IN THE COURT OF COMMON PLEAS
OF CUYAHOGA COUNTY, OHIO

JULIA VERSAU, Individually and as Administratrix of the Estate of Laura Versau Nisbet Adams, deceased
Plaintiff,
vs. Case No. 477704
THE CLEVELAND CLINIC FOUNDATION,
Defendant.

DEPOSITION OF DELOS M. COSGROVE, III, M.D.
TUESDAY, APRIL 15, 2003

Deposition of DELOS M. COSGROVE, III, M.D., the Witness herein, called by the Plaintiff for examination under the statute, taken before me, Cynthia A. Sullivan, a Registered Professional Reporter and Notary Public in and for the State of Ohio, pursuant to notice and stipulations of counsel, at the offices of The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio, on the day and date set forth above, at 8:04 a.m.

EXAMINER 3/8/05

APPEARANCES:
On behalf of the Plaintiff:
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On behalf of the Defendant:
Reminger & Reminger Co., L.P.A., by
WILLIAM A. MEADOWS, ESQ.
LESLIE M. JENNY, ESQ.
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101 Prospect Avenue West
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DELOS M. COSGROVE, III, M.D., of lawful age, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

EXAMINATION OF DELOS M. COSGROVE, III, M.D.
BY MR. MISHKIND:

Q. Would you please state your name for the record?
A. Delos Marshall Cosgrove.
Q. Dr. Cosgrove, you and I have not met before. My name is Howard Mishkind, and along with Chris DeVito, I think you understand that we represent the family of Laura Adams. You do understand that, don't you?
A. Yes.
MR. MISHKIND: Let's mark this as Plaintiff's Exhibit 1.

(Thereupon, Plaintiff's Deposition Exhibit 1 was marked for purposes of identification.)

Q. Plaintiff's Exhibit 1 is a document that was sent over to me yesterday by your

attorney by e-mail. Would you just verify for me that this is a current CV?
A. Yes.
Q. It is current?
A. Yes.
Q. Doctor, just before I begin my questioning, I understand it's now about five after 8:00, and I was advised just actually by you off the record that you have a commitment at 9:15 today, so the deposition has to end for today at 9:15; is that true?
A. That's right.
Q. I'll do the best I can in terms of trying to accomplish as much as I can, but I don't know whether I'll be able to finish my questioning. We may have to get back together at another time.
A. My answers will be very short. I hope your questions are, too.
Q. I'll try to do that. You've had your deposition taken before, true?
A. I have.
Q. Have you ever been named as a defendant in a medical malpractice case?
A. Yes.

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Q. On how many occasions, sir?
A. I don't know.
Q. Can you give me an estimate?
A. Half a dozen.
Q. Are you currently a defendant in any medical negligence cases?
A. Yes.
Q. How many?
A. One; two counting this.
MR. MEADOWS: Show a continuing objection to other lawsuits.
MR. MISHKIND: That's fine.
Q. The other case, does it have similar issues to this case?
A. No.
Q. What is the subject matter of the other case?
A. It is aortic dissection.
Q. What was the nature of the surgery that you were performing?
A. It was relative to a cannulation site for an aortic valve replacement.
Q. It was an aortic valve replacement as well?
A. Yes, it was.

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Q. But in that case there was an aortic dissection at the time of the aortic valve replacement?
A. Yes.
Q. Intraoperatively?
A. Yes.
Q. Did the patient die?
A. No.
Q. What was the name of that patient?
A. I don't remember.
Q. It's a case that's filed here in Cuyahoga County?
A. I assume.
Q. Has your deposition been taken in that case?
A. No.
Q. Other than that aortic valve replacement case and this case, have you been involved as a defendant or an employee at the Cleveland Clinic in any cases that have involved aortic valve replacement surgeries where some complications occurred either intraoperatively or during the postoperative period?
A. No.
Q. Have you ever been named or been

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involved as the surgeon in any cases where complications occurred secondary to an aortic valve replacement surgery? I know that may sound like the same question I just asked you, but at any time either during the perioperative period or during the recovery period where you had done an aortic valve replacement.
A. Yes.
Q. Do you remember how many such cases?
A. No.
Q. Do you remember the name of any of those patients?
A. No.
Q. Have you ever served as an expert witness?
A. Once.
Q. What was the subject matter of that?
A. Coronary bypass surgery.
Q. Did that case involve valve replacement as well?
A. No.
Q. Where was the case that you were testifying in?
A. In Atlanta.
Q. How long ago was that, sir?

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A. 15 years.
Q. Were you testifying on behalf of the patient or on behalf of the physician?
A. Physician.
Q. Who was the physician that was named?
A. Joe Craver.
Q. Is that with a C?
A. Uh-huh.
Q. That's a yes?
A. Yes.
Q. That's the only time that you've been an expert?
A. Yes.
Q. You have written on minimally invasive aortic and mitral valve replacement?
A. Uh-huh.
Q. Correct?
A. Yes.
Q. I scanned your CV, and I came up with a few areas where I believe that there are articles that touch on aortic valve replacement surgery. Are all of the articles that you have published as it relates to aortic valve replacement set forth in your CV?

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A. Yes.
Q. Do you consider the articles that you have written on this topic to be authoritative?
A. They're my views.
Q. But in your opinion are they authoritative?
A. They're my views.
Q. Do you believe that they are reasonably reliable opinions on the subject matter?
A. Yes.
Q. Do you have anything that you are currently publishing or have submitted for publication on the subject of aortic valve replacement surgery?
A. No.
Q. Are all the articles that you've written on aortic valve replacement dealing with minimally invasive procedures, or have you written on both open sternotomy as well as minimally invasive?
A. Written on both.
Q. You have, Doctor, it looks like Dr. Klein's deposition?

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A. Yes.
Q. Have you read it over?
A. Yes.
Q. Did you make any notes at all when you read his deposition?
A. No.
Q. Did you note anything in the deposition or highlight anything in the deposition?
A. No.
Q. Did you turn back any pages in the depo?
A. No.
Q. When did you read the depo, Doctor?
A. In the last 24 hours.
Q. Is there anything that stands out from your recent review of the deposition that you believe to be noteworthy?
MR. MEADOWS: Objection. It's awfully broad. It was a long deposition.
MR. MISHKIND: Sure. I understand that.
A. I think you'll have to be more specific for me.
Q. I can certainly go through the

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entire deposition, a lot of the opinions that he expressed and statements that he made as to the patient's postoperative course --
A. I expect you will.
Q. -- although I don't know whether I'll be able to do that in the time we have today. That's why I was asking with specific regard to his involvement from the 18th of January until the time of discharge, are you able -- maybe I'll give it to you this way.
Are you able to comment at all on the medical management of this patient from the 18th to the time of discharge which is what I focused in with Dr. Klein on during the deposition?
MR. MEADOWS: Same objection. Go ahead and answer, if you can.
A. I don't know what the question is. I'm not sure.
Q. I was hoping to do it the simple way, but I guess I won't be able to do it that way.
Have you talked to Dr. Klein since --
A. No.

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Q. Let me finish. Have you talked to Dr. Klein since his deposition?
A. No.
Q. Have you talked to Dr. Klein about Laura Adams --
A. No.
Q. -- at any time since Laura Adams left the hospital?
A. No.
Q. Have you talked to Dr. Kerr, who apparently was your assistant during the surgeries, since Laura Adams died?
A. No.
Q. How about Dr. Rattlife, the pathologist, have you talked to him at all about the cause of the patient's death?
A. I've read his report. I haven't talked to him about it.
Q. You're talking about his pathology report?
A. Yes.
Q. Have you talked to anyone, Dr. Cosgrove, about this case outside of the Cleveland Clinic in terms of any of the complications or issues that arose with Laura

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Adams?
MR. MEADOWS: Other than us, right?
A. No.
Q. Other than your attorneys.
A. No.
Q. Have you reviewed any medical literature for purposes of today's deposition?
A. No.
Q. I take it that if you wanted reliable information as it relates to the indications for minimally invasive aortic valve replacement, the first place that you would look would be your publications, correct?
A. I deveioped the operation.
Q. I understand that, and I'm not in any way trying to suggest that you would need to look anywhere other than your publications.
A. I think I've read most of the literature that has been written on that topic.
Q. And certainly your publications and what you've written are as good if not better than what's out there by anyone else, correct?
A. That's your judgment.
Q. Do you agree with me?
A. I've done more than anybody else out

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there.
Q. So your publications and what you've written would probably be the best on the subject of minimally invasive aortic valve replacement, true?
A. That's a judgment that I can't make.
Q. You won't quarrel with me on that judgment, though, will you?
A. I wouldn't quarrel with you on anything.
Q. Is that a fair assessment, that what you have written is not only considered in your mind but by most of your colleagues to be the leading thought process in the leading literature on the area of minimally invasive aortic valve replacement?
A. You'll have to ask my colleagues what they think about that.
Q. You don't have an opinion on your own publications, or are you too modest?
A. I write what I think.
Q. I take it what you write and what you think you believe to be authoritative?
MR. MEADOWS: Objection, asked and answered. We've been through that.

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A. I write what I think. You know, I write what the facts are and what my thoughts are.
MR. MEADOWS: Let's go off the record.
(Discussion off the record.)
Q. You have not only journals but also book chapters on minimally invasive aortic valve replacement, true?
A. Yes.
Q. Some of your publications, are they in Topol's textbook?
A. No.
Q. Where are they?
A. One is in Topol's textbook, yes.
Q. Do you have a text that you have written on minimally invasive aortic valve replacement?
A. No.
Q. Where are the book chapters, what books?
A. I think they are listed in there (indicating).
Q. What comes to mind in terms of the most recent book chapter that you have

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published?
A. Well, I'm not sure I remember.
Q. Have you lectured within the last year on the topic of minimally invasive aortic valve replacement?
A. Yes.
Q. Where?
A. Probably --
Q. Most recently.
A. Kuala Lumpur most recently.
Q. I'm sorry?
A. Kuala Lumpur, Malaysia.
Q. How about within the U.S.?
A. I think most recently in Palm Springs.
Q. What was the occasion?
A. It was a meeting sponsored by Edwards Corporation for current strategies in cardiac surgery.
Q. Did you submit any written material at the time of that presentation?
A. No.
Q. Dr. Cosgrove, I take it that you believe that the surgical management of Laura Adams by you complied with the standard of care?

