IN THE COURT OF COMMON PLEAS
SUMMIT COUNTY, OHIO

MARTHA BURGESS, ET AL) CASE NO. CV 02-01-0112
)
Plaintiffs,)
vs.)
)
MICHAEL A. ODDI, M.D.,)
)
Defendant.)

DEPOSITION FOR PLAINTIFFS

*** *** *** ***

DEPONENT: DOCTOR ROBERT CAMPBELL

DATE: DECEMBER 20, 2002

*** *** *** ***

WILLIAM J. KalbFLEISCH
COURT REPORTER
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The deposition of Doctor Robert Campbell, taken on behalf of the Plaintiffs, in the offices of KalbFleisch Court Reporting, 204 Theatre Building, 629 South Fourth Street, Louisville, Jefferson County, Kentucky, on Friday, December 20, 2002 at the hour of 1:30 p.m. Said deposition was taken pursuant to notice and is to be used in accordance with the Kentucky Rules of Civil Procedure.

A P P E A R A N C E S

For the Plaintiffs:

Mr. John W. Burnett
(Via telephone)
Becker & Mishkind Co., LPA
134 Middle Avenue
Elyria, Ohio 44035

For the Defendant:

Mr. David M. Best
David M. Best Co., LPA
4900 West Bath Road
Akron, Ohio 44333

Doctor Robert Campbell, called on behalf of the Plaintiffs, being first duly sworn, was examined and deposed as follows:

EXAMINATION

BY MR. BURNETT:

Q. State your name, please.

A. Robert Acree Campbell, II.

Q. Doctor Campbell, you're a physician licensed to practice in Kentucky, I take it?

A. Yes.

Q. Okay. Does your clinical practice currently consist of -- Or does your practice currently consist of in excess of fifty percent clinical time?

A. Yes.

Q. Okay. And was that the case in February of 1997, as well?

A. Yes.

Q. All right. I see that you're Board-certified.

A. Yes.

Q. And do you need to be recertified for that ever?

A. Yeah. In fact, I have to recertify my thoracic surgery next year.

Q. Okay. You passed the boards in '94, it looks like, for thoracic surgery.

Right?

A. Yes.

Q. Okay. Did you do that on your first attempt?

A. Yes.

Q. Okay. I take it from looking at your Curriculum Vitae, you haven't published.

Is that fair?

A. Yes. I've avoided that all the time.

Q. Okay. You obviously have been retained as an expert in this case in a medicolegal matter.

When did you first start doing medicolegal work?

A. I believe it was 1995.

Q. Okay. And you've been doing it since 1995 then fairly consistently?

A. Yes.

Q. Okay. About how many cases a year do you review?

A. Oh, probably around a dozen, I would imagine.

Q. Okay.

A. About one a month.

Q. Since '95, can you break that down for me, the percentage Plaintiff to percentage

Defendant?

A. As far as review, or actual testimony?

Q. Yeah. Then I'll -- I'll pare it down even further.

Let's start with review.

A. Review has probably been sixty percent Plaintiff, forty percent Defense.

And then as far as testifying, probably fifty-fifty, both by deposition or trial appearance.

Q. Okay. How many depositions do you think you've given.

A. Oh, I would imagine about forty.

Q. Okay. And of the depositions, I know you said it was fifty-fifty trial and deposition as far as Plaintiff-Defendant.

Can you --

A. (Interrupting) Correct.

Q. Is it about the same for the forty depositions you've given?

A. Yes.

Q. Okay. Have you kept a -- any kind of master list of the depositions you've given?

A. No. But I'm actually getting ready to start doing that because I have a -- a Federal case coming up where I'm going have to list everything that I've ever done at least by deposition or trial.

So I have my secretary going back through mountains to stuff trying to figure that out.

Q. When do you have to have that produced?

A. Oh, sometime next year.

Q. Okay. Well, at the end of the year next -- When's -- When's sometime next year? Is it going to be before the 27th of January?

A. No. Huh-uh.

Q. Okay.

A. I have to -- I have to force her to do it every time I see her. So it's not going very well.

Q. Okay. Have you kept copies of any of your deposition transcripts?

A. Some I have. Not -- Not all of them. I have some, yeah.

Q. Do you have a list of those you've kept?

A. No. Huh-uh.

Q. You just have them stacked

somewhere.

Right?

A. I just have a stack, and it's just a small partial stack.

Q. All right. Have you ever acted as an expert either by way of being consulted or up all the way through deposition and trial testimony in a case involving issues that are similar to this case?

A. No, not really. Huh-uh.

Q. Okay. You've never dealt with the issue of a sternotomy versus a subzyfoid window to deal with tamponade?

A. No. Huh-uh. No, I haven't.

Q. All right. About what percentage of your professional time then is spent doing medicolegal work?

A. Oh, probably ten percent at the most.

Q. Okay. I take it your license has never been suspended, revoked, or called into question.

Correct?

A. No.

Q. I take it you've never been denied privileges or had them revoked at any facility.

Correct?

A. No.

Q. I take it you've never had any complaints about you to the State Medical Board.

Correct?

A. Not that they've told me about at least.

Q. Okay. Kentucky is the only state you're licensed in.

Right?

A. No. Indiana also.

Q. Okay. The same questions for Indiana.

In that state, any -- any -- any complaints about your conduct to the Board?

A. No.

Q. All right. Are there any other states where you were admitted and you are no longer admitted?

A. No.

Q. Let's talk a little bit about any lawsuits that have been filed against you.

Have there been any?

A. Yes. Let's see. I've had two as a practicing physician, and then one a long time ago when I was a resident.

Q. Okay. Let's talk about the two as a practicing physician.

A. All righty.

Q. What were the allegations in the first one?

A. Well, I don't know what the allegation was. There was one that I settled where a patient sustained a post-operative stroke after a carotid endarterectomy, and that was -- the allegation was -- I mean there was some sort of technical error that was never actually delineated was the cause of the stroke.

The other case involved a patient -- when I was on call, a patient that my partner had operated on and had performed a thoracotomy on that had bleeding after surgery; and then before we could get him back to the operating room to take care of it, he had a -- a heart attack and died.

Q. Okay.

A. And then that's it.

Q. Did you -- Did that case go to trial -?- or did you settle it -?- or were you dismissed?

A. Which one?

Q. The one involving the thoracotomy and the heart attack.

A. That's still an ongoing case.

Q. Ongoing case. Have you been deposed in that case?

A. Yes.

Q. Do you know the name of the Plaintiff's lawyer?

A. Greg Neal, N-e-a-l.

Q. And he's down there in Kentucky?

A. Yes.

Q. What city?

A. He's in Shelbyville, Kentucky.

Q. Now, the other one, the post-operative stroke and the alleged technical error - you settle that case.

Right?

A. I settled it, yes.

Q. Okay. Why did you settle it?

A. Because even though it was defensible, I've done enough of this work to know that I was either going to win or lose in excess of my policy; and it was merely a business decision to do that so that I would -- would not be at risk.

Q. When did you settle that?

A. Oh, a couple months ago, I think.

Q. Okay. And who was the Plaintiff's lawyer in that case?

A. Steve Meyer from Indiana.

Q. Do you know where in Indiana?

A. New Albany.

Q. And you were deposed in that case, I take it?

A. Yes.

Q. Let's talk about the one years ago as a resident.

A. Okay.

Q. What were the allegations in that case?

A. Well, this involved a patient that had a bleeding esophageal varices and had placement of a Blakemore tube by a gastroenterologist, and he couldn't get the tube in correctly. So he asked me when I was a general surgery resident to come position it for him, and I did. I didn't have any trouble putting it in.

And the patient was transferred elsewhere and found to have later on a ruptured esophagus; and there was no way to tell who was at fault for that, whether it was me or the gastroenterologist. And so that settled. It never went to trial. But it did settle.

And I did give a deposition in that case, and I think that -- I'm not sure how it was weighted. I think they probably paid - they meaning the gastroenterologist - probably eighty percent of whatever the settlement was.

And I was -- I was actually an employee of the hospital, so I think we paid the other twenty percent, or something like that.

Q. All right. All right. I also know from looking at your Curriculum Vitae, it looks like you're -- you have an inactive license in Florida.

