhibit 2 is.
A. This is ICU admission note and it states that I received a report from the person transferring the patient from the operating room to the ICU.
Do you want me to go through what is written?
Q. Well, my first question is, what were your findings on your evaluation?
A. My findings were that the patient was 50 years old, and he had an aortic valve replacement through a minimally invasive procedure. His left ventricular function was mildly to moderately impaired. He had no significant other risk factors. He had had dental damage during intubation, but intubation itself was not difficult.
There was some bleeding that was noticed in the operating room after cardiopulmonary bypass, and so then there was a plan or a request to control blood pressure to systolic pressure of 100, or approximately 100, to help the control of bleeding.
Now, the patient, when he came up, when I

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examined him, he was asleep, he had breath sounds which were clear, bilateral and clear.
And the plan was to wean him off the ventilator up to the point where he gets extubated, but then because of the concern about maintaining the blood pressure about 100 systolic, we decided to sedate him. So that we can control his pressure better, Propofol was chosen to sedate the patient.
Q. How many chest tubes did he have?
A. That's not something I would know.
Q. So you don't know whether he had a mediastinal tube or not?
A. All patients come with chest tubes from the OR after cardiac surgery. I don't know the number and the exact site. It can vary from patient to patient.
Q. Did you have any particular concerns regarding James Long's condition at the time of admission to the ICU?
A. No. We had a plan but not a concern.
Q. Now, the information that you have listed in your ICU admission note under the OR course, you obtained that from the person that transported the patient from surgery; is that correct?

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A. Yes.
Q. And that was a physician?
A. Yes. Well it could be a physician, it could be a CRNA.
Q. In this instance, you are not sure who it was?
A. I don't remember who it was.
Q. Now, you were told that the bleeding that James Long had was after he came off cardiopulmonary bypass; is that correct?
A. Yes.
Q. Where was the site of the bleeding?
A. I do not know. I don't remember. I don't remember whether I was given that information, but they had some bleeding and it was controlled. I suppose, usually we -- nobody closes a chest that is bleeding. I mean, what I can read here is that there was bleeding after bypass.
Q. So is it your assumption that this was after the chest was closed?
A. Oh, no, no. It was before the chest was closed. No, no, this is after bypass.
Q. After he came off?
A. After bypass and he needed hemostasis. And then upon arrival to the unit, I don't have

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evidence that he was bleeding by looking at the nurses record.
Q. Do you know how much blood loss there was?
MR. JACKSON: You mean in the operating room?
MS. TOSTI: Yes. He was told that there was bleeding.
Q. Do you know how much blood loss there was?
A. No.
Q. And to your knowledge, were you informed about any action that was taken as a result of the bleeding?
A. Bleeding is a common thing after bypass. It is not something abnormal. It's common and the surgeon does what is necessary to stop the bleeding. So there was simply an increased concern about the fact that he was bleeding and there was a plan to keep the pressure under control.
Q. Now, you mentioned that there was some additional sedation given to the patient to keep his blood pressure down below 100; is that correct?
A. It's not below 100. It's about 100.
Q. Okay. About 100.

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A. Yes.
Q. And I think you previously mentioned that this was because he had had prior bleeding; is that correct?
A. We were concerned about bleeding and it was desirable to maintain his blood pressure under control so that the bleeding does not occur.
Q. How would the additional sedation affect his blood pressure?
A. The sedation will, can decrease his blood pressure, but it may make control of blood pressure, that is, it may make it easier to maintain the blood pressure within a desired range.
Q. Why is that?
A. Because if a patient is awake or having pain, or anxious, or confused, then the patient will have a sympathetic discharge and they can become tachycardic hypertensive simply as part of the normal emergent from anesthesia or because of pain.
Q. Did you receive any information about any bleeding that occurred before the patient was weaned from cardiopulmonary bypass?
A. No.

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Q. To your knowledge, did the size or the shape of James Long's chest pose any problems to him during surgery?
A. I don't know.
Q. And other than what you have written in your admission note, are you aware of any other problems that James Long had during that first surgery?
A. No.
Q. Doctor, as anesthesia time increases, is there an increased risk to the patient?
A. What kind of risk?
Q. For complications.
A. What kind of complications?
Q. For any kind of complications. Is there any risk to the patient as the time of anesthesia increases in length?
A. No, not necessarily.
Q. Have you ever seen any studies that shows a positive correlation between anesthesia time and complication rates in cardiothoracic surgery patients?
A. With anesthesia time?
Q. Yes.
A. Specifically?