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A. Yes.
Q. With minimally invasive aortic valve replacement surgery, would you agree that there is less visualization of the heart as compared to when a full sternotomy is done?
A. I would agree with the heart. I would disagree in terms of the relevant areas for the aortic valve.
Q. When you're doing a minimally invasive valve replacement, are you the only one that's able to visualize the aortic valve?
A. No.
Q. How is the visualization appreciated by others in the operating room?
A. My assistant sees the same thing I see.
Q. What I have in my mind, and obviously I've not seen you perform the surgery, but sort of a keyhole view of the aortic valve. Is my assessment inaccurate, in other words, that you're looking into a very limited --
A. The incision is 6 to 8 centimeters.
Q. How is it that your assistant is able to visualize that during the course of the replacement with minimally invasive surgery and

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the technique that you use?
A. He looks right at it. You see the aortic valve the same way you would see it if you were doing it through a full sternotomy.
Q. Dr. Kerr was your assistant?
A. Yes.
Q. Where is Dr. Kerr located now?
A. I don't know.
Q. Is he affiliated with the Cleveland Clinic?
A. No.
Q. Dr. Kerr is an osteopathic physician?
A. Yes.
Q. Where was he in terms of his training?
A. He was a fully trained thoracic surgeon, cardiothoracic surgeon.
Q. How long had he been at the Cleveland Clinic back in '99?
A. He was coming back. He had been in practice in Buffalo for a number of years, and he came back and spent an additional year with us. I don't remember where in the course of the year that was.

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Q. Was this a fellowship?
A. Yes.
Q. A fellowship under your tutelage?
A. In our department yes.
Q. I'm sorry, sir?
A. In our department.
Q. Did you work with him on a regular basis?
A. Yes.
Q. When you did your aortic valve replacement surgeries, was Dr. Kerr back during that time period the assistant that you would have in most cases?
A. Fellows rotate with me for a three-month period. There was two of them, so they would help me during that three months of time.
Q. Do you remember who else was the other fellow besides Dr. Kerr at that time?
A. No. I don't remember, but he would have been in a different room at the time, not scrubbed on this case.
Q. This surgery was in January of 1999. Do you know when Dr. Kerr left the Cleveland Clinic?

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A. I don't.
Q. Do you remember Laura Adams?
A. Yes.
Q. You performed two surgeries on her, correct?
A. Yes.
Q. Both surgeries were on the 14th?
A. Yes.
Q. After the second surgery on the 14th, did you follow Laura through the time of her discharge?
A. Well, I think you have to understand how we do it here. Generally, we look after the surgical problems that are related to them, and the cardiologists look after the medical problems, and it goes from the intensive care unit. When she left the intensive care unit, generally they will transfer mainly to the cardiology service. So one of my team saw her. I may or may not have seen her, and I don't remember.
Q. Were you responsible for the decision that was ultimately made to discharge this patient?
A. No.

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Q. Whose responsibility was it to decide whether the patient should be discharged or should stay in the hospital?
A. A cardiologist decides that.
Q. It's not a shared responsibility between cardiothoracic and cardiology?
A. No.
Q. Do you have any opinions as it relates to whether this patient was an appropriate candidate to be discharged on January 24th from the hospital?
A. I didn't make the decision, so I'm not in a position to have an opinion.
Q. Again, obviously, you know the legal issues that are involved, so I just want to find out whether or not you intend to express an opinion on that topic.
A. No.
Q. When I asked you whether you remember Laura, you said, yes, you do. Do you remember anything about Laura after the second surgery in terms of your clinical assessment of her condition on the 15th or at any time that you saw her during the postoperative period?
A. No.

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Q. So your memory of her would have been --
A. Preoperatively.
Q. -- preoperatively and intraoperatively; is that fair?
A. Yes.
Q. Dr. Klein made some mention about Laura having an abnormal affect during the hospital. Did you encounter that in any respect?
A. I saw her preoperatively, and I thought she was a very hyper lady when I saw her preoperatively. It was a slightly strange affect.
Q. She was a young woman; was she not?
A. Yes.
Q. Is it unusual to be anxious when one is coming for cardiac or cardiothoracic surgery?
A. Everybody is anxious.
Q. So was her anxiety from what you perceived, was it outside of the realm of normal?
A. Yes.
Q. In what respect?
A. She seemed slightly inappropriate to

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me in some of her responses to things.
Q. Could you give me an example?
A. No, I can't. I just remember the impression. That was four years ago.
Q. Sure. I understand that. But the fact that you remember that it was somewhat inappropriate, even though you may not be able to give me a specific example, can you generalize at all in terms of was she rude to you?
A. No.
Q. Was she short with you?
A. No.
Q. Did she cut you off?
A. No.
Q. Did she disagree with what you were saying?
A. No. She was not argumentative at all.
Q. Can you verbalize anything that would give me a better understanding as to why you believed that her anxiety was outside of the realm of normal?
A. No. I can just tell you that's my memory of it. I can't remember specifically.

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Q. You won't be able to take the stand and say I remember her doing this or I remember her doing that which is an example?
A. I can remember my impression of her outright.
Q. Again, I'm trying to put words behind that impression.
A. I can't do it for you.
Q. Did her affect, her anxiety, in your opinion complicate the surgical approach?
A. No.
Q. Did it cause or contribute in any way to any of the intraoperative complications that you encountered?
A. No.
Q. This is just what you remember about her, but from a clinical standpoint can we agree that you didn't feel it to be significant?
A. It didn't affect the intraoperative portion of it.
Q. There's nothing about her affect and her personality that you believe caused or contributed to any of her complications, true?
A. True.
Q. The decision to do a minimally

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invasive aortic valve replacement with the homograft technique, did you discuss with the patient prior to doing the surgery the various techniques or options that existed for aortic valve replacement?
A. Yes.
Q. Based upon her prior medical history, her age, her physical condition, did you make certain recommendations to her?
A. No. I told her I'd do it either way. She could have a small incision or a large one.
Q. But in terms of using a homograft, were there other options that you had in terms of the AVR replacement?
A. Uh-huh.
Q. What were they?
A. Do a pericardial valve, a mechanical valve, but she wanted a homograft.
Q. Had she done, to your knowledge, any studying on the topic?
A. I don't remember whether she had or not, but she came -- I remember quite definitely that she wanted the homograft.
Q. Did you ever talk with her

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cardiologist back in Connecticut?
A. I don't remember whether I did or not.
Q. Do you have, Doctor, outside of the hospital records any notes at all about Laura Adams?
A. No.
Q. The reason I asked that is because you probably read when the deposition started --
A. Well, I don't keep those notes.
Q. So what Dr. Klein generated after the fact --
A. I didn't.
Q. -- you have not done that?
A. No.
Q. So what we have that has come from your mouth by way of dictation or your handwriting is in the Cleveland Clinic chart, true?
A. That's correct.
Q. You may or may not have had some communication verbally?
A. I may or may not have. I don't remember.
Q. There was a Dr. Grimm?

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A. Yes.
Q. Did he do the preoperative assessment on the patient?
A. Yes.
Q. Can you explain to me briefly, and again to try to streamline things, how the process takes place when a patient is referred to the Cleveland Clinic as a candidate for aortic valve replacement, what happens before they get to you, please?
A. They come in one of two ways. They are either referred directly to me, or they are referred through a cardiologist, or they come through them referred to me. As I remember, this lady was referred to me, and I always have a cardiologist see them preoperatively to do the clinical evaluation of the cardiac status, and I saw her preoperatively and discussed the findings with her and what we would do in the operating room.
Q. She came to the Cleveland Clinic, I believe, on the 13th. Did you see her on the day before the surgery?
A. I think I did. I can't remember the day I saw her exactly, a day or two before.

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Q. Was it your preference, Doctor, to do the procedure with an aortic homograft?
A. Not necessarily my preference. I always discuss with the patient all the various options for a valve replacement and the pluses and minuses of those, and I always do what they want to have done.
Q. What were the advantages of doing the aortic valve replacement with an aortic homograft?
A. The advantages are that it does not require anticoagulation, that it has the best durability of the tissue, operative advantages, and it's the most resistant to infection.
Q. The advantages of doing the aortic valve replacement by minimally invasive technique as opposed to an open sternotomy, could you just briefly tell me what those advantages are?
A. Less trauma in terms of less blood loss, smaller incision, better opportunity for reoperation in terms of not disturbing the pericardium over the right ventricular outflow tract, shorter stays in the ICU, shorter stays in the hospital, shorter recovery, less pain.

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Q. Are there any contraindications or relative contraindications to doing the type of procedure she needed by the minimally invasive route?
A. Yes, reoperations.
Q. Can you be more specific when you say reoperations?
A. I don't do reoperations --
Q. I'm sorry?
A. I don't do reoperations through a small incision.
Q. So that if there's a need for reoperations, it can be an open sternotomy?
A. If she had had a previous operation, I would not have done it through a small incision.
Q. Oh, I'm sorry. I understand. So that would be the only contraindication?
A. For an isolated aortic valve, yes.
Q. Is it unusual for a patient as young as she was to require aortic valve replacement?
A. It's a spectrum of a bell-shaped curve -- well, not bell shaped. The older you are, the more likely you are to require a valve replacement.