A. Yeah. I used to practice down there; and then I -- when I moved up here, I inactivated it.

Q. Okay. And again my same question to you down in Florida - any complaints about your conduct to the State Medical Board that you're aware?

A. No. Huh-uh.

Q. Okay. You were never -- Your -- Well, I guess my question to you about your -- Well, forget it. Strike that.

A. Okay.

Q. Why did you leave Florida and go to Kentucky?

A. Because my family and my

wife's family all live up in Ohio, and we wanted to be closer to our family. Plus south Florida was not the best place to raise kids.

Q. Okay.

A. Yeah.

Q. I mean it looks like you were raised in Hilliard. Your family's probably still in Columbus.

Right?

A. Oh, yeah, every bit of them.

Q. Okay. Okay. You're a member of a professional group, I take it?

A. Yes. We have a seven-man group.

Q. Okay. And you've been a member of professional groups in the past.

Right?

A. Yes.

Q. Okay. Has -- Have any of your professional groups to which you've been a member been sued and you not been named as a party; but nevertheless, your conduct was called into question?

A. Not -- Not that I'm aware of, no.

Q. Okay. You know, I'm looking

at your report; and you talk about utilizing the subzyfoid approach for the problem of cardiac tamponade in a post-operative patient --

A. (Interrupting) Yeah.

Q. (Continuing) -- as being well-described in the literature.

A. Yeah.

Q. Okay. That's on Page Three of your report.

A. Good.

Q. Can you tell me what literature you're thinking of when you state that?

A. Well, if you get Glen's Textbook of Surgery, which is a thoracic surgery textbook.

Q. Okay.

A. Or Edmond's Textbook of Surgery.

Q. Okay.

A. Or I believe Kirklin also describes it.

Q. Spell Kirklin, please.

A. Kirklin, K-i-r-k-l-i-n.

Q. I-n, okay.

A. I-n. And then there's been quite a few articles in the literature concerning that,

too, as far as -- as far as that goes.

Q. Are you there?

A. Yeah, I'm here.

Q. It sounded like you were drifting away from me.

A. Yeah.

Q. To your knowledge, is there any support in the literature for the contention that in circumstances such as this while a subzyfoid approach may be appropriate initially, once thrombosis is recognized and assumed to still be present, that a full sternotomy should be undertaken?

A. As far as I'm aware, there is no literature that states that.

If you open enough -- do enough subzyfoid incisions on people that are -- that are far enough out from surgery that you can do that, you frequently will find some thrombus in there because virtually everybody that has heart surgery has thrombus within their pericardium.

Q. Is it thrombus in the pericardium sufficient to cause tamponade however?

A. Well, not necessarily. But then tamponade is not -- is not necessarily a diagnosis that's made say by CAT scan or echocardiogram. It's a --

It's a clinical diagnosis taking in a wide variety of factors.

Q. Yeah. And you know what? And I want to get to those with you --

A. (Interrupting) Okay.

Q. (Continuing) -- in a few moments.

Before that what I'd like to do is discuss a little bit of your practice.

A. Sure.

Q. Okay. Tell me -- Is your practice any different today than it was in 1997?

A. Oh, yes, it is.

Q. Okay. Tell me what it was like in 1997.

A. In 1997, probably thirty to forty percent of our practice was cardiac, another -- and then the -- and then the rest of it was equally divided between general thoracic surgery and vascular surgery.

Okay?

Q. Okay.

A. And then actually -- And prior to that, one hundred percent of my business was cardiac surgery.

Q. Prior to when -?- '97?

A. Yeah. Well, actually in '93, when I was in Palm Beach, all I did was heart surgery.

Q. Okay.

A. And then when I came up here, we did a mixture of things.

Things have -- have changed a lot over the past several years in the world of thoracic surgery; and we were fortunate in that we had quite a few people in this group that were very, very good at doing general thoracic, meaning cancer surgery of the esophagus and lung.

So the great majority of the surgery that I do now is -- is thoracic oncology.

We have plenty of good heart surgeons up here in Louisville, but our group does virtually all of the thoracic surgery in town now.

And about 1996, I think, '97 - It's on my CV there. I can't remember - I became the medical director here in town for the American Cancer Society; and that just opened up all sorts of referral patterns that we didn't even have before for general thoracic surgery.

Q. Let me -- Let me see if I can get this a little clearer in my own head.

In '93, you were doing about a

hundred percent heart surgery.

Right?

A. Correct.

Q. Okay. And what years did that encompass? From when to when?

A. Just -- Just 1993, because I was in Florida just for one year.

Q. Okay. What were you doing before then?

A. I was in training at -- at --

Q. (Interrupting) Okay.

A. (Continuing) -- Jackson Memorial Hospital.

Q. Okay. So before that you were an intern and resident.

Right?

A. Well, no. Right before that I was a fifth -- sixth and seventh resident in thoracic surgery.

Q. Okay.

A. Yeah.

Q. And then in -- in '93, you did only heart surgery?

A. Yes.

Q. Okay. And in '94 onward, what

did -- what did you do?

A. From '94 until about, oh, '99 or 2000, it was the breakdown that I just gave you before, you know, thirty to forty percent hearts; and then the rest an equal mixture of general thoracic and vascular.

Q. Okay.

A. In 2000, my -- the partner and -- my partner and I that were doing heart surgery decided to stop doing the heart surgery because we were doing so much general thoracic surgery, we couldn't handle the work load.

Q. Okay. Okay.

A. So -- I mean even as it is now, we just had to hire a new -- we're hiring a new thoracic surgeon because we still can't keep up with the work load even though there's seven guys in the group.

Q. So from 2000 until today, you're not doing any heart surgery?

A. No. I mean I still do pericardial windows for -- for every indication that there is, but I don't do pump surgery anymore.

We still do certain cases with pump standby, great vessel work, certainly tumor work the chest, other things like that.

But elective heart surgery,

no. We're just too busy doing other things right now.

Q. Okay. Let's talk about from '94 to roughly 2000.

A. Okay.

Q. Of the surgeries you performed, what percentage was coronary artery bypass surgery?

A. I would say it was probably eighty percent coronary bypass, and twenty percent valve surgery or valve surgery in combination with coronary bypass.

Q. Okay. And from 2000 on, then no coronary artery bypass and no valve surgeries.

Right?

A. Right.

Q. Okay. When you were in Florida doing heart surgery only, break that down for me as far as coronary artery bypass and valve surgery.

A. I would say it was probably -- Because we had an older population down there, it was probably more like sixty to seventy percent just coronary bypass; and then the remainder combinations of valve surgery or valve surgery and coronary bypass.

Q. Okay. You know, from '93 to '99 then, talking in general, yearly, how many times were

you involved with bleeding problems requiring the patient to go back to surgery after you performed either coronary artery bypass or a valve procedure?

A. When you say bleeding problems, do you mean immediately -- in the immediate post-operative period?

Q. Yeah. Well, let's -- let's talk within like seventy-two hours.

Is that what you consider post-op?

A. Well, that's generally -- Generally, if you're going to have problems with bleeding acutely following heart surgery, it will be within the first twelve to twenty-four hours.

Rarely will you have to take somebody back up to seventy-two hours.

But up to seventy-two hours is -- is okay with me to use as a cut-off.

Q. Let's use that as the cut-off.

A. Yeah. I would say probably -- probably on a percentage basis, somewhere between -- I would say probably two percent of the coronary patients and maybe five percent of the valve patients.

Q. I'm going to ask you a tough question. Can you -- can you give me those in numbers

then?

A. Yeah. I'd probably -- You means as far as take-backs?

Q. Yeah.

A. Yeah. It's probably -- It would probably be - let's see - maybe three to five heart -- I mean three to five coronary bypasses a year that would have to go back.

Q. Okay.

A. And maybe one or two valve patients that would have to go back.

Q. Okay. Have you ever cared for a -- for a valve patient three weeks out like in this case who had bleeding difficulties?

A. Well, you'll have to be more specific. I've -- I've certainly had to -- had -- this is obviously, as you know, a very unusual case.

But I've certainly had to -- to take a patient to the operating room this far out from heart surgery for pericardial effusion and tamponade, yes.