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Q. Yes.
A. No. I am not aware of something related specifically to anesthesia time with complication.
Q. How long is it usually between the time that anesthesia is begun and the incision in an aortic valve surgery?
A. It varies. It depends on how long it takes to expose the heart, and --
Q. Well, tell me what the usual range is in time.
MR. JACKSON: Don't guess, doctor. If you can give her a fair answer, go ahead, but please don't guess.
A. I cannot guess. The range is variability.
Q. In your experience, doctor, from the time that anesthesia is begun to the first incision, what's the least amount of time that you have seen?
A. In an elective cardiac surgical case?
Q. Yes.
A. From the time anesthesia is induced until the time that the incision is made, it can be anywhere from -- more than 15 minutes, at least. Usually it's longer.
Q. Doctor, would you consider two hours from

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the time of anesthesia to the first incision as being on the long side?
A. It depends on what was done during those two hours. It is long if nothing was done, but I don't know if any studies were done at that time.
Q. Doctor, if it's reported to you in the intensive care unit that a patient had bleeding after coming off cardiopulmonary bypass, would that be a patient that would be watched closely for continued bleeding in the unit?
A. Every patient is watched closely for bleeding in the unit.
Q. Would there be any increased concern in regard to bleeding in a patient that was reported to you had had bleeding during surgery after coming off cardiopulmonary bypass?
A. Again, there is increased concern, yet observation is the same for everybody.
Q. Doctor, your admission note indicates requested to control blood pressure to systolic of about 100.
Why was 100 picked as the point to maintain the blood pressure at?
A. The statement says that I was requested, so I cannot talk on behalf of the person who

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requested that.
Q. So in other words, you don't know?
A. It makes -- let's say I cannot say why specifically 100 was requested, but I think it's appropriate.
Q. And tell me why you think it's appropriate?
A. It's an appropriate systolic blood pressure after surgery for a patient in Mr. Long's case. It's appropriate to have a blood pressure of 100.
Q. Did you have any duties or responsibilities in titrating medications or managing his care to control that blood pressure at about 100?
A. In as far as sedation was concerned, and sedation was part of the procedures to control blood pressure, yes.
Q. What about in inotropic medications, did you have any responsibilities in regard to the titration of those?
A. No.
Q. Now, if James Long's blood pressure went above 100, would that increase his risk for bleeding?
A. There is an approximation of 100. I mean 101 is not a problem. Certainly it was estimated that hypertension may result in bleeding. I don't

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know of a specific pressure which would be necessarily associated with bleeding.
Q. Now, doctor, I think I have given you a set of the nursing flow sheets. They have not been marked as an exhibit, but I believe there is three separate sheets from the time of admission, and they have a number of the hemodynamic parameters that were taken at or about the time of his admission.
And I would like you to just look over those. And I will ask you, were any of the initial values on admission of any concern to you in those hemodynamic parameters?
A. They are acceptable.
Q. I'm sorry?
A. They are acceptable.
Q. And those would be the ones that we are looking at are listed on the line that's designated with an A?
A. Yes.
Q. And all of those values that run across those lines were acceptable for this patient?
A. That's at 1730; correct?
Q. Correct?
A. Yes.

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Q. What's the normal range for central venous pressure?
MR. JACKSON: For what? This kind of a patient; is that what you are talking about?
Q. First I want to ask what the normal range is for a central venous patient.
A. It depends on the patient.
Q. You don't know of a normal range?
A. Exactly for which patient?
Q. Well, let's take a post-op cardiothoracic patient, what is a normal range for a patient?
A. Varies from 6 to 20. It can be 6 to 25. It depends on the patient.
Q. And in this case, James Long had a CVP of 17 and that would be within a desirable range for him; is that correct?
A. It is within the desirable range. It could be -- it varies from patient to patient.
Q. But we are talking about James Long and what I am asking you specifically, is that CVP of 17 a desirable range for him?
A. It is associated with a blood pressure with cardiac output and I think it's fine.
Q. Now, what is the normal range for cardiac

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output in a post-op cardiothoracic patient?
A. It also varies from patient to patient, but usually we try to have it above 2.2, 2.4, and 3.3 is perfect. It's very good.
Q. Well, in this case, isn't the cardiac output 8.0 and cardiac index 3.3?
A. I am sorry, I was talking about the index, so the index of 2.4 or above, 2.2 or above actually is appropriate, and there is no specific upper limit.
Q. What does the term systemic vascular resistance refers to?
A. It refers to the peripheral arterial tone and whether the arteries are constricted or dilated.
Q. And what is the normal range for systemic vascular resistance in a post-op cardiothoracic patient?
A. It varies from patient to patient. It also varies with the size of the patient, and so an average range would be 700 to 1,300, 1,400, but again, with larger patients, it would be lower.
Q. And in James Long's case, his systemic vascular resistance, I believe, on the A line is listed at 559.