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Q. Tell me what your understanding was as to her presurgical cardiac condition in terms of her heart function aside from --
A. She had normal left ventricles, normal coronaries, a bicuspid aortic valve with aortic stenosis, an aortic insufficiency, and a dilated ascending aorta of 4.7 centimeters.
Q. She was not aneurismal, correct?
A. It depends on the definition of aneurismal. For somebody who is small, and she certainly had an abnormal-sized aortic valve, and it's been our experience that women, particularly who have enlarged aortas, are apt to have aortic dissections subsequently if you don't do something about them in the first operation.
So she was within 3 millimeters of reaching the definition of where almost everybody would do an aortic valve replacement or an aortic replacement. Most people do them at 5 centimeters. She was small, so relatively that was big for her. So you can call it an aneurysm or you can call it a relative enlargement.
Q. Was it your intent at the time of

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doing the replacement to address the aneurismal area as well?
A. Yes. That was part of the reason for using the homograft.
Q. Tell me who you remember meeting besides Laura prior to her surgery.
A. Her husband was there, but I don't remember who else.
Q. Do you recall anything about her husband?
A. No.
Q. Are you able to picture him physically?
A. No.
Q. Are you able to recall whether he participated in any of the discussions?
A. No. He was physically there, though.
Q. You don't know whether other family members were there?
A. I don't remember the other family members there. I remember that I wrote it in the chart that I discussed this with she and her family, and I didn't annunciate who in her family was there.

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Q. When you marked down discussed with her and her family, it could have just as easily been her and her husband used in sort of a general sense, true?
A. Yes.
Q. Did Laura, and I'm not asking you to tell me the specifics of what she asked, but do you recall her asking you any questions to understand better what it was that was being contemplated to be done?
A. No. I don't remember.
Q. Is that to say that she didn't, or you just don't remember one way or another?
A. I don't remember.
Q. Is there anything about your preoperative discussion with her that you remember in terms of any exchange between her and you?
A. No.
Q. You have a routine where you explain things, it probably rolls right off your tongue, in terms of explaining the advantages and disadvantages?
A. Yes.
Q. And the type of recuperation that

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will be involved, true?
A. Yes.
Q. As well as the potential complications that may ensue during the surgery?
A. I don't generally go through all the complications. I go through the risk of death.
Q. Besides the risk of death, you don't normally indicate any other complications?
A. I don't go through all of the list. Those would take about a half an hour.
Q. Do you go through anything besides you may die during the surgery?
A. I go through the choices of the prostheses. I tell them the type of incision, the risk of the operation, the length of the expected stay in the intensive care unit, the length of expected stay in the hospital, and the recovery time expected.
Q. What do you tell them about the risk of the operation?
A. I say it is 1 percent.
Q. That risk of 1 percent is a risk of what happening?
A. Dying.
Q. Are there any other risks of the

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operation that you explain other than the 1 percent risk of dying?
A. Generally, I don't go through all the other risks.
Q. Did you have any reason to believe in this case that you would have gone through any other risks other than dying?
A. No.
Q. The homograft that you used to replace the aortic valve, is there a name that you use for this type of homograft and this type of incision that you used?
A. I'm not sure I understand your question.
Q. I'll break it down. There's different incisions that you use in terms of approaching an aortic valve replacement, correct?
A. There hasn't been over the last few years, but yes, there are different options.
Q. As I understand it, there are several techniques that you can use in terms of making the incision.
A. This was a hemisternotomy.
Q. Hemisternotomy?

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A. Yes.
Q. Can you put into words as to how that incision was made?
A. Yes. You make about a 6 centimeter incision in the skin from over the manubrium, you cut the sternum down to the fourth right intracostal space and make an L over into the right and put a retractor in, and it brings you down on the aortic valve.
Q. Who did what you just described?
A. Dr. Kerr.
Q. Were you present when Dr. Kerr did it?
A. I don't remember.
Q. Do you know what time you arrived in the OR?
A. Not without looking at the chart.
Q. Please.
A. I'll tell you I arrived -- they didn't go on the heart-lung machine until I was there, if that helps you. I'll go back and look, if you'd like me to, at the exact hour, but I don't come in generally until -- they do not go on the heart-lung machine until I'm there.

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Q. Is it your testimony that up until the time that she was ready to go on the heart-lung machine you most likely would not have been in the room?
A. I don't remember.
Q. Is that a reasonable conclusion?
A. It's reasonable.
Q. As I understand it, you're limited to doing what, two cases?
A. You're allowed to have two people under operation at the same time.
Q. In fact, on that day did you have another patient under operation?
A. I don't remember.
Q. Those records are maintained; are they not?
A. Yes.
Q. Prior to January of 1999, how many of the homograft AVR surgeries using the minimally invasive technique had you performed?
A. I don't know without looking, but over a hundred.
Q. You continue to use the same technique?
A. Yes.

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Q. Have you modified the technique in any respect --
A. No.
Q. -- since January of '99, sir?
MR. MEADOWS: Objection. You can answer.
A. No.
Q. Since January of '99, so approximately three years, three or four years, how many additional AVR surgeries using a homograft through the minimally invasive technique have you performed?
A. I'm coming up on about 3,000 minimally invasive, and I can't -- about a third of those are aortic valves, and I can't tell you how many are homografts.
Q. Are the other two-thirds mitral?
A. Yes, or combinations.
Q. A combination of mitral and aortic valve?
A. Yes, or tricuspid.
Q. Her mitral valve was not involved, correct?
A. Correct.
Q. You, as I understand it, keep on a

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data entry system the number of AVRs that are performed at the Cleveland Clinic?
A. We have almost all the data.
Q. It indicates each patient and what the complications were that were incurred, true?
A. Yes.
Q. What has been your experience in terms of the life expectancy of the valve when replaced without complication intraoperatively or during the immediate postoperative period for this type of valve on a patient in her 30s?
A. The valve durability, you're asking me about?
Q. Right.
A. I can get the data out for you. I can't do it off the top of my head.
Q. Do you recall Dr. Klein indicating that with a woman in her 30s she probably would have required secondary valve replacement in a 15- to 20-year time period?
A. It probably would have been sooner than that actually.
Q. Less than 15 years?
A. Probably, yes.
Q. Can you give me an estimate as to

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when she probably would have needed it?
A. You know, I can do it much more accurately if I get the data out for you.
Q. Could you point me to where the data would be?
A. Yes.
Q. Where would that be?
A. Down the hall in Dr. Blackstone's office.
Q. Who is Dr. Blackstone?
A. He's our statistician.
Q. He's like the guy at the Cleveland Indians that keeps track of things?
A. Yes. I don't know about the guy for the Cleveland Indians, but he does keep track of our data.
Q. Of the aortic valve replacements using a homograft similar to Laura Adams, how many have you had to resort to an open sternotomy?
A. Our incidence of converting a closed minimally invasive operation to an open sternotomy is approximately 1 percent.
Q. Of the 1 percent that you have had to resort to an open sternotomy, what has been

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your death rate? In other words, did the 1 percent of patients survive or did they die?
A. The mortality rate for all the minimally invasive aortic valves is .7 percent.
Q. What about those that are resorted or reverted or converted to an open sternotomy?
A. I don't know that number.
Q. Is it reasonable to conclude that the mortality would be higher in that subgroup?
A. No, it wouldn't be.
Q. Why is that?
A. Because I don't have the data, I don't think I can assume that.
Q. So if you resort to an open sternotomy and are able to address the complication --
A. That's not always complications. In some cases it was unrecognized coronary artery disease. Sometimes it was unrecognized mitral valve disease. Occasionally, we had to place a chest tube. Sometimes it was because we couldn't cannulate. It was a variety of reasons.
Q. Are there any studies that address the incidence of complications when a minimally

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invasive is converted to an open sternotomy?
A. No.
Q. Do you know of any articles outside of what you have published that address that issue?
A. No.
Q. You indicate the overall complication rate is --
A. Conversion rate.
Q. Is?
A. It's 1 percent.
Q. 1 percent, and then the .7 percent is what?
A. The mortality rate.
Q. That includes conversion as well?
A. Yes. That includes everything.
Q. All comers?
A. Yes.
Q. Is the mortality rate higher as the patient's age is older?
A. I don't think we have enough deaths to make a statistically meaningful correlation between age and mortality.
Q. Would the mortality be higher where there is increased comorbidity?

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A. Usually, that's the case, but you're dealing with such a low operative mortality rate that in order to do a multivariable analysis to figure out what the comorbidity is and what the effect is, I don't know if you have enough deaths to make it statistically significant.
Q. How long have minimally invasive surgeries of this nature been performed?
A. I did the first one in 1996.
Q. Is this considered a standard approach to aortic valve replacement in the U.S. at this time?
A. It's my standard approach.
Q. That I appreciate, but do you know whether it's recognized as an accepted approach to aortic valve replacement by your peers throughout the country?
MR. MEADOWS: Objection to form and otherwise.
A. Well, certainly they're aware of it. I don't know whether they accept it or not. Most people practice it.
Q. Are you aware of anyone that feels that minimally invasive aortic valve replacement is contraindicated?

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MR. MEADOWS: Objection.
A. I'm sure there are such people. There are also people who don't believe in penicillin.
Q. So you would put people who don't believe in minimally invasive sort of at the extreme?
A. No. I didn't say that. I said that you can find any kind of opinion that you want.
Q. Are you the only one that's doing the minimally invasive as the chief cardiothoracic surgeon here at the Cleveland Clinic, or are there others?
A. My colleagues all use it.
Q. I'm sorry?
A. My colleagues all use it.
Q. How many surgeons are there in the department?
A. There are nine cardiac surgeons.
Q. Once Laura was placed on the heart-lung machine, you believe that -- strike that.
You would have been in the room at the time that the patient was placed on the heart-lung machine, true?