Q. Okay. How many times?

A. How many times? Just my patients -?- or other people, too?

Q. Just yours.

A. Just mine.

Q. And when I say yours, I'm assuming you did the primary procedure --

A. (Interrupting) Right.

Q. (Continuing) -- and then you're handling the --

A. (Interrupting) Right.

Q. (Continuing) -- the bleeding later.

A. Right. I would say probably -- Are you talking about on a yearly basis, or in my entire lifetime?

Q. Geez. I don't know. Can you give it -- Give it to me yearly if you can, and then lifetime.

A. I would say probably that far out, probably only one or two patients a year at the most.

Q. Okay. And how many in your lifetime do you think?

A. Well, I would probably --

Q. (Interrupting) Twelve?

A. Yeah, twelve to fifteen maybe, something like that.

Q. Okay. And again that's three weeks out.

Right?

A. Three weeks out approximately, yes. And those are -- those are just mine. I've done some for other people, too.

Q. Okay. Of those -- Let's narrow -- Yeah. How many have you done for other people?

A. Probably an equal amount.

Q. Okay.

A. Either for my partner or -- I've had occasion a couple of times to do them for -- for the heart surgeons who -- who work with us over at Jewish but have their patients go to -- come back after they've been discharged to hospitals that they don't go to.

Q. All right. Okay. Of these patients -- Let's talk about the ones you've treated for tamponade.

A. Okay.

Q. Okay. How -- How did you normally approach these if there was a normal approach?

A. Three weeks out?

Q. Yeah.

A. Virtually everybody got -- Well, I'll tell you this: If -- If they were in immediate extremis -- and none of my patients were like that. But I did have one patient, I believe it was across the river, who came back in who had had a valve replacement by a

friend of mine here at Floyd Memorial -- I mean at Jewish Hospital who required an immediate pericardiocentesis right at the bedside.

Q. Okay.

A. Or stretcher side I should say, to -- to temporize him, and then was taken within the hour to the operating room where he got a subzyfoid window and drainage.

Q. Okay. Aside from that one, how -- how did you normally treat these? How did you approach them?

A. The rest of them underwent subzyfoid pericardial drainage.

Q. Okay. On any of them, did you ever perform a full sternotomy?

A. Not three weeks out, no.

Sternotomies -- Let me just go ahead and interject this. Sternotomies, or re-entry procedures as we -- as we call them, are generally only used by -- by most practicing cardiac surgeons within the very immediate post-operative period, meaning within the first -- you know, up to seventy-two hours or so.

After that you don't really run into the problems of bleeding, mechanical bleeding, at all.

Q. You mean bleeding from a suture line?

A. Bleeding from a suture line, from a -- from a stitch that's popped out, from a cannulation site, bleeding that you can see.

Q. Okay. Now, when I'm talking about these patients with tamponade three weeks out, have they -- have they all been patients who had had valve procedures?

A. No. Some have been coronary procedures.

Q. Okay. Okay. So from your standpoint, whether it's a coronary procedure or a valve procedure, three weeks out, they all got a subzyfoid window?

A. Right.

Q. And you -- you drained the pericardium?

A. Right. Really all you have to do is just open up the bottom five to ten centimeters of their wound that's there and remove some of the suture material, and you're right where you need to.

Q. And then what you would do with the patients in general?

A. You drain them, put a tube in.

Within the next, you know, twenty-four to seventy-two hours, generally the drainage is down that you can remove the tube; and they generally do well.

Q. Did any of the patients die?

A. Not that I can recall, no. Or at least -- at least not from anything bleeding-related or procedurally-related.

Q. Were any of these patients we've been discussing, tamponade three weeks out, were any of them post-Ross procedure patients?

A. No. They may have been post-valve or double-valve -- double-valve patients, but not -- as far as I can remember, not post-Ross procedure.

Q. What about any of the patients who required care within, you know, twenty-four to seventy-two hours because of bleeding complications? Were any of those Ross patients?

A. No. Not that I recall, no.

Q. You don't do Ross procedures?

A. No. The great majority of cardiac surgeons in this country don't do Ross procedures.

Q. Have you ever cared for a patient post-Ross?

A. Oh, yeah. And we did that in our training.

But that's generally a place that if you think a patient needs a Ross procedure, you send them to someone who does a Ross procedure.

Q. Have -- In any of the care you've rendered patients post-Ross procedure, have you run into concerns about bleeding?

A. Well, any time you have -- Let me put it this way: The answer is no.

But any time you do a Ross procedure or any other sort of valve replacement where you have a long suture line or multiple suture lines, like a double-valve replacement where you'll have two suture lines, the more suture lines that you have, the more you -- you, you know, run the risk of that sort of thing occurring.

But generally, if you're going to have bleeding from the suture line, it's going to be while they're in their first hospital visit, within -- generally within twelve to twenty-four hours.

Q. Have you repaired bleeding suture lines?

A. Oh, yeah.

Q. Okay. Give me an idea how many times.

A. Well, I would say --

Q. (Interrupting) Eight?

A. I would say that figure that I gave you on -- Now, you're talking about from heart procedures.

Correct?

Q. Yes, please.

A. Okay. That figure that I gave you on bring-backs for valves, I would say that probably one out of every three of those may have had a suture line where a stitch had to be put in it. And generally it's a single stitch.

I've never had to replace an entire suture line anywhere that I can recall.

Q. When you say bring-backs, do you mean within seventy-two hours?

A. Yeah. When we talk about sternal re-entry and bring-backs, we're talking about patients that are within seventy-two hours, or certainly within a normal post-operative period of time, which would be -- for heart surgery, its anywhere from three to seven days, is kind of an average length of stay, depending on the type of procedure that you get.

Q. And in those patients where you've done a full sternotomy, you've replaced a stitch at least?

A. Oh, no. The great majority of them, you don't have to do anything because most of it is just -- Most bring-back bleeding has nothing to do with suture lines whether it be from valves or from coronaries.

It's the generalized ooze secondary to the heparinization that they got during their first operation.

Q. I thought you told me of one of three of those, you would -- they would be for suture line leaks.

A. Right. Which means that two of three of those, they wouldn't have any sorts of mechanical bleeding at all. They would --

Q. (Interrupting) Got you.

A. (Continuing) -- just be generalized ooze, yeah.

Q. Got you. By the way, in those one of three bring-backs, as you call them, would -- would you be dealing with valves in which there was a running suture line or single stitches?

A. Well, the suture line -- Virtually everybody closes aortic and atriotomy closures with a running suture line. Not very many people use an interrupted suture line for that.

So I would -- I would say that

virtually all of those suture lines I'm talking about are running stitches.

Q. Good. And -- And if you're going to repair one and you see a loose area, you just put a stitch in that loose area.

Right?

Is that what --

A. (Interrupting) Well, that's all I've ever had to do.

Q. Okay.

A. I've never run into the problem that -- that was noted in this particular case, though.

Q. Yeah. And I'll -- And I'll get to that.

A. Sure.

Q. Bear with me, Doctor. I'm looking at --

A. (Interrupting) That's okay.

Q. (Continuing) -- Doctor Oddi's op note of the 9th.

Doctor Oddi apparently with ringed forceps took out what he called well-formed thrombus measuring approximately one hundred and twenty to one hundred and thirty cc.s in volume.

A. Right.

Q. Have you ever pulled out that much well-formed thrombus before?

A. I'm sure I have.

Q. Okay. How often?

A. That's not -- Well, I mean I can't give you a number of times, but I can tell you that if -- if you -- if you were to take every cardiac surgery patient, whether it be a valve or a -- a coronary bypass and say do an echocardiogram or a CAT scan on them, in the great majority of those patients you're going to see some clot within the pericardium.

But most of those patients don't develop a tamponade physiology to the point that they need to go back to the operating room because I mean clotting is a natural phenomenon following surgery.

Q. Okay.

A. So to have we'll-formed thrombus in the pericardium is not an unusual finding, whether it be in a patient whose symptomatic or asymptomatic.

Q. He's -- When there's well-formed thrombus, as it's described, is that evidence of a fresh bleed or an old bleed?

A. Well, it depends on the

thrombus, but it's not -- it's not -- it's not evidence of -- necessarily of any fresh bleeding. You certainly know it's evidence of previous bleeding in there because when you do surgery on the heart, you always have some bleeding in there following -- following closure of the chest.