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A. Correct.
Q. Was that a normal or desirable level for his systemic vascular resistance?
A. Mr. Long is -- I don't know his surface area, but I know that he is, he weighs 120 kilos, and for larger patients, a low SVR is expected. And it was appropriate since we were trying to vasodilate him and maintain a blood pressure -- the target was not systemic vascular resistance, the target is the blood pressure. The systemic vascular resistance is a calculated number.
Q. Well, doctor, isn't there a relationship between systemic vascular resistance and blood pressure?
A. There is a relation, but the goal is, we were not titrating or the medical team was not titrating management to a specific systemic vascular resistance. The goal was to maintain arterial pressure, and we expect the systemic resistance to be low since this is our purpose, to vasodilate the patient so that the blood pressure remains low or within a specific range.
Q. So, let me see if I understand you correctly. One of the things that was being attempted was to keep the systemic vascular

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resistance low in order to keep the blood pressure at the level that was desired?
A. That's not what I said.
Q. Okay.
A. I said the goal is to maintain the blood pressure at a systolic of close to 100. Now, the systemic vascular resistance is a number that is calculated based on the blood pressure and the cardiac output and the CVP, and we do not titrate our management to a specific systemic resistance. We titrate it to achieve our goal, which is a target for the blood pressure to be around 100 millimeters mercury systolic.
Q. Do you know why he received Levophed in the ICU?
A. Because his blood pressure was lower than desired, most likely.
Q. And what about epinephrine, why did he receive that, if you know?
A. I don't know.
Q. Now, after he was admitted to the intensive care unit, how long were you physically in the unit with him?
A. I don't know.
Q. At the time that he was admitted to the

unit, were there any other physicians present that were assessing him with you?
A. I do not remember specific people, specific physicians. I know that there was either a physician or CRNA reporting to me, and the surgical resident also comes up with the patient and he reports to another member of the surgical team. I don't know who these people were.
Q. Now, doctor, I believe one of the sheets that I gave you is a set of orders that were written. Let's put a mark on this.

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(Thereupon, YARED Deposition Exhibit 3 was mark'd for purposes of identification.)

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Q. You wrote an order there, I believe, at 1730 hour; is that correct?
A. Yes.
Q. And that one of the portions of that was for Propofol for sedation; correct?
A. Correct.
Q. Was that written at or about the time that he was admitted to the ICU?
A. It says 1730 and that's the time he was

admitted.
Q. And is it typical to continue sedation for patients that undergo cardiothoracic surgery with Propofol, is that a typical order for a patient?

MR. JACKSON: You mean in the ICU now?

MS. TOSTI: Yes.

A. To order specifically Propofol or sedation in general?
Sure. It is not the only drug, but it is one of the drugs we use.
Q. And how long would a patient normally be continued to need sedation with Propofol?
A. It varies from patient to patient.
Q. And how would you judge as to when you would start withdrawing Propofol from the patient?
A. As long as the patient needs to be sedated for, the patient would stay on the sedation, which is Propofol.
Now, the goal here was to make sure that he was, he had an acceptable blood pressure, and that he was not bleeding, and so the patient was -- so the goal was to keep him sedated. And it's titrated to his level of wakefulness.
Q. Now, doctor, I would like you to refer back

to your admission note, which I believe is Plaintiff's Exhibit Number 2, and there are some blood gas values that are written down the left hand side of the page.
Were those preoperative blood gas values on this patient?
A. Yes.
Q. And in regard to the PaO2, was that a normal range for this patient?
A. Pre-op?
Q. Yes.
A. Yes.
Q. Now, postoperatively, what level would you like to maintain this patient at in regard to the PaO2?
A. I would like to have a PaO2 greater than 60 at any given time.
Q. Now, I would like you to take a look at the ventilation flow sheet and I am going to have our court reporter mark this as Plaintiff's Exhibit Number 4.