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A. Absolutely.
Q. Then can you tell me from the standpoint of the procedure itself what aspect of the initial aortic valve replacement you performed as opposed to Dr. Kerr?
A. The whole thing.
Q. What was Dr. Kerr's role?
A. He was my assistant.
Q. Physically was he assisting in any aspect of the surgery, or was he there to help you in the event that you needed an extra set of hands?
A. He assisted me. We worked together. He was on the assistant's side of the table, and I was on the surgeon's side of the table. I did all of the aortic homograft replacement.
Q. So he was on the opposite side of the table?
A. Uh-huh.
Q. When you are doing the minimally invasive surgery, is he able from where he's standing to visualize through the hole that you've created the aortic valve?
A. Yes.
Q. During Laura's first surgery, did

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you experience any complications?
A. Yes.
Q. The first complication that you experienced was ventricular fibrillation?
A. Yes.
Q. Reading through the operative report -- and trying to be as respectful as I can to your time, if I put words in your mouth, I'm sure you'll tell me I'm using the wrong phraseology -- was that at or about the time of closure?
A. Yes.
Q. Had you encountered that complication with ventricular fibrillation at or about the time of closure on any prior cases?
A. Jeez, I don't remember.
Q. Does any case stand out in your mind that you can say, yes, Mr. Mishkind, I remember?
A. We have almost 18,000 heart operations. I've had almost every complication you can imagine at one time or another, so this is not one of those common things that you expect to see.
Q. What is it, in your opinion, that caused the patient to go into defib at the time,

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at or around the time of closure which I show at about 10:23?
A. It appeared that she had an acute dissection of her left main coronary artery.
Q. What caused the acute dissection?
A. I assume that -- I don't know, to be honest with you. You know, she -- we placed sutures around the orifice of it. Whether that tore part of the intima of the artery and it went on to dissect, I don't know. She came off the pump initially fine, which she would not have done had she had a dissection.
So I assume the dissection must have taken place as the blood pressure got higher and she came off the heart-lung machine.
Q. When she is on the heart-lung machine, what position is she in bodywise?
A. Lying on her back.
Q. I'm sorry?
A. Lying on her back.
Q. She's lying on her back, okay. And when she came off the machine?
A. She's still lying on her back.
Q. What time frame are we talking about from the time that she came off the heart-lung

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until the time that she had the dissection?
A. About an hour.
Q. Now, look at your operative report on page 2, if you want to look at it, otherwise, I'm looking at a section where it says, as we were about ready to close the patient, the patient had ventricular fibrillation which did not respond to defibrillation multiple times; therefore, the incision was lengthened, the sternum was completely divided, and manual compression of the heart was begun.
Do you remember that taking place?
A. I remember she fibrillated. I don't remember the exact details of it.
Q. Who handled the chest compression? Was that you, or was that Dr. Kerr?
A. I don't remember.
Q. Now, you did a TEE at that time, correct?
A. Yes.
Q. It showed hypokinesia?
A. Yes.
Q. Was it of the left ventricular wall?
A. Yes.
Q. From a pathophysiology standpoint,

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what caused that?
A. Well, the concern was that she was not getting a normal blood supply to her left ventricle. I suspected something was the matter with her left coronary artery, and I put her back on the pump and reexplored that area.
Q. Was this secondary to the dissection?
A. Yes, I think it was.
Q. Now, why was the distal anastomosis and the left main anastomosis taken down at that time?
A. Because you can't get to the left main to see what the problem is until you take down the distal anastomosis.
Q. After checking for the area of dissection, then you had to reanastomose the area?
A. Yes.
Q. Do you use a different technique when you have to reanastomose now for a second time during the first operative procedure?
A. No.
Q. What is the technique that's used to reanastomose?

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A. It's a running proline suture.
Q. Literally, is it done by hand?
A. Yes.
Q. Were you doing the suturing?
A. Yes.
Q. Do you always do the suturing?
A. Yes.
Q. So Dr. Kerr would not have been doing this?
A. No.
Q. You indicate that the transesophageal echo was suspicious for no flow down the left main. Again, what was your concern at that point as to the cause for that?
A. She had a dissection. That was my concern.
Q. Again, that's all part and parcel of the dissection?
A. Yes.
Q. There were two episodes of ventricular fibrillation during this procedure; were there not?
A. Yes. She didn't have normal contraction after I did the one graft to the circumflex, so I did the second one to the

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diagonal.
Q. Had you ever encountered the multiple, and I don't mean to state that there were a lot of complications, but a number of complications similar to what you encountered during operation number one with Laura Adams?
A. I've had a lot more complications than this.
Q. After you did the reanastomosis, there still appeared to be severe impairment of the left ventricle?
A. Yes.
Q. And the anterior wall?
A. Yes. She started to get better.
Q. What are bulldogs?
A. Clamps.
Q. This procedure normally takes how long, Doctor, without intraoperative complications?
A. Four hours.
Q. This case took how long?
A. I don't remember. I haven't looked at the anesthesia sheet.
Q. Could you do that for me real quickly, please?

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MR. MEADOWS: Here you go (indicating).
A. It looks like she went to sleep at 10:00 and left the operating room at roughly 3:00.
Q. So the total procedure wasn't extended that drastically by these complications, but by another hour perhaps?
A. Probably longer than that, but it was extended.
Q. You say you have experienced with this type of surgery two episodes of ventricular fib like this on prior aortic valve replacements?
A. Yes.
Q. Did you have any options when after the cannulas were removed and she went into V-fib and didn't respond initially -- you recall she didn't respond to the defibrillation, and that's the point in time where the incision was lengthened; do you recall that?
A. Uh-huh.
Q. Were there any other options that you had short of resorting to an open sternotomy at that point?

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A. Not in doing bypass grafts. I had to do bypass grafts. I had to enlarge the incision.
Q. Did you know at that point when she was not responding to the defibrillation that you were going to have to do bypass grafts?
A. No.
Q. So when she didn't respond to the defibrillation, your decision was to do an open sternotomy?
A. One of the things is you can do a defibrillation, and you have a bigger chance to get paddles in to defibrillate her, so we could put bigger paddles in to defibrillate her.
Q. At that point you discovered that you were going to have to do bypass surgery?
A. Yes.
Q. Other than the dissection, was there any other reason that you had to do the bypass surgery?
A. No.
Q. So had there not been a dissection, she wouldn't have needed to have coronary artery bypass surgery?
A. Exactly.

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Q. Are there techniques that you have available in your arsenal in doing this type of surgery to minimize the likelihood of a dissection taking place?
A. Well, we're pretty careful with our sutures. That's the main thing.
Q. If one is not careful with the suturing, can that precipitate a dissection?
MR. MEADOWS: Objection.
A. Yes, it could, but I'm not sure we know what caused the dissection in this lady.
Q. Can you rule out the sutures as being a cause of the dissection?
A. No.
Q. Are you able to come up with anything that's more likely to be an explanation of the dissection in this case?
MR. MEADOWS: Objection.
A. Well, I think you have to figure that this is a pretty unusual complication in a lady who did have an enlarged aorta suggesting that she did not have normal tissues.
Q. So they were more friable?
A. One would assume so, yes. Certainly thinner, we know that.

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Q. Again, I'm trying to look at a differential in terms of the cause of dissection aside from sutures. Whether she had normal tissue or more friable or thinner tissue, carefully performed are there any explanations for a dissection that you can think of that would be more likely than sutures?
A. No.
MR. MEADOWS: Other than what he just told you. You just asked that question. He gave you an answer.
MR. MISHKIND: Okay. That's fine. I think the record will be clear.
Q. The sutures that were inserted, you did the suturing, correct?
A. Yes.
Q. When the dissection occurred, it indicates that you had to reanastomose the area. Did you remove the sutures?
A. Yes.
Q. Were you able to determine whether or not the sutures most likely caused the dissection?
A. I couldn't determine. She had a dissection at the origin which I sewed up, and

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then, because I am never sure whether you can completely obliterate the dissection, I elected to go ahead and do a coronary bypass on top of that for surety, to ensure she had blood supply to her heart.
Q. Would you agree that it is the desired intent when doing this surgery to avoid causing the dissection?
A. Yeah. I think I agree with that.
Q. I suspected that you would. Have you had dissections in AVRs before?
A. Yes.
Q. Have you had dissections in aortic valve replacements where they were caused by the sutures?
A. I've had dissections where I didn't suture, and I've had dissections where I did suture.
Q. Let's talk about the cases where you did suture. Were you able to determine whether or not the suturing was the cause of the dissection?
A. No.
Q. In some of those cases, were you able to come up with other explanations for the

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dissection?
A. Yeah.
Q. In those other cases, what were some of the explanations?
A. Coronary profusion cannulas. It's a fairly well-recognized cause of that.
Q. That's not the case in Laura's situation?
A. I don't know.
Q. You don't have an opinion to a reasonable degree of probability that that's what caused her dissection?
A. It's certainly one of the recognized causes of dissections of the coronary arteries.
Q. But again, in this case can you say to a probability that's what caused hers?
A. I can't say what caused hers. I don't know what caused that.
Q. Besides what you've just explained and the suturing, what else have you encountered that are causes of dissection?
A. Well, it's so rare that I've only seen about three of them, so I really can't tell you that.
Q. Why is it so rare, in your

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experience, that dissections don't happen?
A. Well, we don't sew inside the coronary arteries, so you would have to assume that -- you know, a dissection does begin within the artery, so it's unlikely that you're going to have disruption of the lining of the coronary artery. Sutures don't go in there.
Q. About two hours later she had to be brought back for surgery secondary to bleeding, true?
A. Yes. 3.5 percent of the patients come back for bleeding.
Q. Were you present at the time that the patient was transferred at the end of the first surgery to the intensive care unit?
A. I don't remember.
Q. Normally, with this type of surgery would there be a point in time that you would turn the matter over to your assistant?
A. Yes.
Q. Again, without specifically recalling this case, what would be your custom and practice in terms of when you would turn the case over, especially with the complications you had encountered?

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A. When the patient is hemodynamically stable, the tubes are out, they are off the heart-lung machine, bleeding is stopped, and you're ready to close the chest.
Q. How do you go about making certain that the reanastomosis is secure and that there is no bleeding at the time that the closure is done?
A. We suck, we look, and we put sponges in and wait until they come out without blood on them. We don't close them when they're bleeding.
Q. You would agree that the standard of care, especially after reanastomosing an area, is to make sure that there are no signs that there is a bleed from the anastomotic site, true?
A. We don't close people when they are actively bleeding.
Q. If there are signs that there may be inadequate reanastomosis, you need to make sure that you secure the area so as to prevent a bleed during the immediate postoperative period?
A. The only sign I know of of an inadequate anastomosis is bleeding.