But you can't do anything about -- It may not even be from the heart. It may be just from -- the sternal wires have a tendency to bleed also when you put them through; and, of course, if they bleed, they -- they drip right down on top of the -- on the anterior surface of the heart which can cause a well-formed clot.

Q. In terms of probability, from what you can see in the reports and the deposition testimony, was the thrombus in this case evidence of a recent bleed or an older bleed? And then if you can, please define recent and older.

A. Well, let's -- let's do this this way. And I'd say -- I would say that based without using a retrospectoscope, as we say, you know --

Q. (Interrupting) Yeah.

A. (Continuing) -- that if -- if I were given the operative note of the 9th to look at and had no knowledge of what happened the following day, then I

would say that it was typically what you would find in someone who you would go back into with -- three weeks out from surgery who had been put on Coumadin, okay, who had both liquid blood and -- and thrombus in there because what happens when you have thrombus, as it lysis or breaks down, the Heparin or Coumadin, either one, tends to hasten that process; and you get a lot of liquid blood mixed in there with clots.

Okay?

So I would then say that based on that question, I would not think it was from a suture line. I would think it was the typical process of just having an intracardiac -- or I mean an intrapericardial clot with lysis and -- and fluid, you know, or blood, you know, developing in there.

I wouldn't be able to tell you anything about it being from a suture line until I looked at the operative note the following day.

But Doctor Oddi didn't have that luxury.

Q. You probably jumped ahead of me.

A. Okay.

Q. What I was trying to get from you is: Would you characterize this thrombus as evidence

of a -- of a fresh bleed or an older bleed?

A. Well, that's what I'm trying to say. Based on his -- There's no -- There's certainly no way to tell because he just says there's a semi solid -- I'm sorry. Let me look at -- at where he says this.

He says that there was well-formed thrombus within this space.

That could be either one. But based on this patient's presentation, I would have to -- I would have to favor the fact that it's probably old thrombus, not just from the appearance and the description of the clot, but from the fact that this guy has never given any evidence of any hemodynamic instability that would be consistent with a suture line leak.

Q. Well, let me jump into that right -- right there.

A. Okay.

Q. What evidence are you looking for with hemodynamic instability that is consistent with a suture line leak?

A. Well, generally when patients -- Like he exhibited the following day.

Generally within -- Let's just talk about in general. A suture line leak from -- in a post-operative patient doesn't generally just present

itself as a larger than -- than acceptable volume of chest tube drainage.

It generally presents with hypotension that doesn't correct with volume replacement or vasopressor support, accompanied by evidence of increased venous pressure from either a Swan-Ganz or a central venous pressure catheter reading, distended neck veins, that sort of stuff.

Q. Did -- Did the patient have any of those symptoms on the 9th?

A. Not that I can illicit.

What he had was -- He had an echocardiogram report and some -- and a history of recent onset of shortness of breath.

Q. Okay.

A. Okay?

Q. Is it more likely than not that the blood seen by Doctor Oddi in the pericardium was coming from the proximal suture line on the aortic side down near the aortic annulus.

A. Well, there's no way to determine that because that couldn't be seen through that - that incision.

Once again this could be -- This blood clot that's in there could be totally unrelated

to what happened to him the following day, or it could be the result of having what's called a herald bleed from say a loosening of the suture line where you have a small amount of bleeding but then stopped.

Q. What's a herald bleed? I'm unfamiliar with that term.

A. A herald bleed is -- is -- It's kind of a generalized term used in surgery where a patient, before they have an exsanguinating hemorrhage, may have a small amount of hemorrhage or bleeding that manifests. It's usually -- We use that term like patients that have rectal bleeding will have a little bit of rectal bleeding followed by a massive amount of rectal bleeding, you know, a day or a week or a year later.

The same with patients that have hemoptysis where they're coughing up blood. Generally they don't go to immediately life-threatening hemoptysis. They have a little bit of bleeding first that stops completely and then goes on.

The thing is that most of the patients when they have a little bit of bleeding never progress on to massive bleeding. The great majority of patients -- the preponderance of patients, no matter where they bleed show evidence of a small amount of bleeding that stops and never recurs.

Q. Is it likely that bleed -- Strike that.

Is it likely that what Doctor Oddi saw in the pericardial space on the 9th, and drained, as well as the -- the thrombus that he removed, is it likely that that was the result of a herald bleed?

A. Well, it -- I mean my answer would be it could be, but only retrospectively looking at it.

Okay?

Prospectively looking at it from Doctor Oddi's point of view, no, you wouldn't assume that because neither myself nor Doctor Oury or any other person that I've seen deposed in this case has seen a suture line failure three weeks after surgery.

I've never seen one -- that in a valve patient, or certainly not present this way.

Q. When's the farthest out you've seen a suture line leak?

A. Within, I would say, forty-eight hours of the time of operation.

Q. Okay. In repairing a suture line, have you ever had difficulty getting a suture line to hold?

A. Not like they -- Not like in

this particular case. I've never seen -- I've never seen acutely tissue that's described as friable and granulomatous or granular in nature.

That's -- That's a process that takes days to weeks to months to develop when that's seen. That's not something that you would normally see within the first, you know, seventy-two hours following cardiac surgery.

Q. Do you have an opinion to a reasonable degree of medical probability what that is a result of?

A. Well, I can't tell you what the mechanism is. I can tell you that -- that -- And it's certainly well-described not only by -- by Doctor Kaminsky in his op record but also in the autopsy report.

There was some sort of process -- granulomatous process going on that made the tissue very friable.

In fact, the pathologist used terms like -- Let me -- He used terms of necrotic tissue. He used terms of chronic inflammation and granulation tissue at suture sites, specifically the inferior anastomosis of the aortic replacement.

I -- I have seen patients who have a reaction to Prolene. That's very uncommon, but

it's -- it's -- it's happened before. You can have a reaction -- Certain patients can react to virtually any type of suture material no matter how inert they are, even stainless steel.

The other thing that can do that is -- is ischemia to an area. Remember in a Ross procedure, you're -- you're cutting out tissue that normally has its own blood supply and -- and interposing it so that it no longer has its own blood supply, but it will have to develop it at a -- at -- as time goes on.

Now, I -- You know, this is all speculation because I've never seen that described.

Yet some sort of etiological event happened to make this into some sort of granulomatous tissue that was quite difficult for sutures to -- to hold, and not just for Doctor Kaminsky, but to also cause a suture line breakdown.

Q. And again just so I understand it, whether it's ischemia or a reaction to the Prolene, you don't have an opinion to a reasonable degree of medical probability of what caused that?

A. No. All I can say was it was present.

And at the time that you're trying to repair this sort of thing, you really kind of

don't care what caused it anymore. You're just trying to get the sutures to hold.

Q. Could they have used, more likely than not, Pledget sutures and gotten it to hold?

A. No, not really. Granulomatous tissue -- I'll tell you, you'll see this sometimes -- I've seen it like on reoperative aortic aneurysms.

Q. Uh-huh.

A. Where -- I mean you have to go to a much higher level to do your anastomosis because no matter how you try to do it, whether you try to Pledget it, glue it, staple it, anything else, it just won't hold; and that's because there's something intrinsically abnormal about the aorta in that area.

You can do that in the abdominal aorta. You don't -- You can't do that with the heart because you -- you can only go so far down on the heart and still be able to sew to it.

Q. But in this case, what's been described here in the op note of the 10th, you've never seen that?

A. No, not -- not specifically at the aorta.

I mean I can certainly appreciate what they're describing, and I can also

appreciate what the pathologist is describing. I can't -- I can't tell that I've seen it with a known cause, but I have seen it in other sites. I've just never seen it within the chest there.

Q. I see. Okay. What about -- The same question with regard to biologic glue.

Had they used biologic glue, more likely than not, could they have gotten the sutures to hold?

A. Well --

MR. BEST: (Interrupting) Hold on. Excuse me, Doctor. I object to this line of questioning. There's no criticism in this case about the surgery done by Doctor Kaminsky, and so we're really talking about irrelevant issues in this case.

MR. BURNETT: David, I'm only -- I'm going into that issue because of the -- Just so you understand, I'm not -- I'm not pointing at Kaminsky at all.

I'm -- I'm addressing this because of the -- had Doctor Oddi opened the doctor - or strike that - the patient the night before, I think Doctor Campbell said that it's likely that the same thing would have happened.