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(Thereupon, YARED Deposition Exhibit 4 was mark'd for purposes of identification.)

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Q. Down the first column at the bottom, there are a set of blood gases with the time that they were drawn written in at 1749. I would like you to take a look at those.
And if you would look at the PaO2 on that particular set of blood gases, which I believe they have written in 689 --
A. Yes.
Q. Now, is that an acceptable PaO2 for this patient?
A. PaO2 is acceptable.
Q. Why in James Long's case would there be a difference of 90 preoperatively and 68 when he is admitted into the cardiothoracic intensive care?
A. All patients have a decreased PaO2 at cardiopulmonary bypass and cardiac surgery because there is increased fluids in the lungs, there is atelectasis. It's very, very common.
Q. Now, doctor, there was a portable chest X-ray report that was in the medical records, a chest X-ray that was done shortly after admission to the ICU.
Did you review that chest X-ray on James Long?

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A. I probably saw the chest X-ray.
Q. Were you made aware of the results of that X-ray by a report or a call or something from X-ray?
A. I don't remember that.
Q. Generally speaking, if a portable chest is done in the unit, do you actually get to see the actual film?
A. We see the film. We don't get the report.
Q. Okay. And if this particular film was done at 1819 hour, is it likely that you saw that film?
A. It is likely that I saw it. I don't remember it specifically, what I saw.
Q. Doctor, the film that was done at 1819 hour, the report states that there was some perihilar congestion on the X-ray.
Is that something that you would expect a patient to have after coming out of cardiothoracic surgery?
A. Yes.
Q. That's a normal finding for a patient that has just had that type of surgery?
A. It's common.
Q. Now, on the nurses flow sheets that you have in front of you, I would like you to look

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again at the hemodynamic monitoring. And at 1850 hour, it indicates that James Long's blood pressure dropped to 75 over 46 with a mean arterial pressure of 55 and a pulmonary artery pressure of 28 over 18, cardiac output of 4.4 and cardiac index of 2, according to the flow sheet.
Do you know what caused his blood pressure at that point to drop to 75 over 46?
A. He was on nitroprusside right before that and it was turned off at that time from what I can tell on the record here.
Q. Where do you see that he was on it and that it was turned off?
A. On 1830 he was getting 5 milliliters. Here.
Q. Okay.
A. It was turned off.
Q. Do you know why it was turned off at that particular time?
A. Probably because the pressure was coming down below the target.
Q. Is there anything else that would have caused or could have caused his blood pressure to drop and have the same reflection in the other hemodynamic parameters?

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MR. JACKSON: Objection. You can answer.
A. Hypovolemia.
Q. Could internal bleeding cause those same changes?
A. It is possible, but there is another reason, which is his urine output. He was getting fluid replacement. He had been putting out about two liters -- I think it's 1,900, I think it's 1,900 cc's in two hours. He received fluid replacement for that.
Q. Doctor, when his blood pressure dropped to 75 over 46 at 1850 hour, were you notified?
A. I don't recall.
Q. Would this be the type of situation that the nurses would usually notify you about?
A. No.
Q. Would this be something that they would normally notify a surgical resident about?
A. Yeah, they would. If they are concerned, if they are concerned about it, yes. If it is anything more than turning Nipride off, they would inform the resident.
Q. Doctor, on the ventilator flow sheet, it indicates that at 1925 hour, you were at the

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bedside. And I believe that is on one of the exhibits that we have marked as Exhibit 4.
A. Yes.
Q. Do you know why at that particular time you were at the patient's bedside?
A. I was informed about his blood gases. We were trying to get his oxygenation better. It's common that I am informed about the blood gases.
Q. What in particular were you told about the blood gases?
A. Well, I was informed about the 68, initial 68, and although, as I said earlier, this is expected, we certainly do certain different maneuvers to try to improve it.
And PEEP was increased initially and inspired oxygen was also increased, and then at 1925 the goal was at that time, although we had adequate blood gases, we want to be able to decrease the FIO2. So I increased PEEP further at that time to 10.
Q. And I don't see a value written in here for the FIO2?
A. Well, you would see it here.
Q. At the top of the page?
A. Yes.