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Q. I'm sorry, sir?
A. The only sign that I'm aware of of inadequate anastomosis is bleeding, and we don't close patients when they are bleeding.
Q. Did you have any discussion with the family in between the first surgery and the second?
A. I don't remember. I generally call people immediately after the patient is off the heart-lung machine.
Q. You have no reason to believe that didn't take place in this case?
A. I don't.
Q. As to what you said to Laura's husband or any family members --
A. I don't remember.
Q. You just can't recall that?
A. I don't.
Q. The nature of your conversation in terms of what happened and why the surgery was complicated, that's not reflected in any of your notes in terms of you discussed it with the family?
A. No.
Q. I know we've touched on this, but

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before the aortic valve replacement surgery was started, based upon her underlying coronary pathology you did not anticipate the need to do any type of coronary artery bypass surgery had the AVR gone without incident, true?
A. That's correct.
Q. Are the risks associated with aortic valve replacement, intraoperative risks, the same or different than the risks associated with mitral valve replacement?
A. Different.
Q. Are there greater intraoperative risks, or are there less intraoperative risks for AVR versus mitral valve?
A. The mortality rate is higher.
Q. For what?
A. Aortic valve.
Q. I'm sorry, sir?
A. For aortic valve.
Q. What is the mortality rate for mitral valve?
A. Three-tenths of 1 percent.
Q. Is this the nationwide rate or your personal?
A. It's my personal. The nationwide

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rate is about three or four times that for both procedures.
Q. Without going through Laura's preoperative history, you've told us about her stenosis, you've talked about some of the regurgitation and things of that nature, but was she in your opinion at increased risk for complications secondary to dissection more so than any other patient undergoing this type of surgery?
A. No.
Q. The time that she was on the heart-lung machine was obviously increased by virtue of having to reanastomose the area, true?
A. Yes.
Q. Let's jump ahead to the second surgery. How did you get called; do you recall that?
A. No.
Q. Obviously, someone beeped you and said --
A. I don't remember.
Q. But you did come back?
A. I don't remember the details of it.
Q. Well, the second surgery has you as

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the surgeon and Dr. Kerr as the assistant.
A. Yes.
Q. Did you do that surgery?
A. I don't remember. If it says I did, I did. I have no memory. I have no memory of the second operation.
Q. You signed it, but Dr. Kerr dictated the report.
A. My residents dictate all my operative notes.
Q. The same as for the first one, correct?
A. Yes.
Q. But in all fairness, what you're telling me is that you don't remember the surgery to repair the bleeding point --
A. I don't.
Q. -- in Laura Adams?
A. No.
Q. Am I correct that you may or may not have done the surgery?
A. You're correct.
Q. Is there any way for us to be certain by way of some document as to whether or not you were the surgeon that did the repair of

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the homograft?
A. I don't know what that would be, no.
Q. If you didn't perform the surgery, obviously it would have been Dr. Kerr, true?
A. Yes.
Q. Simply because you signed it at the end, as you did on the other one, doesn't mean that --
A. Right.
Q. -- you were present for the surgery, true?
A. Right.
Q. Did you see the sine angiograms before the surgery was done?
A. I'm sure I did.
Q. Did you make any comment at all in the hospital records as to what the findings were?
A. No.
Q. Understanding that you may or may not have been present for the second surgery, tell me what your understanding is as to the reason she needed to have the emergent operation?
A. She was bleeding from the distal

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anastomotic site.
Q. Was that the area where there was the dissection?
A. No.
Q. Was there a dissection of the left main coronary ostia?
A. Yes.
Q. What caused the dissection of the left main coronary ostia?
A. I think we just talked about that.
Q. Was that during the first surgery?
MR. MEADOWS: Objection. You went through that whole series.
A. We just went through the whole business about the dissection of the left main coronary.
Q. I thought I asked you, and maybe I misunderstood what you explained in terms of the reason that she had the bleed.
A. She had the bleed from the distal anastomosis of the aorta, from the homograft to the distal aorta, which is not related to the coronary ostia. They are different sites.
Q. That's what I want to make sure I understand. Your explanation to me is that the

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dissection of the left main coronary ostia was --
A. A different surgical site.
Q. That was surgery number one, correct?
A. Do you understand what a homograft looks like?
Q. I do, yes.
A. The anastomosis to the left main is in a different site than is the distal anastomosis where she was bleeding.
Q. Again, maybe I'm making my question more complicated than I need to, but the bleeding that took her back into the second surgery was a different location than the dissection that occurred during the first surgery?
A. Yes.
Q. Okay. That's all I meant. Obviously, I convoluted my question. I just wanted to make sure that we were talking about two different sites.
In the operative report it says that she had excessive bleeding from her chest tubes. Can you explain that to me? Why would there be

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excessive bleeding from the chest tubes?
A. Anybody that bleeds more than 300 or 400 cc's we consider abnormal and take them back to the operating room. Everybody bleeds some from their chest tubes. That's why we leave them.
Q. The operative report dictated by Dr. Kerr, it says that the distal anastomotic site of the homograft did appear to have a bleeding point coming from the posterior aspect which was repaired with a single 4-0 pledgeted proline stitch.
Would you have used a 4-0 pledgeted? It's standard to use?
A. (Indicating.)
Q. That's a yes?
A. Yes.
Q. In terms of the reason that she developed a bleeding point at the posterior aspect when she didn't have a bleed at the time of closure, can you explain that to me?
A. I can't.
Q. What are some of the potential causes for a bleed from the distal anastomotic site so close in time to the conclusion of the

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first surgery?
A. Most commonly a patient gets hypertensive.
Q. How does one monitor that to appreciate any potential of hypertension?
A. We have an arterial line, and we constantly measure the blood pressure.
Q. Do you know whether she was being monitored?
A. I'm sure she was.
Q. What other steps do you take as a surgeon to minimize the potential for bleeding from the distal anastomotic site at the time of closure during the first surgery?
A. I'm sorry. I don't understand your question.
Q. That's all right. Every once in a while it's confusing.
What steps do you take to minimize the potential for a bleed from an anastomotic site?
A. You want to know how I do the technical to do the anastomosis?
Q. That's probably going to be the easiest way to explain it.

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A. I use a 4-0 proline, large bites close together. I evert the distal anastomosis so I get double layers of the distal aorta. After it's all finished, we check to make sure there's no bleeding.
Q. Have you ever encountered, ever encountered, within a two-hour period a bleed from a distal anastomotic site on one of your cases?
A. Yes.
Q. How many times has this happened to you?
A. In the last 18,000?
Q. Yes.
A. I'm not sure I can tell you. I can tell you the reoperation for bleeding rate, and I told you that.
Q. I'm being very specific, though, in terms of the distal anastomotic site.
A. I had one yesterday.
Q. Within two hours?
A. Yes.
Q. What caused that?
A. It was a bleeding between sutures.
Q. Do you know why that happened?

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A. I don't.
Q. Are there steps that you should have taken to have minimized the likelihood of that happening?
MR. MEADOWS: Objection.
A. I thought I did.
Q. Since this is not something that has never happened to you before, I presume over time you analyze why a bleed occurs from a distal anastomotic site, true?
A. Uh-huh.
Q. That's a yes?
A. Yes.
Q. And you take steps to either improve on your technique or to minimize this potential complication from occurring, correct?
A. Right.
Q. I take it that's the standard of care, to minimize and to appreciate the risk of this happening, true?
A. Yes. I would suspect that there's probably no surgeon alive who does very much of this surgery who hasn't had bleeding from an anastomotic site. This is one of the complications of surgery, is bleeding, and it

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happens from all sorts of locations.
Q. Now, aside from the bleed from the distal anastomotic site, were there any other complications that resulted in her having to go back in for surgery?
A. No.
Q. What was done, whether it was you or Dr. Kerr or both, at the time of the second surgery?
A. One stitch was placed that stopped the bleeding.
Q. Did she have to be put back on the heart-lung?
A. No.
MR. MEADOWS: Off the record.
(Discussion off the record.)
Q. When the second surgery was performed, the chest had to be reopened, the sternum was reopened, correct?
A. Yes.
Q. At that time Dr. Kerr or you evacuated the clot that had formed around the heart and then evaluated the graft sites, or someone evaluated the graft sites, correct?
A. Uh-huh.

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Q. That's a yes?
A. Yes.
Q. Did the reopening of Laura's chest, in your opinion, increase her risk for infection?
A. No.
Q. Why?
A. Why do you think it would?
Q. Doesn't the reopening of a chest twice for open heart surgery or a sternotomy, doesn't that increase the potential for infection?
A. Not in our experience.
Q. Are you aware of any literature that would speak to the contrary?
A. No.
MR. MEADOWS: Objection.
Q. So your experience is that the reopening of the chest didn't put her at any greater risk of development of infection?
A. That's our experience.
Q. By the way, do you know Dr. Tyrone David?
A. Yes.
Q. How do you know him?

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A. Professionally.
Q. Have you talked to him about this case?
A. No.
Q. Are you aware of the fact that he has written a report in connection with this case?
A. No.
Q. Did you suggest him as an expert on behalf of the Clinic?
A. No.
Q. When you say you know him professionally, that's sort of a loose term. It's like me saying I know Mr. Meadows professionally.
Have you lectured with him?
A. Yes.
Q. On how many occasions have you lectured?
A. With him? He has lectured here. I've lectured in Toronto.
Q. He has invited you; you've invited him?
A. Yes.
Q. On how many occasions has that taken

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place?
A. He was a visiting professor here a number of years ago, and I was a visiting professor there a number of years ago.
Q. Have you and he authored or coauthored any articles?
A. No.
Q. Have you and he appeared outside of the Toronto-Cleveland Clinic arena at any symposiums or seminars and presented at the same time?
A. Yes.
Q. On how many occasions has that taken place?
A. We have debated on a couple of occasions.
Q. I'm sorry?
A. We've debated on a couple of occasions.
Q. I take it by that that there are issues that you and he don't necessarily agree upon?
A. That's correct.
Q. What are some of the issues?
A. We've debated about stentless

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valves.
Q. What is your position on stentless valves?
A. I developed one for the Edwards Company that I've never used or implanted, and he developed one.
Q. I'm sorry?
A. He developed one that's manufactured by St. Jude that he uses or has used.
Q. When is the last time that you and Dr. David had any contact?
A. Let's see, three months ago.
Q. What was the occasion?
A. I'm trying to think. It was -- no, it was two months ago. I saw him in Miami, and we were both speaking at a meeting.
Q. So it's your testimony, Doctor, that the fact that she had undergone surgery followed by a reoperation in the afternoon for bleeding did not increase her risk for infection, true?
A. In our experience that is the case.
Q. Would you agree that the risk of infection increases as cardiopulmonary bypass time increases?
A. Yes.