And I'm just -- I'm testing

his -- his opinion in that regard. That's the purpose of this.

MR. BEST: I appreciate that. I'll let him answer the question. I'm just putting my objection on the record. I don't want it misunderstood here.

MR. BURNETT: Okay.

MR. BEST: I don't have any problem. He's -- He can answer anything he wants.

A. Yeah. Well, let me -- let me tell you about this. I -- I can tell you that the only glue that could conceivably have helped him is not allowed in this country thanks to our wonderful FDA.

Q. All right. And -- And what's that?

A. That is the GIF glue that's available in Europe.

And -- And -- And only now experimentally in 2002 is it being allowed to be utilized in some centers for aortic dissections.

And in 1998, it was not available for anybody in this country to use, as far as I'm aware, but certainly not for Doctor Kaminsky or Doctor Oddi to utilize.

Q. Okay.

A. The types of glue that we had were simply fibrin glue that will barely stop a little venous capillary from bleeding let alone pulsatile flow.

Q. Okay. Okay. Let's -- Let me -- Let me move back to these cases in which you've done subzyfoid window --

A. (Interrupting) Okay.

Q. (Continuing) -- post -- in cases in which there's been a valve procedure.

A. Okay.

Q. Okay. You know, whether it's three weeks out, whether it's twelve hours out.

In any of those cases, did you -- And if I've asked you this, Doctor, forgive me.

Did you suspect bleeding from a suture line in any of those cases?

A. Well, we'll have to clarify that because at twelve hours, you would certainly entertain the possibilities that you could be bleeding from a suture line.

And at twelve hours, I don't think that -- if I had a patient that was twelve hours post-op, I likely would not do a subzyfoid window on them.

Q. Okay.

A. Now, let me clarify that. I

have done subzyfoid exposures at the bedside on patients who had to go back downstairs because you can immediately decompress the chart without -- the -- the chest without even having to cut open any wires to temporize things.

But then when you get them downstairs, you convert them to an open sternotomy by taking the wires out. But that's what you do with a twelve-hour-old patient.

With a three-week patient, three-week-out patient, that's a totally different story. You don't suspect suture line breakdowns, mechanical bleeding, or anything else especially if they've been getting anticoagulation.

You expect what I'm assuming Doctor Oddi probably expected, too. This is a lysing clot on a patient who has blood that's formed in the pericardium secondary to their -- their Heparin therapy and then Coumadin therapy.

Q. Now, twelve hours out - I mean you did the subzyfoid window on a patient like that - say before you do a full sternotomy, they're likely to see well-formed thrombus and grossly bloody fluid.

Right?

A. Well, yeah. At twelve hours, yeah.

Q. Okay. All right. In this case, Heparin was initiated post procedure by a resident, John Trubiano.

Right?

A. Right. It was -- It was initiated, I believe -- you're talking about that Heparin was post-op --

Q. (Interrupting) Post procedure.

A. (Interrupting) Post-procedure? Yes.

Q. Post procedure?

A. Yes.

Q. Now, John Trubiano assisted Doctor Oddi during the subzyfoid procedure the evening of the 9th.

Right?

A. I believe so, yes.

Q. Okay. On the morning of the 10th, is it more likely than not that Doctor Trubiano, he started the Heparin at the direction of Doctor Oddi?

MR. BEST: Well, I object. I think the only testimony of that is that Doctor Donlin requested that, and Doctor Oddi said it was okay. I think that's what the record shows, but whatever the record shows or Doctor Campbell believes is fine.

A. Yeah.

MR. BURNETT: You know -- Okay. I -- And -- and, David, I'm just looking at Doctor -- I took a look at from Donlin's deposition, and I think he indicates on there -- I asked him at Page Seventy-eight: Were you the individual who ordered the Heparin and/or Coumadin restart on the morning of the 10th?

And he said he did not.

And I asked him if he was aware if it had been ordered.

And he said he didn't believe so.

Q. But, Doctor, do you have any knowledge of that at all, as to who ordered it?

A. I don't have any knowledge.

Q. Okay.

A. But regardless of who ordered it, I'd have no criticism of it because I would have done the same thing.

Q. Okay. I'll get to that.

A. Okay.

Q. Is it -- Regardless of whether or not you would have order it or you think it's and appropriate order --

A. (Interrupting) Sure.

Q. (Continuing) -- is it more likely than not that the initiation of the -- of the Heparin the following morning was something that helped facilitate the catastrophic bleed that occurred later in the day, the dumping of the eight hundred cc.s into the tubes?

A. No, none whatsoever.

Q. Okay. Tell me why.

A. Because Heparin does not now nor ever will cause mechanical bleeding.

When -- When Doctor Kaminsky took this patient back and unroofed that clot and found pulsatile flow, that had absolutely nothing to do with Heparin therapy.

Q. Tell me what your authority is for that. Can you --

A. (Interrupting) My authority for the fact that Heparin -- You would have to understand how Heparin works. Heparin works by inhibition of antithrombin three in the clotting cascade. It has absolutely nothing to do with mechanical bleeding.

Q. Was there likely a clot at the -- Well, strike that.

We have bleeding from the anastomosis site.

Right?

A. Right.

Q. And that's likely the cause of the dumping of the eight hundred cc.s of blood into the tubes in the afternoon of the 10th.

Right?

A. Correct.

Q. Okay. Is it likely that there was -- there was a clot holding the suture line together, and -- and the clot loosened because of the Heparin; and --

A. (Interrupting) No.

Q. (Continuing) -- then there was more flow?

A. No. Huh-uh. Because Heparin in and of itself will not cause any -- any real change in the clot itself as far as -- like thrombolytic therapy. I mean if you -- if we were talking about a thrombolytic agent, such as TPA or streptokinase, that would be a different story.

Q. Yeah. And let me back up a minute. And I apologize for jumping around like this.

We talked earlier about herald bleed.

A. Right.

Q. Okay. Is this described in

the literature?

A. Herald bleeds?

Q. Yes.

A. Yeah. Just in generic terms. You can probably find that in surgical textbooks under a wide variety of things.

There's -- It's not anything that's specific to cardiac surgery or anything else. It simply -- It simply describes some bleeding that may occur that heralds a -- a -- a portending larger bleed on down the -- the road.

There's -- There's certainly no way that you can estimate -- When you see -- When you see someone who comes in your office and they say, Doctor, I've had a little bit of mucous on the toilet paper, I mean you don't know whether to say you've got hemorrhoids; or this is a herald bleed, and we need to put you into the hospital because something bad's going to happen to you.

There's no way to quantitate that. You have to use your judgment.

Q. Okay. Let's talk for a minute about tamponade if we could.

A. Okay.

Q. This occurs, is it fair to say, when there's extrinsic pressure on the heart?

Right?

A. Yes.

Q. Okay. Bleeding into the pericardial sac can be a cause.

Correct?

A. Yes.

Q. A clot in the pericardial sac can also be a cause.

Correct?

A. Yes.

Q. So can the combination of the two? They can both act to be a cause of tamponade.

Is that right?

A. That is correct.

Q. Okay. So is it fair to say that cardiac tamponade is a variable diagnosis? It's not like being a little bit pregnant? It's not like being pregnant, I mean?

A. Right. That's -- That's why I say it's a -- it's a clinical judgment that's not necessarily measured by echocardiograms or any other sort of things. It's measured by the doctor who's ascertaining the patient.

Q. Okay. So there can be cardiac tamponades severe enough so that if left untreated, the

extrinsic pressure on the heart can cause the patient to die, simply stated.

Right?

A. From cardiac tamponade?

Q. Yeah.

A. Yes. But this patient didn't -- didn't die from cardiac tamponade.

Q. I know.

A. Oh, okay.

Q. No. There can also be cardiac tamponade of a lesser degree so that it exerts pressure on the heart, and the patient exhibits signs and symptoms of tamponade; but this can be timely relieved.

Right?

A. Yes.

Q. All right. And what I'm getting at is, a patient doesn't have to have, you know, a certain amount of -- X numbers of cc.s of fluid and thrombus in the pericardial sac before it's -- before you call it tamponade.

Is that fair?

A. That's correct.

Q. Okay. In this case, at six forty-five a.m. the next morning --

A. (Interrupting) Yes.

Q. (Continuing) -- they have a chest x-ray that showed - and I'll quote it - "enlarged cardiac silhouette", closed quote.