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Q. So you were trying to adjust the FIO2 and so you increased the PEEP on this patient?
A. Correct.
Q. Do you recall who called you to see the patient at that time?
A. Maybe someone called me and maybe I was just passing by, I don't know.
Q. And at that point in time, did you have any concerns that James Long may be having excessive postoperative bleeding?
A. I don't recall, but I know that when I stopped by, I look at the overall picture and I don't recall any specific concerns.
Q. Now, doctor, do you have any responsibilities in regard to monitoring the amount of chest tube drainage a post-op surgical patient has?
A. No.
Q. That's not something that the nurses would refer to your attention that would go to the surgical staff; is that correct?
A. Yes. They address it to the surgical staff.
Q. Doctor, can a rise in CVP pressure and diastolic blood pressure sometimes be an indicator

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of cardiac tamponade?
A. Repeat the question, please.
(Record read.)
A. What diastolic blood pressure? Arterial or pulmonary arterial pressure?
Q. The diastolic blood pressure that's recorded on the nursing flow sheets.
A. Under blood pressure here?
Q. Yes.
A. It may happen. It's not diagnostic.
Q. Now, doctor, the ICU flow sheet indicates that 1930 hour James Long's pulse was up to 107, his CVP was 19, his diastolic pressure went up to 64, and at about that same time, the nurses recorded that he had had 250 cc's of drainage into his chest tubes.
Would any of those values raise a concern in your mind that this patient may be having excessive postoperative bleeding?
A. It may. It may. At the same time, his PEEP was increased. His PEEP can increase a CVP reading too.
Q. When you saw him at 1925 hour, did you have any concerns that he was having excessive bleeding?

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A. I don't remember.
Q. Now, at 1930 hour, James Long's systemic vascular resistance went from 593 to 965 at 1830 hour. What caused that change in the systemic vascular resistance?
MR. JACKSON: Read that question back.
(Record read.)
Q. The time that she just read is incorrect. I probably misstated it.
But if you look at the 1910 time period on the flow sheet, the systemic vascular resistance is listed at 593, and then at 1930, the systemic vascular resistance is indicated at 965.
And my question is, do you know what caused that change in the systemic vascular resistance?
A. It reflects less dilatation is all I can say about it.
Q. And you don't have an opinion as to what would cause James Long's systemic vascular resistance to change in that period of time?
A. There are many reasons. Many possible reasons.
Q. What are some of the possible reasons?
A. Maybe he woke up a little bit, maybe he was

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stimulated. Although he was not more awake, he may have been simulated by some procedure, nursing care or I don't know. Maybe Nipride had been off for a few minutes, so I suppose it's not, there was no change in Nipride at that time. He could be waking up, as I said.
It could be that his arterial pressure is going up, and there was a small increase in arterial pressure, and cardiac index came down a little bit but still within normal. So any of those changes could have been associated with increased SVR.
Q. Doctor, an increase in the systemic vascular resistance at or about the same time that a patient drains 250 cc's into his chest tube and also shows a decrease in cardiac output and cardiac index, does that cause a concern or raise a concern that this patient may be bleeding?
A. I think the concern about the patient bleeding was there all the time, and we were told from the time he came to the unit that there was a concern about him bleeding. Certainly the concern is still there.
Now, before we leave that question, I also notice something else that increases SVR. If you

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look under the cardiac infusion, you have Levophed that was started at 1910 that will increase SVR.
Q. Doctor, tachycardic can be a sign of hemorrhage; isn't that correct?
A. It can be.
Q. Do you have an opinion as to why James Long's heart rate was over 100 from 1930 hour until he was taken back to surgery?
A. Tachycardia is a common response that we see in cardiac surgical patients. Some of the same factors I mentioned for the SVR can play a role; that is, the patient waking up more, emerging from anesthesia, or being subjected to more stimulation. Hypovolemia certainly, low cardiac output also can play a role.
And there is also, there are sympathetic reflexes that are common in patients who undergo cardiac surgery that simply have to do with surgery on mediastinal structures and the cardiovascular system that results in tachycardia.
Q. Do you have an opinion as to what was causing a downward trend of his blood pressure beginning at 1950 hour?
A. 1950?
Q. Correct.