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Q. Would you agree that the risk of infection increases not only as cardiopulmonary bypass time increases, but also as the necessity to reexplore and reanastomose an area increases?
A. No.
Q. That's not been in your experience, that phenomenon?
A. That's correct.
Q. How does one quantify the increased risk of infection based upon increased cardiopulmonary bypass time? Is there some type of quantification?
A. Not that I'm aware of.
Q. Just that you recognize that the longer the time, the greater the risk of infection?
A. Uh-huh.
Q. True?
A. Yes.
Q. Were you the one that prescribed the Zinacef?
A. It's one of our standard orders.
Q. That's 1.5 grams, and it was q 12 hours time three?
A. I think that's the standard order.

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I'd have to look. I don't remember.
Q. With the increased pump time, are there occasions where you will modify those standing orders?
A. No.
Q. So even though there's an increased risk of infection, the standing orders for Zinacef, 1.5 grams q 12 hours times three, remains without modification?
A. Yes.
Q. Have you reviewed the postoperative records?
A. Yes.
Q. Have you reviewed the records to determine when you last appear to have been involved actually by way of making some type of a note in the record?
A. I don't think there is any notes in there by me.
Q. I believe that there may be a reference to you seeing the patient.
A. I don't think I wrote in the chart, though.
Q. But would you agree that there's a reference to you seeing the patient I think on

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the 15th?
A. I don't remember.
MR. MEADOWS: Can you show him what you're referring to?
MR. MISHKIND: I don't have -- well, maybe I can.
Q. As I'm looking for it, in reviewing the records, you did not see any entries made by you?
A. No.
Q. Who from your team was responsible for monitoring the patient during the postoperative period?
A. Dr. Kerr and my other resident, who I don't remember.
Q. Ultimately, would you have been responsible for Dr. Kerr and your other resident?
A. Yes.
Q. Do you have any recollection of discussing the case with Dr. Kerr or your other resident during the postoperative period?
A. No.
Q. There was a thoracentesis that was performed on January 22nd, 1999. Was that done

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by your team?
A. Yes.
Q. There was a Dr. Marullo. Might that have been the other resident?
A. It's possible.
Q. Do you know why a thoracentesis was required on January 22nd?
A. Because she had a pleural effusion, right.
Q. Was there a culture done on the fluid drained from the thoracentesis?
A. I don't know.
Q. Have you ever performed a thoracentesis?
A. Yes.
Q. On postoperative patients?
A. Yes. Not in a long time.
Q. When you performed a thoracentesis on a postoperative patient where there was fluid drained, did you normally perform a culture on the fluid?
A. Usually.
Q. Do you have any explanation in this case as to why there wasn't a culture done?
A. I don't know if there was or wasn't.

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Q. Assuming that there wasn't one, do you have any explanation why a decision not to perform a culture would have been made?
A. It was done as a therapeutic therapy, and it probably didn't look like it was infected.
Q. Even though it's done therapeutically, when you drain fluid, that doesn't mean that one can't do a culture on the fluid, correct?
A. Correct.
Q. Do you know of any reason in this case why a culture couldn't have been done on the fluid?
A. No.
MR. MISHKIND: Did you find the note?
MR. MEADOWS: No.
MS. JENNY: I looked for it, Howard. I didn't see it.
MR. MISHKIND: Off the record.
(Discussion off the record.)
Q. Doctor, according to the hospital records, the patient had temperature elevations each day after surgery, but blood cultures, at

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least according to my review, were done on January 17th and on January 18th, but no additional blood cultures were done after that time.
Do you recall, first, that blood cultures were done on the 17th and 18th?
A. Only from reading the chart.
Q. I think there were a total of five blood cultures, times three on the 17th and times two on the 18th. Does that ring true to you?
A. Yes.
Q. Do you know why there were no blood cultures done after the 18th?
A. No.
Q. Do you have an opinion as to whether or not blood cultures should have been done after the 18th?
A. We don't routinely do blood cultures on everybody every day that has a fever in the hospital because almost every patient after cardiac surgery has a fever.
Q. In this particular patient, though, do you know whether the decision when the patient continued to have elevated temperatures

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where she was on aspirin, where she was on Tylenol, where she also had an increase in her WBC, why a decision was not made after the 18th to do any repeat blood cultures?
MR. MEADOWS: Objection to form and foundation.
Q. I'm sorry, Doctor. Go ahead.
A. I wasn't party to the decision.
Q. Do you know or do you have an opinion to a probability as to what blood cultures would have shown had they been done on or prior to the date of discharge?
A. I don't think you know what blood cultures will show until you do them.
Q. So you don't have an opinion based upon the totality of this case as to whether or not the blood cultures would have been positive?
A. I don't know.
Q. There was also an order for a repeat CBC that was ordered on January 24th but, at least according to what I've gathered from Dr. Klein's depo and the records, there doesn't appear to be any evidence that that CBC was done, and make that an initial statement.
Do you recall, first, seeing the

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discussion in Dr. Klein's depo about that?
A. Yes.
Q. Do you recall seeing that there was an order for a CBC on the 24th?
A. I haven't seen that order.
Q. You certainly have no reason to take issue with what the record says or what Dr. Klein indicated, true?
A. No.
Q. If a CBC is ordered on a patient that is being discharged or the plan is to discharge the patient and the patient has continued to have elevated temperatures, has an increased white blood count, would you agree that it would be reasonable and prudent to perform the CBC on the patient certainly before the patient is discharged from the hospital?
MR. MEADOWS: Objection.
A. I think it's reasonable to do it and reasonable not to do it.
Q. But if it's ordered and there's an indication for it, would you agree that it should be done?
MR. MEADOWS: Objection, asked and answered.

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A. If it's ordered, it should be done.
Q. Do you know of anything from what you've learned by reading Dr. Klein's depo or looking at the hospital records as to why the CBC was not done prior to discharge?
MR. MEADOWS: Objection.
A. I don't know why it wasn't done. I don't know. Dr. Klein speculated on it. I can only speculate on it.
Q. Yours would be double speculation, speculating on what Dr. Klein has speculated?
A. I guess.
Q. There was some suggestion in the deposition of Dr. Klein that he felt that the patient was anxious to get home, back to Connecticut. Do you have any evidence that you can rely upon to say that you concur with that?
A. I wasn't party to any of that portion of the hospital decision.
Q. The fact that this was your patient that had to have two surgeries within a short period of time on the 14th and then had elevated temperatures, she had an elevated white blood count, she had the fluid drain from the thoracentesis and other symptoms that were going

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on, is there a reason why you were not consulted --
A. She had --
Q. Let me finish first, and then you can go ahead.
Is there any reason why you were not consulted as it relates to the decision whether this patient was appropriate to be discharged given the fact that she was going to be going back to Connecticut as opposed to staying in the Cleveland area?
MR. MEADOWS: Objection to form and foundation. Go ahead.
A. She had a normal echocardiogram, she had normal blood cultures, she had a defervescent temperature, and she was clinically getting better. It was a judgment call that she was discharged. I didn't make that call.
Q. Would you have made that call?
A. I wasn't on the spot. I can't say.
Q. Would you agree that the temperatures that she had were suppressed to some degree by the 81 milligram aspirins that she was taking on a daily basis?
A. It's possible.

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Q. And also the Tylenol given on seven occasions?
A. It's possible.
Q. She also received a dose of Percocet on one occasion. Do you recall that?
A. Everybody gets Percocet after heart surgery. They hurt.
Q. She also had multiple IV doses of Toradol, correct?
A. Yes. I assume she did if you say so.
Q. That is used for pain control, correct?
A. Yes.
Q. It's a nonsteroidal anti-inflammatory?
A. Yes.
Q. The anti-inflammatory property of the drug may also mask temperature spikes, true?
A. It's possible.
Q. She appears to have what I would describe as an unusual amount of incisional pain for a patient ten days post-op. Would you agree with that?
A. I wasn't daily evaluating her pain,

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and I think it's probably hard for you to evaluate it, too.
Q. It's probably more difficult for me to evaluate it than for you to evaluate it. I don't mean to be flippant by that, but do you recall seeing that there was at least ongoing complaints of incisional pain?
A. She had pain. She had pains in her left arm, too, and she had that preoperatively, and there was pain in the right arm. She had a pain consult, a neurologic consult, she had numbness of her face, all of which was negatively worked up.
Q. I totally agree with you, but in addition, Doctor, there was, at least on the record, and obviously the record will speak for itself, but from what I gathered there appeared to be incisional pain that continued for the ten-day postoperative period. Whether one calls it unusual or normal, can we at least agree that there was incisional pain that she had in addition to the other complaints of pain?
MR. MEADOWS: Objection to form and the colloquy that preceded the question. Go ahead and answer the question, Doctor.

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A. Everybody has pain after heart surgery.
Q. Would you agree that severe persistent pain and incisional tenderness may be an indication of a mediastinal infection?
A. Yes.
Q. Would you agree that her white blood count was increasing before discharge?
A. Yes.
Q. And that she had persistent at least low grade temperatures during the postoperative period?
MR. MEADOWS: Objection to form, vague.
A. She did have temperatures up until she went home, but it was gradually coming down, and everybody has temperatures after heart surgery.
Q. If a CBC with a differential had been done on the 24th, would that have shown whether there were indications of an infectious process?
A. I don't know.
Q. At any time during the postoperative period was an infectious disease consult

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requested?
A. I don't know. I don't think so.
Q. Now, on the 22nd, Doctor, when the thoracentesis was done, that day her WBC was elevated to 15.94, and the record indicates that she continued to have persistent low grade temperatures. I think you told me that there was some concern about pleural effusions.
A. She had a right pleural effusion.
MR. MEADOWS: Objection. You're giving a speech and then asking the question. I'm going to move to strike the statement you make before the question.
MR. MISHKIND: You know what I'll do, I'll even withdraw it and restate it.
MR. MEADOWS: That would be great.
MR. MISHKIND: How is that?
MR. MEADOWS: That would be great.
Q. A thoracentesis was done on January 22nd, 1999, true?
A. Yes.
Q. Will you assume for purposes of my question that her white blood count on that date was 15.94?
A. Yes.