If you want, I can direct you to that in the chart.

A. No. I'm familiar with that.

Q. Okay.

A. Yeah.

Q. Is it likely that that chest x-ray showing enlarged cardiac silhouette was a result of thrombus surrounding the -- the suture line on the aortic side down near the aortic annulus?

A. Which date are you talking about now?

Q. On the 10th.

A. On the 10th?

Q. Yes.

A. No. This guy already had a big heart. I mean he had marked cardiomegaly from his -- from his previous disease process.

You don't ever make a diagnosis especially in a post -- post-operative patient of -- of cardiac tamponade from a single chest x-ray.

Q. At six forty-five a.m., given the x-ray and the neo signs and symptoms, was there

tamponade?

A. The -- On the morning of the 10th?

Q. Yes.

A. I do not believe there was, no.

Q. Is it fair to say as a general practice, with cardiac tamponade, your goal as the surgeon is to remove from the pericardial space the substance causing the tamponade?

Correct?

A. Well, now, this is always a risk/benefit ratio. If -- If you -- And I'm sure you have. If you read Doctor Oddi's note, he said that he removed as much clot as he could -- as he could possibly remove, okay, safely.

And in fact, let me -- let me get to this so I don't misquote him here.

He says, "Upon inspection of the lower portion of the pericardium, it was obvious there was well-formed thrombus within this space with a fairly large volume of this material. With a ringed forceps, as much as this well-formed thrombus was extracted as possible, measuring a hundred and twenty to a hundred and thirty cc.s. There was certainly more thrombus remaining,

especially posteriorly and anteriorly toward the sublet portion of the pericardial space. This was not able to be extracted".

So in other words, he removed what he could remove. I mean he did what he could do through that particular incision.

Does that in my mind necessitate having to do a sternotomy? No, it does not. You have to weight the risk/benefits ratios of doing that particular procedure for him -- or on him.

Q. In this case --

A. (Interrupting) Sorry.

Q. (Continuing) -- given the addendum to the note where Doctor Oddi says - and I'll quote - "The concern is that there may be some slow ongoing bleeding from one or more of the suture lines from his cardiac procedure", end clote -- end quote.

Do you see that in the addendum?

A. Yes.

Q. Okay. Given that concern of Doctor Oddi's, isn't he in a position, as a reasonably prudent physician, to conclude that the thrombus he's leaving in there is the result of bleeding from a suture line?

A. Well, no, that's -- But that's what he says. He just -- He's -- What he's saying is that there may be some slow ongoing bleeding, and that's what his concern is; and that he will be observed closely in the coronary care unit.

Q. Okay. But -- But listen to my question now.

Doesn't he, as a reasonably prudent physician, have to conclude that the thrombus is congealed blood from one of the suture lines?

A. No. He just -- He -- It's -- It's prudent of him to -- to weigh that has one of the concerns.

Okay?

But he does not have to conclude that that's what it's from.

I believe that he is prudent enough that had he indeed concluded that it was from that, then he would have probably gone ahead and done the sternotomy.

Q. If -- If there is a slow ongoing bleeding from one or more of the suture lines three weeks post-Ross procedure --

A. (Interrupting) Uh-huh.

Q. (Continuing) -- that's an

alarming thing - isn't it?

A. Yes. But it's also -- The answer is yes, it's very alarming.

But it's also highly unusual, and you generally would not have a slow ongoing ooze or bleed from one of those suture lines. It's generally an all or none phenomenon because it's -- We're not talking about venous bleeding. We're talking about arterial bleeding, and that's generally not -- you don't generally have an ooze from an arterial bleeder.

Q. Well, let me ask it to you this way. Is it -- Is it possible that the suture line can loosen up and you have an ooze resulting in this type of well-formed thrombus and this type of grossly bloody fluid in the pericardial space which leads to cardiac tamponade?

A. Yes, it's possible.

Q. Okay. And then is it possible that that is a herald bleed, as well?

A. It could be. Sure.

Q. Okay. What about the fact that he indicates there is no obvious explanation for the presence of thrombus within the pericardial space?

Do you see that in the addendum?

A. Yes.

Q. Okay. Given that and the concern that there maybe some slow ongoing bleeding from one or more the suture lines, can't we agree that a reasonably prudent physician should do a sternotomy?

A. Well, there's only one problem with what he said. And, of course, my job is not necessarily to agree with everything that Doctor Oddi wrote or -- or stated.

And there is an obvious explanation for presence of thrombus within the pericardial space, and that is that he's still three weeks out from heart surgery, from rather extensive heart surgery; and many people three weeks out from extensive heart surgery are still going to have well-formed thrombus in their chest.

Q. More likely than not what is the well-formed thrombus that Doctor Oddi saw and removed from him?

A. Retrospectively, probably from a loosening of the suture line.

Q. Okay. Now, I know your opinion is that Doctor Oddi was not required by the standard of care to do a full sternotomy under these circumstances.

A. Correct.

Q. Okay. Please tell me each and every reason why. I think we've probably touched on some, but I want to make sure I understand the bases for your opinion.

A. Well, one, I believe that he -- he did treat the tamponade successfully with his subzyfoid incision by removing the fluid and clot that he encountered and then placing a drainage tube.

Okay?

And then that's further evidenced by the patient's continued hemodynamic stability post-operatively.

Okay?

Secondly, the fact that this patient is three weeks out from surgery and -- following a procedure wherein the literature nor in the other expert -- the Plaintiff's expert's opinions have they seen a suture line failure. It's a reasonable thing to conclude that you don't have the -- the first reported case of this in the history of mankind.

The risks versus benefits of doing a sternotomy is that there's very little chance you're going to injure anything from a subzyfoid incision.

At three weeks post-operatively, with a -- with a sternotomy, you have

very, very dense adhesions that are already forming in there, that when you put the sternal saw back in -- because -- because after you take these wires out, this sternum is basically already healed at three weeks.

And you're going to have to resaw that open, and you're going to -- there's a great risk of injuring not just the ventricle when you open up, but your entire Ross conduit that you have put in.

So it's a risk/benefit ratio that you're looking at.

Put it this way:. If -- If he had done a sternotomy and sawed through the ventricle in the process only to get in there and find out that there no bleeding from the suture line to begin with, I think we would be here but for a different reason then because people would be saying that he violated the standard of care by doing a sternotomy when he didn't have to.

Q. How likely would it be that he would saw through the ventricle?

A. Well, the -- I can give you all sorts of case citings. That happens all the time on redo sternotomies.

And once again all you need to do is -- If you'll -- If you'll just check Glen and Edmonds and Kirklin on dangers of re-entry sternotomy, it's quite

well-documented because the back -- the front of the heart is stuck to the back of the sternum.

Q. Have you given me all of the reasons -- all of your reasons for your opinion that Doctor Oddi was justified in doing only a subzyfoid procedure and not a full sternotomy under these circumstances?

A. Well, I'd say I believe so.

But time -- Let me -- I'm just going through my own mental process here.

Let's see. Three weeks out on Coumadin. Risk versus benefits of sternotomy versus subzyfoid incision. The findings of thrombus in and of themselves don't necessitate conversion to it because you're expecting to find thrombus in there.

I think that covers -- And plus, you relieved the tamponade. I think that covers it.

Q. But what if -- I mean -- And you know what? What about the problem in the note -- And again I'm going to argue with you here for a minute.

A. Okay.

Q. What about the note that says the concern there may be some slow ongoing bleeding from one or more of the suture lines?

Given that concern of Doctor Oddi, don't you have to presume the worst?

A. Well, I think that you -- you -- you always entertain that possibility. I mean he's certainly raised the -- the issue there. It's not like he doesn't know anything about it all.

This patient is -- once again is three weeks out from surgery.

Okay?

It's -- It's unheard of to have a suture line failure three weeks out after surgery, yet that's exactly what this patient did have.

He's going to be observed closely. I don't know what else you could do.

I mean yes, you could have done a sternotomy. This gets into the next issue. Yes, you could have done a sternotomy at that point, uncovered a large clot up there just Doctor -- like Doctor Kaminsky is; but you would have been in the same place that Doctor Kaminsky was twenty-four hours later or less.