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A. Levophed was being turned down at that time. It had been started at 10 cc's an hour and 5 and 3.
He could have been less stimulated. He could have -- hypovolemia can also be a factor. But he still has an acceptable cardiac output and is diurese, his urine output.
Q. What is the drug Amicar used for?
A. It's an anti-fibrinolytic used when patients are suspected to have fibrinolysis, and this is something that happens in most patients undergoing cardiopulmonary bypass and cardiac surgery. It occurs to various extent, it is given to promote hemostasis.
Q. Do most patients that undergo aortic valve replacement surgery receive Amicar?
A. Many patients receive Amicar.
Q. Do most?
A. Most, yes. I would say most.
Q. Do most patients receive Amicar in the dosages that James Long received it?
A. Yes.
Q. Now, doctor, the ICU flow sheet indicates that you were at the bedside at, I believe, 2110 hour. Do you see that?

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A. Yes.
Q. And do you have any reason to disagree with that notation that you were at the bedside then?
A. I do not remember that, but I do not have a reason to disagree with it. I do make rounds on the patients while I am in the unit, so I think that's part of my round.
Q. Do you recall if you were contacted to come see the patient or whether you were just there making rounds on the patient at that time?
A. I can only make a guess.
MR. JACKSON: You shouldn't guess. If you can give an explanation for it, go ahead, but you shouldn't guess. She doesn't want you to guess.
A. All right. What I can say is that I saw Mr. Long before I left, and usually, usually it's by 9:00 o'clock plus or minus one hour, depending on how things are in the unit.
But at that time, I think as I finish, as I do my rounds, I do a round every time I am here later, so this is part of my routine. And I see every single patient before I leave the hospital and leave the resident who is on call here, so I see every single patient.

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And Mr. Long, as I remember, was in the last bed at 54 or maybe close to the last bed in 54. So he would be the last person or among the last patients I would see. And it sounds reasonable to say that I was there at 9:10.
Q. And based on what your usual course of action is, it's likely that these were rounds that you were making when you saw him?
A. Most likely, yes.
Q. Doctor, if you would look at the hemodynamic values that are listed at or about the time that you are noted to be at the bedside, looking at those values, is there anything concerning in them?
A. His cardiac output was a little bit lower than desired. It was 2.0 here. This is at 9:10 p.m. I don't know whether I was aware of this cardiac output or not. I don't remember that.
Q. Why would that cardiac output, cardiac index of 2.0 be of concern?
A. It was below what we target for patients. We target really 2.2, but it's -- I mean, a cardiac index that goes down or, you know, fluctuates is expected in the post cardiac surgical period, so all it is is something that

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tells us that, well, we needed to replace fluids, perhaps, and try to reestablish a better cardiac output.
Q. What about his blood pressure that's listed at that time, 84 over 53?
A. Right. It is probably around the blood pressure that is being targeted. And at that time, he was being titrated to adjust the proper pressure and vascular tone, because he was still dilated despite the cardiac vasodilation. It's just an indicator of that.
Q. I would like you to look at the pulmonary artery pressure. And I think it looks like on my copy 83 over 52.
MR. JACKSON: What time is that, please?
MS. TOSTI: 2110, the same line that we are looking at.
A. I think there was a little circle around this value and a little note here saying that, I think it says ART.
Q. Do you know what the significance of that is?
A. I guess it's an error in the entry. It looks to me like ART means arterial and this value

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is in fact the systemic blood pressure, but this is what I can conclude from what I see here.
Q. You didn't put those circles around that value?
A. No.
Q. If that was a pulmonary artery pressure of 83, would that be of concern?
A. Of course.
Q. Why would that be?
A. Because it's a very high pulmonary artery pressure. I mean, you don't expect this high artery pressure in a patient without previous history of pulmonary hypertension.
Q. Would cardiac tamponade cause that type of a pressure to occur?
A. It's much higher than what we see in a cardiac tamponade, much, much higher.
Q. Do you know -- and I understand that you said that you left the unit sometime around 9:00 o'clock or thereabouts. Do you know why there are no pulmonary artery pressures after 2150 hour in this case?
A. I wouldn't be able to say.
Q. Doctor, did you ever order a repeat X-ray for this patient?

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A. I don't remember.
Q. If the X-ray department suggested that a repeat X-ray be done, would that fall to you to determine or would that be the surgical service that would determine that?
A. I don't know for what reason it would be repeated, but I don't know. It would not come to me.
Q. Is it possible to do a bedside echocardiogram in the cardiothoracic unit?
A. Yes.
Q. Can surface echoes be done on patients that have just recently had cardiothoracic surgery?
A. It can.
Q. What about a transesophageal echo, could that be done on a patient that has just had cardiothoracic surgery similar to what James Long had?
A. Yes.
Q. If a patient was having a cardiac tamponade, would a surface echo or a transesophageal echo be of assistance in determining that?
A. If he has a cardiac tamponade?
Q. Yes.