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Q. And that she was continuing to have persistent low grade temperatures during the postoperative period up to and including the 22nd?
A. Yes.
Q. Are those findings consistent with a potential infectious process?
MR. MEADOWS: Objection to form, vague.
A. They're consistent with a lot of things, one of which is a normal postoperative course, and one of them is infection.
Q. So infection certainly could not be ruled out as of January 22nd, true?
A. True.
Q. The thoracentesis being performed on January 22nd was done because of pleural effusions?
A. Yes.
Q. Pleural effusions may be associated with mediastinal infections, true?
A. Yes.
Q. Had they cultured the fluid, would you agree that if in fact there was a mediastinal infection, there was enough fluid

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that was drained during this therapeutic thoracentesis that there would have been a sufficient quantity of fluid to perform a culture on the fluid?
MR. MEADOWS: Objection to form and any assumptions within the question.
A. Do you want to ask that again? I'm a little vague as to what you're asking me.
Q. Sure.
A. Was there enough fluid to culture?
Q. Yes.
A. 1,700 cc's, yes.
Q. If a culture had been done, I think what you told me before is you don't know whether or not an infection would have been diagnosed, true?
A. True.
Q. If an infection had been diagnosed based upon the culture, would you agree that the patient most likely would have needed to remain in the hospital for further treatment?
MR. MEADOWS: Objection.
A. We don't send patients home with infections.
Q. Do you have an opinion to a

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probability as to whether it would have been reasonable and prudent to send Laura Adams home had she been cultured from the thoracentesis and an infection diagnosed, knowing that as of January 24th her white blood count was still elevated and knowing on the 24th that she still had a low grade temperature?
MR. MEADOWS: Objection to foundation.
A. I don't understand what your question is.
Q. What circumstances would you discharge a patient after a thoracentesis is done on day eight following this type of surgery where there is evidence of an infection?
A. I still don't understand your question.
Q. You say that sometimes we send patients home after a thoracentesis. Where there is an infection --
A. Absolutely we do. About half our patients on the floor have a thoracentesis.
Q. When a patient is going to be going from Cleveland to Connecticut --
A. Yes.

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Q. -- you need to be more concerned about the medical management of that patient as opposed to someone that's going to be staying in the Cleveland area and can be seen by you or one of your colleagues, true?
MR. MEADOWS: Objection.
A. I think we're equally concerned about everybody we send home.
Q. If you have a concern about a patient that has an infection, are there occasions where you will discharge a patient but tell them that they should stay in the Cleveland area for 24 or 48 hours before they return to their homeland, whether it's out of the country or in the country?
MR. MEADOWS: Objection.
A. It totally depends on the individual case.
Q. Do you intend to provide an opinion in this case hypothetically if the thoracentesis had been performed and a culture obtained on the fluid and an infection was diagnosed whether it would have been reasonable to discharge Laura Adams two days later on January 24th?
MR. MEADOWS: Objection to form.

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A. Tell me what the question is again.
Q. Sure. If the thoracentesis had been done and a culture obtained and that culture came back indicating that she had an infection, do you intend to provide an opinion at trial that in that setting it would have been reasonable to discharge the patient two days later?
MR. MEADOWS: Objection.
A. The assumption is that she -- the question is, am I going to give an opinion at trial?
Q. Well, let's start with today. Do you have an opinion whether it would have been reasonable and acceptable care to have discharged Laura if the thoracentesis had been done with a culture obtained and the culture returned indicating that she had an infection?
MR. MEADOWS: Objection.
A. If she had an empyema, we probably would not have sent her home, and she would have been a hell of a lot sicker. She wouldn't have even been able to stand up. She would have been too sick.
Q. Short of an empyema, what else would

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you have --
A. That is the definition of an empyema, fluid in -- bacteria in the pleural space, that's an empyema.
Q. Patients are always going to be sicker than she?
A. They're going to be very sick. I've never seen one that wasn't very sick with an empyema.
MR. MEADOWS: We're coming up on 45 minutes past our estimated close time here.
MR. MISHKIND: I know. I said it was an estimate. Off the record.
(Discussion off the record.)
Q. Do you know why Laura was discharged from the Cleveland Clinic with a white blood count of 15.94?
A. No.
Q. Do you know why she was discharged and not given any antibiotic therapy to take at the time of discharge?
A. No.
Q. Would you have prescribed antibiotics for this patient to take?
A. I don't know.

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Q. I'm sorry?
A. I don't know. I wasn't the decision-maker, and I wasn't looking after her at this point.
Q. I take it you don't have an opinion, considering you weren't the decision-maker, whether it was or was not appropriate to discharge Laura on January 24th?
A. I do not have an opinion.
Q. Do you have an opinion as to whether it was appropriate to clear her to return to Connecticut rather than stay in the area, assuming it was appropriate to discharge her, on January 24th?
A. No.
Q. You indicated that she would have been in much more pain had she had an empyema. If a culture had been done on the thoracentesis, do you have an opinion as to what it likely would have shown?
A. No.
Q. At the time of the autopsy -- you've seen the autopsy, haven't you?
A. Yes.
Q. Do you have a copy of it there?

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A. Yes.
Q. I'm going to get it in front of me, and you can certainly feel free, if you want to, or you probably have it memorized.
In the autopsy it indicates that one of the findings was acute suppurative necrotizing bacterial aortitis.
A. Aortitis.
Q. Gram-positive cocci?
A. Yes.
Q. Can we agree that given that final finding that it's likely that had a culture of the thoracentesis fluid on January 22nd been obtained, it would have shown evidence of gram-positive cocci infection?
MR. MEADOWS: Objection, calls for speculation.
A. Absolutely not.
Q. Why?
A. Why would it?
Q. Why do you say it wouldn't have?
A. You said the supposition was that it would have shown, and I'm saying the infection is on the inside of the blood vessel and the fluid is on the outside. I don't think that

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they're related.
Q. Okay. So simply because she had gram-positive cocci bacteria, there's no reason to conclude that had a thoracentesis been done the bacteria would have been discovered?
A. Absolutely.
Q. What about if a CBC had been done on January 24th with a differential, do you have an opinion as to whether or not that bacteria would have been discovered?
MR. MEADOWS: Objection, calls for speculation. It's been asked and answered.
MR. MISHKIND: Well, actually not this particular one.
MR. MEADOWS: Yes, it has.
MR. MISHKIND: I appreciate it, but go ahead, Doctor.
A. A CBC wouldn't have discovered the bacteria.
Q. What would have had to have been done, a blood culture?
A. She probably would have had to have a culture of her aorta.
Q. Are you suggesting blood cultures would not have detected it?

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A. It's possible.
Q. It's possible that it would have detected it?
A. It's possible that it wouldn't have detected it.
Q. And it's also possible that it would have detected it?
A. It's possible.
Q. Would you agree that the probability of the patient surviving would have been increased had there been evidence prior to the discharge that she had a gram-positive cocci infection?
A. No.
Q. Subject to being treated?
A. No.
Q. Why?
A. It was a yes or no question. What's the question now?
Q. Why do you say that her likelihood of survival wouldn't have been greater had she had infection, a gram-positive cocci infection, diagnosed on January 24th and treated as opposed to --
A. She would have ruptured her aorta

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here in the hospital, and she would have died, too.
Q. If she had ruptured her aorta in the hospital, wouldn't she have had a better likelihood of survival being in the hospital as opposed to being at home?
MR. MEADOWS: Objection.
A. Pretty small.
Q. So you think that she was doomed regardless?
A. I didn't say that, did I?
Q. Well, you said that if she had a gram-positive cocci bacterial infection that caused a rupture of her aorta --
A. I said if she ruptured her aorta in the hospital, people with aortic stenosis very seldom survive if they've had a cardiac arrest on the floor.
Q. What types of symptoms do you look for in a patient that has a gram-positive cocci infection that indicates a change in hemodynamic status?
A. I've never seen a gram-positive infection on an aorta.
Q. So when you look at this autopsy

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where it says acute suppurative necrotizing bacterial aortitis, you've never seen that before?
A. No.
Q. Where it says rupture of infected necrotic aortic arch adjacent to the cannulation site, do you have an explanation as to what caused the aortic arch adjacent to the cannulation site to become infected?
A. It said it had spread.
Q. I'm sorry?
A. It said in the autopsy report that it had spread.
Q. Spread from where?
A. The infection had spread from the homograft to the aorta.
Q. How do you prevent a spread of an infection from a homograft to the aorta?
A. Since I've never seen an infected aorta before, I don't know.
Q. An infected homograft, you mean?
A. Right.
Q. If you suspect that there is an infection, though, you obviously need to treat it, correct?

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A. If I had never seen one before or read of one before, it would be hard to suspect one, wouldn't it?
Q. Except you know what the signs and symptoms are of an infection even though you might not be able to isolate exactly where the infection is within a patient's body, correct?
A. How am I going to treat it? The only way you're going to treat it is get it out of there. How are you going to diagnose it? You've tried with blood cultures, you've tried with echo, and no one has ever seen it before, so how are you going to suspect it?
Q. The fact that she had five blood cultures, the 17th times three, the 18th times two, that were negative, that doesn't mean that she wouldn't have had positive blood cultures on the 19th to the 24th, correct?
A. True. That's why I do them, because you don't know.
Q. Because of the fact that they didn't do blood cultures on the 19th through the 24th, we don't know what the blood cultures would have shown?
A. We don't, and how would we have

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known to suspect an aortic infection when no one has ever seen one before?
Q. Do you have to automatically conclude that it's an aortic infection to be able to -- strike that.
A. That's what it says.
Q. I understand that, but if this patient had been operated on by you twice on the 14th, she had increased heart-lung time, so she was at increased risk of infection?
A. She did.
Q. Right?
A. Right.
Q. And if she has signs and symptoms at least that are suggestive of an infection, what you're saying is that the only way to treat this patient would have been to go back in and to remove the homograft?
A. Yes.
Q. Had you been consulted, hypothetically the patient had been kept in the hospital because there was a concern about an infection, additional blood cultures were done, cultures were taken on the thoracentesis and there was reason to keep the patient in the

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hospital and the conclusion was that she had an infection, would you have gone back in and removed the homograft?
A. I never would have suspected that it was infected because I had never heard of it before.
Q. What recommendations would you have made from a cardiothoracic standpoint if in fact all the parameters indicated that the patient had an infection and may have a mediastinal infection?
MR. MEADOWS: Objection.
A. I don't know. It's pure supposition.
Q. Would you have at least considered, with evidence suggesting a mediastinal infection, would you have at least considered going back in and reexploring the area from the homograft?
MR. MEADOWS: Objection.
A. I don't know, but I doubt it since I've never heard of it, I've never read of it, and I've never heard anybody talk about it.
Q. Do you have an opinion as to when the proximal right coronary artery occluded?