Q. Let's -- Let's talk in terms of within your -- when you talk about twenty-four to seventy-two hours post --

A. (Interrupting) Sure.

Q. (Continuing) -- procedure. It's a valve procedure, and you see this kind of condition; and you've got a -- you've done a subzyfoid procedure.

At that point in time, if you're concerned of slow ongoing bleeding from one or more of the suture lines, it's -- it's required by the standard of care that you open the patient up.

Right?

A. If you're twenty-four to seventy-two hours out, yeah.

But I wouldn't normally do a subzyfoid approach -- I would only do that emergently in the ICU until I could get the patient back to the operating room.

Q. Okay.

A. Okay? The standard re-entry technique in patients when they're twenty-four to forty-eight hours or twenty-four to seventy-two hours post-operatively, is to take them back to the operating room, remove their wires, and just simply open the sternum.

Because the sternum doesn't have to be resawed at that point. It simply will open back up with a retractor.

Q. So, there's no risk of hitting the --

A. (Interrupting) Well, there's always a risk of hitting something; but the risk is much less at that point.

Q. Well, you're -- But you're not -- Well, are you telling me that you're not concerned about sawing into the ventricle?

A. Not -- No, not at -- not at twenty-four to seventy-two hours out because you don't have to use the saw again. You've already done that. The only thing that's keeping that sternum together are the wires that you've put in there.

The natural tendency of the sternum, as soon as you take the wires out, is for it to open back up anyway because of the elastic recoil in the skeletal -- or the thoracic skeleton.

Q. Okay. Now, you've indicated that you think had Doctor Oddi done the thoroco -- or the -- yeah, the thoracotomy the night before - --

A. Sternotomy?

Q. Sternotomy. Excuse me.

A. Yeah.

Q. The sternotomy the night before, more likely or not -- or to a reasonable degree of medical probability, the same thing would have happened as what happened the next morning.

A. Exactly.

Q. Tell me why.

A. Simply because the process

that prohibited Doctor Kaminsky from being able to repair this was not really a technical one as far as getting to a spot that required a suture.

The problem was getting the sutures to hold, and that's -- like I said, that's evident in his operative note and it's also evident in the pathology report from the autopsy.

In other words, there's a reason that a suture line suddenly -- It's not a suture broke when we say a suture line failure. What happened, I believe, is that whatever this granulomatous process was, this chronic inflammation that they found in there, probably would not allow -- because it wasn't healed, in other words, the artery was not healed yet, probably allowed for some -- because of the tension's that's naturally on anything that pulsates, allowed it to pull through -- liken it -- liken it to a cheese -- a cheese slicer. Okay? And soft cheese is a lot easier to put that slicer through than hard cheese. And it's the same sort of thing. If you have some sort of granulomatous process that's going on that's causing friability of the tissues, then you can put as many sutures in there as you want to; but because of the intrinsic nature of whatever this process is, they're not going to hold.

And I believe that's what

Doctor Kaminsky found that night, and that's what Doctor Oddi would have found the night before.

Q. What options would he have then? Could he have put the patient on bypass.

A. Well, but see, Doctor Kaminsky put the patient on bypass. That's -- That's fine, except that it still doesn't -- being on bypass only gives -- only buys you some time while you're trying to repair this. It doesn't allow the tissue to hold any better.

Q. In terms of probability, what options would have been available to Doctor Oddi the night before, assuming he opens the chest up, finds the suture line, as -- as we've discussed it with the granulomatous tissue and the friable tissue, what options would there be available to him the night before to salvage this patient?

A. Well, I -- I don't think he had any options that would have been any differently than the ones that Doctor Kaminsky had, and that is to try to control the suture line bleeding as best you can.

Q. But the night before, he's not dealing with -- with having dumped eight hundred cc.s into the chest tubes.

A. But that's not a -- that's not what the problem is. That -- The eight hundred cc.s of blood that's dumped is the sign of what the problem is.

And the problem is bleeding from the suture line. It has -- It doesn't matter if it was eighty cc.s or eight thousand cc.s That's not the problem.

Because they got him on bypass. They got the heart decompressed. They had everything available to them that they needed to have available to them to repair the suture line.

The problem was the intrinsic nature of the tissue itself.

There is some tissue that -- that cannot be sewn back together. It's like sewing, as we say - excuse the expression - it's like sewing flatus to moonbeams.

Q. Okay. But you've never seen tissue like this before in the heart? You've seen it in other areas of the body.

Right?

A. Yes. But in the same structure - the aorta. Just move down -- down towards the feet a little bit.

Q. You've seen this -- You've seen tissue like this in the aorta?

A. Absolutely. That's what I was trying to tell you. On reoperative aortic aneurysms, you

can find this. But you have the option of going to a different site in the aorta where you can find healthy tissue.

The -- Doctor Oddi didn't have that option -- Or I should say, Doctor Kaminsky didn't have that option because he was only a couple of centimeters from the very origins of the aorta to begin with; and you could only go so far to start your suture line. After that, there's nothing you can do. You're down into the heart.

Q. Is confronting this type of tissue as described in the op note and in the autopsy report and pathology report, is it -- is this described in the literature?

A. Oh, yeah.

Q. And did you tell me that already? If you didn't, would you humor me and tell me again where?

A. Okay. Be specific in your question, and I'll tell you about that.

Q. Yeah. I mean this granulomatous tissue you described, this friable tissue.

A. Yeah. If you look in the index in any of these books under granulomatous tissue, you're not going to find it.

But if you look in -- in textbooks as far as description of -- of tissues that just won't hold in case reports and things like that, certainly everybody that's ever sewn anything inside the body can tell you that there are some tissue that just won't hold suture at all because of its friable nature.

I mean that's -- You don't have to do a double-blind study on that to know that it happens. That's just based on training, experience, knowledge, and just observation over a period of time.

Q. Do you have an opinion in terms of probability as to why it took three weeks for this to manifest itself?

A. Well, I think -- I think that whatever it was was chronic as depicted in the autopsy report and also by the description of Doctor Kaminsky.

I can't tell you why it took three weeks; but then some granulomatous processes, you know, take three years. I mean there's just no way to tell why it was three weeks. Whatever it was, it was -- it was some sort of reactive process.

It could also be a suture line infection. Just because they didn't get anything to grow out in culture doesn't mean anything at all. There probably is many infections that occur where nothing ever

grows out as ones that do. It depends on your collection technique.

Q. You say it was chronic, then you -- and then you cited to Doctor Kaminsky's op note and the autopsy.

What in the autopsy, if you would, please, leads you to believe it was chronic?

A. Let me read it to you. The part where it says chronic inflammation and granulation tissue.

Q. Okay. Okay. The -- The conclusion then by the pathologist that --

A. (Interrupting) Yeah.

Q. (Continuing) -- it's chronic?

Okay. What about Doctor Kaminsky's op note?

A. Well, what he does -- He doesn't use the word chronic in there, but what he does use is -- is words such as shaggy appearance. Let's see. Yeah, that's basically it.

What -- What he's talking about is just in general. He just describes in general the difficulty that this area was to resuture.

Q. Okay.

A. I mean he doesn't have the

benefit that a pathologist does of looking at these things underneath the microscope.

Q. Let me back up a minute and -- going back to Doctor Oddi.

A. Okay.

Q. I mean should it have been running through his mind, as a reasonably prudent physician in these circumstances, that what he was seeing was a herald bleed?

A. No. Because once again there's no precedent for this to be a herald bleed three weeks after a Ross procedure. That's unheard of. That's what we're talking about.

A herald bleed three weeks after a Ross procedure, you would have to be thinking of what could be bleeding in there; and, of course, you would think, well, suture line bleeding doesn't normally present this way. Suture line bleeding presents the way that it presented on the 10th and not on the 9th.

A reasonably prudent physician would come to the conclusion I believe that Doctor Oddi did, in that this is just a problem secondary to anticoagulation in someone who just had heart surgery three weeks ago.

Q. Well, if you were two or three

weeks -- If you were two or three days out -- I mean - I'm sorry - twenty-four to seventy-two hours out from valve surgery and you saw a bleed like this in the pericardium, would you have concluded that it was a herald bleed?

A. You're talking about what he saw -- what Doctor Oddi saw?

Q. Yeah. With what Doctor Oddi in this patient on the 9th.

If you were just twenty-four to seventy-two hours out post-valve surgery, would you have concluded more likely than not that this was a herald bleed?