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A. It helps.
Q. Is that helpful in diagnosing?
A. It does help.
Q. Doctor, looking over the hemodynamic values from the time of admission to the time you left the unit at approximately 9:00 o'clock, can you tell me if you see any trends in those values that would be consistent with postoperative bleeding?
A. The variation in the numbers I see here is all within the usual. Blood pressure is lower than -- I mean, the blood pressure is low and maintained to a systolic target of about 100, and that's done on purpose.
So I see cardiac output going down, but then there is a good response to fluid administration. And the decrease in cardiac output is associated with a large urine output, and there is a good response to fluid, which you would not see in tamponade. We don't see such a dramatic improvement in cardiac index with tamponade.
Q. During the time that James Long was in the cardiothoracic unit, do you have a recollection of discussing his condition or care with any other physician?

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A. I do not remember that.
Q. Did you speak to any member of the Long family while he was in the ICU?
A. On that day?
Q. Yes.
A. I don't remember.
Q. And doctor, there is a notation on the nurses notes that a Dr. Hernandez was at the bedside at 2310. Is it likely that you had already left the unit by that time?
A. It is likely.
Q. Okay. Dr. Hernandez, do you know him?
A. Yes.
Q. What service is Dr. Hernandez on?
A. Surgical service.
Q. Doctor, there is a notation that Dr. Cosgrove was in to see the patient at, I believe, 1830 hour. Do you recall being present when Dr. Cosgrove was there to see the patient?
A. I don't recall.
Q. Do you know whether James Long was seen by anyone from surgery between the time that Dr. Cosgrove came in at 1830 -- I'm sorry, at 1810 hour until the time that you left the unit?
A. I don't know.

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Q. Did you participate in any way in James Long's second surgery when he went back because of bleeding problems?
A. No.
Q. What is your understanding as to what happened to James Long when he went back to surgery?
A. He was hypotensive when he arrived to the OR and that they had to open the chest urgently and reestablish adequate hemodynamic profile.
Q. And do you have an opinion as to what point in time James Long suffered ischemic injury to his brain?
A. No.
Q. Did you speak to the family at any time after James Long's second surgery?
A. I don't know. I may have spoken with one or more members of the family because he was in the unit for a significant period of time, but I don't recall anything specific.
Q. Did you at any time speak to Dr. Cosgrove or Dr. Meullbach or Dr. Hearn regarding what happened to James Long?
MR. JACKSON: He answered that earlier, I believe, but go ahead, doctor.

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A. I may have, I don't know. I don't remember.
Q. If James Long had been taken back to surgery earlier on the evening of August 20th, do you have an opinion as to whether he would have suffered hypotension and brain damage?
MR. JACKSON: Objection. Go ahead and answer.
A. I don't know.
Q. And do you have an opinion as to what point in time, if any, James Long's condition was irreversible in regard to the brain damage?
A. Could you restate the question, please?
(Record read.)
A. When he failed to wake up after the second surgery, that was when we had the first indication that he may have sustained a neurologic insult. But whether or not it was irreversible is not something that we could tell at that time.
Q. Did you provide any care or monitoring for him after his second surgery in the intensive care unit?
A. Probably I did take, I did participate in some point in his respiratory management in terms of getting him off the ventilator.

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Q. Do you have an opinion as to James Long's reasonable life expectancy if he had not suffered hypotension and severe ischemic brain injury?
A. I am not -- I can't make such a statement.
Q. Are you critical of any other health care providers that rendered care to James Long?
A. No.
MS. TOSTI: I have no further questions for you, doctor. I thank you for your time today.
MR. JACKSON: He will read it.
(Deposition concluded at 11:45 o'clock a.m.; signature not waived.)

Jean-Pierre Yared, M.D.

CERTIFICATE

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

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

I do further certify that this deposition was taken at the time and place specified and was completed without adjournment; that I am not a relative or attorney for either party or otherwise interested in the event of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, on this 10th day of February, 1999.

Vivian L. Gordon

Vivian L. Gordon, Notary Public
Within and for the State of Ohio

My commission expires May 22, 1999.

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