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A. No.
Q. Do you have an opinion as to when the left main coronary artery occluded?
A. Yes.
Q. When?
A. Right at the operating table. We talked about that.
Q. What is cardiac tamponade?
A. It's a hemodynamic state caused by fluid surrounding the heart allowing the heart not to fill.
Q. You see in the autopsy that one of the findings on the patient was cardiac tamponade?
A. It's hard to make from an autopsy. it's a physiologic finding.
Q. Would you take issue with the autopsy as it related to cardiac tamponade?
A. I don't know how you can make that diagnosis from an autopsy.
Q. I take it then you would take issue with it?
A. I'd say I don't know how you would do it.
Q. Do you have an opinion, Doctor, as

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to what caused her necrotizing bacterial aortitis?
A. I don't know what caused it.
Q. Do you have an opinion as to what the cause of her death was?
A. I don't know.
Q. On autopsy the fact that there was a rupture of the aorta measuring 4-by-3 millimeters with 1,000 cc's of blood removed in the ER, aren't those findings clinically consistent with a patient having cardiac tamponade?
A. It's possible that it caused cardiac tamponade.
Q. Do you know whether the microscopic results from the Cleveland Clinic substantiate that Laura Adams died of infection?
A. I don't know whether they do or not. I haven't seen the microscopic results.
Q. The healing myocardial infarction at the apex of the heart, I think it says it was over ten days old?
A. Yes.
Q. Do you believe that that myocardial infarction was at the time of the first surgery?

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A. Yes.
Q. So this is what likely occurred at the time that she required the --
A. Bypass grafts.
Q. -- bypass grafts, okay. If an aortic homograft is infected at the time of implantation, what is the probability of a patient having a rupture of the necrotic aortic arch ten days after the implantation?
A. I have no idea.
Q. Do you know back in 1999 whether the Cleveland Clinic was having any increased incidence of infection with regard to aortic valve replacement?
A. I do have an idea.
Q. What is that?
A. No.
Q. How do you know that?
A. I remember we did do regular bacteriologic cultures and monitoring.
Q. Are homografts by definition immune -- perhaps that's a poor use of the term -- from becoming infected?
A. No.
Q. They are basically lower risk?

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A. Lowest risk.
Q. What is the incidence of an infection in a homograft?
A. I don't know.
Q. It's in the literature; is it not?
A. I'm sure it is someplace.
Q. You are just not familiar with it off the top of your head?
A. No.
Q. If it had been determined by you or someone else while still in the hospital that she had an infected homograft, would surgical intervention have been the first approach, or would antibiotic treatment have been the first approach?
A. I'm not sure I can answer the question. I don't know.
Q. Because you've not encountered it?
A. I've not encountered it, I have no experience with it, and I'm not aware of any literature about it.
Q. If Laura had not ruptured at the aortic arch and if she had not developed necrotizing bacterial aortitis, in other words, had she not died on January 28th, do you have an

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opinion to a probability as to what her life expectancy would have been?
A. It wouldn't have been normal.
Q. Normal nowadays is early 80s for Caucasian women?
A. Yes.
Q. Hers would have been reduced by what percent?
A. I don't know.
Q. What is your best probability?
A. I don't have a guess.
Q. Would she have lived into her 70s?
A. I don't know.
MR. MEADOWS: Objection.
Q. Can you state whether she would have lived into her 60s?
A. I don't know.
Q. All you can say is that she just would not have had a normal life expectancy?
A. I can say that pretty definitely.
Q. You can't rule out that she would have lived into her 50s or 60s, true?
MR. MEADOWS: Objection.
A. Yes. I can also tell you that people who don't have any infections and don't

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have any complications of their aortic valve have sudden death in the first year after their aortic valve replacement with some regularity.
Q. What is the percentage of that?
A. I can get that for you, but I don't have that with me.
Q. With regard to the cause of death, do you have any opinions that you have not shared with me?
A. No.
Q. With regard to the justification or the appropriateness of discharging this patient, either to go back to Connecticut or to stay in Cleveland on an outpatient basis for a period of time, are there any other opinions that you have that you've not shared with me?
A. No.
Q. In terms of the two surgeries, the surgery that you performed and then the second surgery that you may or may not have been involved in, are there any other aspects in terms of complications that developed that we have not talked about?
A. No.
Q. In terms of discussing the case with

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Dr. Rattlife or anyone else as it relates to opinions on standard of care or causation issues, other than discussing matters with your attorneys, have you shared with me all the information that you have or have discussed with others?
A. Yes. I haven't discussed it with anybody else.
Q. All right. Doctor, let's take just a minute break.
(Brief recess.)
Q. In your CV, Doctor, there's reference to movies. Where would one obtain those movies?
A. You'd probably have to ask me for them.
Q. Specifically, they're on page 14, the movie bibliography. Are these available at a retail level, or can they be purchased anywhere?
A. It's about $500,000 for you. That's a special deal. Usually, it's for a million.
Q. How about if I pay in cash.
A. I'll give it to you for 499.
Q. Seriously, are they not available to

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the public?
A. No, they are not.
Q. So if I wanted, for example, number 21, minimally invasive aortic valve surgery, or 24, minimally invasive valve surgery involving two valves, I would have to ask you and then hope that you would provide it to me, correct?
A. Correct.
Q. Are these lengthy videos?
A. Very long, a day or two.
Q. Seriously?
A. Uh-huh.
Q. Are you being serious with me, or are you joking?
A. I'm joking. They're about eight minutes.
Q. Are they maintained here at the hospital?
A. Yes.
Q. Are they for teaching purposes?
A. Yes.
Q. I will follow up with a letter to you requesting that. You also have a patent on minimally invasive cardiac surgery procedures?
A. I do.

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Q. Does that have anything to do with aortic valve replacement?
A. Uh-huh.
Q. That's a yes?
A. Yes.
Q. Who is the patent with?
A. The Cleveland Clinic owns the patent.
Q. You receive some type of royalty?
MR. MEADOWS: Objection. Don't answer that.
MR. MISHKIND: Let me finish first.
MR. MEADOWS: He's not getting into any kind of compensation he receives off the patent or anything else.
MR. MISHKIND: Let me finish the question, and then you can instruct him not to answer.
MR. MEADOWS: Go ahead. I see where it's going.
MR. MISHKIND: At least for somebody's edification, I have to finish my question.
MR. MEADOWS: Go ahead.
Q. Do you receive any type of

remuneration as it relates to the patent that is referenced on page 14 for minimally invasive cardiac surgery procedures?
MR. MEADOWS: Objection. Don't answer that.
MR. MISHKIND: Just for the record, the basis for your objection?
MR. MEADOWS: It has got absolutely nothing to do with this lawsuit, and I think it's proprietary and certainly is not even reasonably calculated to lead to admissible evidence.
MR. MISHKIND: I think it certainly can depending upon what is contained in there and what financial interest he has.
MR. MEADOWS: No.
MR. MISHKIND: Suffice it to say, I disagree with you. I think it is calculated to lead to discovery of admissible evidence, but I understand that you're instructing him not to answer, so we'll move on.
Q. Doctor, the last question for you, and then your five minutes are up. Your residents who dictate the operative reports, how soon are they to be dictated?

A. They are supposed to be dictated in 24 to 48 hours.
Q. Is that standard protocol here at the hospital?
A. That's what we tell them to do. They don't always behave.
Q. Do you have any explanation in this case as to why the surgical report, second surgical report which you may or may not have been present for, was not dictated until the day after Laura Adams died?
A. No.
Q. Has anyone ever explained to you why?
A. I never noticed it before. I was not aware of it.
Q. The fact that it was dictated 15 days later and a day after her death, you have no knowledge as to that?
A. Right.
Q. It certainly should have been dictated sooner, correct?
A. It should have.
Q. That's not in keeping with the procedures at the hospital, true?

A. No. We beat the boys up, and sometimes they don't always behave.
Q. But in this situation, this was not in compliance with Cleveland Clinic protocol, correct?
A. That's the department's protocol.
Q. And it was not in compliance with it, true?
A. Right.
MR. MISHKIND: Thanks, Doctor. No further questions.
MR. MEADOWS: We're going to read it. 28 days?
MR. MISHKIND: I didn't say that, but if you ask nicely, I will.
- - - - -
(Deposition concluded at 10:20 a.m.
(Signature not waived.)
- - - - -

AFFIDAVIT

I have read the foregoing transcript from page 1 through 115 and note the following corrections:

PAGE	LINE	REQUESTED CHANGE

_____

Subscribed and sworn to before me this _____ day of _____, 2002.

_____
Notary Public
My commission expires _____.

CERTIFICATE

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

I, Cynthia A. Sullivan , a Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named DELOS M. COSGROVE, III, 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. I am not, nor is the court reporting firm with which I am affiliated, under a contract as defined in Civil Rule 28(D).

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, on this 21st day of April 2003.

Cynthia A. Sullivan , Notary Public
Within and for the State of Ohio

My commission expires October 6, 2006.

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DEPOSITION OF DELOS M. COSGROVE, III, M.D.