A. Well, you would have been able to conclude whatever you wanted to because you would have handled it differently at twenty-four hours than you would at three weeks.

Q. Okay. But assuming for some reason you do a subzyfoid approach twenty-four to seventy-two hours out --

A. (Interrupting) Uh-huh.

Q. (Continuing) -- and you see this type of presentation, at that point in time what's running through your mind is more likely than not we've got a herald bleed here.

Right?

MR. BEST: I -- I object. He's been through this multiple times. I guess he can do it one more time, but --

MR. BURNETT: (Interrupting) Okay.

MR. BEST: (Continuing) -- he's told you these aren't -- You're talking about not only apples and oranges. You're talking about apples and plants. There's two different animals. So he can explain it again, but let's not keep repeating the same stuff.

A. Yeah. First of all, I think that if -- if you're a heart surgeon and you take somebody back at twenty-four to seventy-two hours and you do just a subzyfoid approach on them at that time and look in there and see clot and you don't open the sternum, that's a deviation of the standard of care for that particular incident, at twenty-four to seventy-two hours because you're thinking of -- Your thinking is totally different. If you're thinking of post-operative bleeding algorithms, okay, and you're going all the way back to decision trees, which is how surgeons are basically trained to do. We have decision trees and algorithms that we follow. This -- This -- This period of time, you are thinking about suture line breakdowns and cannulation sites and things like that because that's when

they present themselves.

Okay?

You wouldn't want to just expose to a subzyfoid incision as your only operation simply because you need to think about those things that are going to cause the problem.

At three weeks, it's a totally animal that we're talking about. A thrombus in there at three weeks on a patient -- in a patient that's been on anticoagulation, you don't think of cannulation sites and suture lines because that's not normally what it is.

It's unheard of for it to be. I've never seen it. I don't believe Doctor Oury had ever seen it based on his testimony, either, that far out. This is a very, very unusual situation that we're dealing with.

Q. Okay. Tell me -- Let's talk a little bit about your file.

A. Okay.

Q. First of all, did you make any notes in this case?

A. No.

Q. Okay. You authored one -- one report?

A. Yes.

Q. Were there any revisions?

A. No. The -- The only thing that I have noted -- And I'll just tell you that if you look at my original report -- Do you have that in front of you?

Q. Yes.

A. Okay. I've added a number six and a number seven on here that -- and that is just that I've reviewed the deposition of Doctor Oury.

Q. Okay.

A. And I also reviewed the deposition of William Risher, the original expert that you had in this case.

Q. Okay.

A. And that's it.

Q. But -- But your -- your three standard opinions...?

A. And nothing else has changed, no.

Q. Okay. Did you make any notes on any of the medical records?

A. No. Huh-uh.

Q. And you saw Doctor Kaminsky's and Doctor Donlin's depositions as well?

A. Yeah. I think I included those up there in the --

Q. (Interrupting) Yeah.

A. Yeah.

Q. Now, are you critical of Doctor Kaminsky or Doctor Donlin?

A. No, not at all.

Q. Okay. Are you critical of the patient at all in this case?

A. No. Huh-uh.

Q. Bear with me one moment, Doctor. I'm almost done.

Doctor, have you received any other reports from any other Defense experts?

A. No.

Q. No report from a fellow named Mark Botham?

A. No.

Q. Okay. Are you aware of the -- the concept -- Or have you come across a situation in which you've concluded that traumas in the pericardial space is, for instance, more recent than fluid in the pericardial space because of the pulsating beats of thrombus down in the fluid? Does that make sense to you?

A. Well, if you look at anything -- I mean I could put anything I -- I could put, you know, an angel food cake on top of a heart, and it

would pulsate. Anything that's inside the pericardial cavity laying on top of the heart is going to pulsate.

So you can't conclude anything by -- by the fact that the thrombus itself is pulsating.

Q. Well, I mean what I'm -- what I'm asking is, the pulsating actually liquefies thrombus?

A. That the pulsation liquefies like an agitating type of action?

Q. Yes.

A. No. I've never seen that.

MR. BURNETT: Okay. Doctor, I don't have anymore questions.

THE WITNESS: Okay.

MR. BEST: John, you owe Doctor Campbell a Thousand Dollars for this. Do you want him to send you a bill?

THE WITNESS: I'll send it to you.

MR. BURNETT: You know what? If he would send us an invoice, that would be helpful.

THE WITNESS: Yeah. I'll send it to David, and he can send it on to you.

MR. BURNETT: That's fine.

THE WITNESS: Okay.

MR. BEST: And then just so

we've got -- I've talked to Doctor Campbell about his testimony. I did check with the Court. Tuesday is his call day. So I'm assuming Monday -- Wednesday you'll be done. He's going to testify Thursday morning. Are we still on the same page? He's canceling patients and moving his life around in order to accommodate this trial.

MR. BURNETT: Yeah. Let's see. Monday and Wednesday. I didn't realize Tuesday was his call day.

MR. BEST: Yeah. You told me you needed two full days including picking the Jury, so that's why --

MR. BURNETT: (Interrupting) I -- I shouldn't need more than two full days.

MR. BEST: If you still have a lay witness or something, we'll take him out of order and put Doctor Campbell on --

MR. BURNETT: (Interrupting) Okay.

MR. BEST: (Continuing) -- first thing Thursday morning.

Is that okay with you?

MR. BURNETT: Yeah, that's fine. And I've got -- Do you want to -- You know, Ms. Burgess broke her ankle; and I can pick her up and bring

her to your office at your convenience in the next week or two, whatever you'd like.

MR. BEST: Yeah. We'll get -- I'll get ahold of you on that --

MR. BURNETT: (Interrupting) Okay.

MR. BEST: (Continuing) -- in the next few days.

MR. BURNETT: That's fine. Listen, Doctor Campbell, thank you for your time, sir.

THE WITNESS: Okay.

(END OF DEPOSITION)

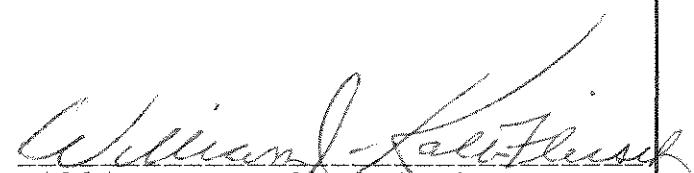
STATE OF KENTUCKY)
) SS:
COUNTY OF JEFFERSON)

I, William J. Kalbfleisch, Notary Public within and for the State of Kentucky at Large, do hereby certify that the foregoing deposition of DOCTOR ROBERT A. CAMPBELL, II, was taken before me at the time and place and for the purpose in the caption stated; that the said witness was first duly sworn to tell the truth, the whole truth and nothing but the truth; that the deposition was reduced to shorthand writing by me in the presence of the witness; that the foregoing is a full, true and correct transcript of the said deposition so given; that there was a request that the witness read and sign the deposition; that the appearances were as stated in the caption.

I further certify that I am neither of kin nor of counsel to any of the parties to this action, and am in no wise interested in the outcome of said action.

WITNESS MY SIGNATURE, this 6TH day of January, 2003.

My Commission Expires: October 18, 2006.



William J. KalbFleisch
Notary Public
State at Large, Kentucky

I have read the foregoing 80 pages, and the statements contained therein (subject to corrections, additions and deletions contained in the errata sheet appended hereto) are true and correct to the best of my knowledge and belief.

WITNESS: Robert Campbell, II M.D.

Subscribed and sworn to before me by Doctor Robert A. Campbell, II this the 4th day of January, 2003.

My commission expires: Notary Public, State at Large, KY My commission expires May 22, 2004.

Barbara Cutter
Notary Public

ERRATA SHEET

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I have read the foregoing 80 pages, and the statements contained therein (subject to corrections, additions and deletions contained in the errata sheet appended hereto) are true and correct to the best of my knowledge and belief.

WITNESS: Robert Campbell, II

Subscribed and sworn to before me by Doctor Robert A. Campbell, II this the 9th day of January, 2003.

My commission expires: Notary Public, State at Large, KY My commission expires May 22, 2004.

Barbara Cotton
Notary Public

ERRATA SHEET

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