COMMON PLEAS COURT
FRANKLIN COUNTY
STATE OF OHIO

- - -

Yavonna Lyons, Individually and as Administratrix for the Estate of Jeffrey Lyons, Deceased,	:	
Plaintiff,	:	
vs.	:	Case No. 02CV-07-7550
Capitol City Cardiology, Incorporated, et al.,	:	
Defendants.	:	

- - -

April 20, 2004

Deposition of

Steven Joseph Yakubov, M.D.

a witness herein, called by the Plaintiffs for cross-examination under the applicable Rules of Ohio Civil Court Procedure, taken before me, Beth A. Higgins, a Registered Professional Reporter and Notary Public in and for the State of Ohio, taken by agreement of counsel and pursuant to Notice, at the offices of the witness, 3545 Olentangy River Road, Columbus, Ohio 43214, on Tuesday, April 20, 2004, commencing at approximately 4:40 p.m.

- - -

APPEARANCES:

JAMES M. KELLEY, III, Esquire
Elk & Elk Company, L.P.A.
Landerhaven Corporate Center
6110 Parkland Boulevard
Mayfield Heights, Ohio 44124
Email: jkelley@elkandelk.com
(888) 355-6446,
On behalf of the Plaintiff.

THOMAS A. DILLON, Esquire
Roetzel & Andress
155 East Broad Street, 12th Floor
Columbus, Ohio 43215
Email: tdillon@ralaw.com
(614) 463-9770,
On behalf of Defendant
Bruce Auerbach, M.D.

VINCENT J. LODICO, Esquire
Crabbe, Brown & James LLP
500 South Front Street, Suite 1200
Columbus, Ohio 43215
Email: vlodico@cbjlawyers.com
(614) 228-5511,
On behalf of Defendant
Samir R. Tulebaev, M.D.

FREDERICK H. SEWARDS, Esquire
Hammond & Sewards
556 East Town Street
Columbus, Ohio 43215
Email: fsewards@hammondandsewards.com
(614) 228-6061,
On behalf of Defendants
Barney Beaver, M.D., and
Capitol City Cardiology,
Incorporated.

Tuesday Afternoon Session
April 20, 2004
4:40 p.m.

- - -

STIPULATIONS

It is hereby stipulated by and between counsel for the respective parties herein that this deposition of Steven Joseph Yakubov, M.D., may be taken at this time by the Notary; that said deposition is being taken by agreement of counsel and pursuant to Notice; that said deposition may be reduced to writing in stenotypy by the Notary, whose notes may thereafter be transcribed out of the presence of the witness; that proof of the official character and qualifications of the Notary, the time and place of the taking of said deposition are hereby waived.

- - -

INDEX

- - -

- - -

EXHIBITS

Deposition Exhibits	Marked	Referred

(No exhibits marked)

- - -

PROCEEDINGS

- - -

STEVEN JOSEPH YAKUBOV, M.D., being by me first duly sworn, as hereinafter certified, deposes and says as follows:

CROSS-EXAMINATION

BY MR. KELLEY:

Q. Can you state your name, please, for the record?

A. Steven Joseph Yakubov.

Q. Dr. Yakubov, my name is Jay Kelley. I am here today to take your deposition in the matter of Lyons versus several defendants. I believe you're here on behalf of Dr. Auerbach, if I understand correctly.

A. Correct.

Q. What I'm going to do today is take your deposition. I know you've been through this process before, but I want the ground rules on the record. Okay?

It's a verbal question-and-answer session; and I say verbal, because we have to use words to describe our answers. Such things as head nods, pointing, or gesturing don't transcribe well. So

Page 6

try to use words for all your answers. Okay?
A. Fine.
Q. I'm not here to rush or trick you, so feel free to utilize the records which are in front of you or any notes that you brought before you answer a question. Okay?
A. Yes.
Q. If I phrase a question either inartfully or you just simply don't hear it or understand it, be sure to let me know before you answer it and I'll be happy to repeat it or rephrase it. Fair enough?
A. Yes.
Q. Prior to your deposition today, what materials have you been provided?
A. I have -- I have the deposition of Dr. Albert Kolibash, which I just received about five minutes ago, so I have not read it.
Q. Okay.
A. I have the records from Capitol City Cardiology.
Q. Let's go slowly as you go through it.
Within the Capitol City Cardiology notes -- records, do you have any notations?
A. No.

Page 7

Q. Okay. Do you ever have a custom of making notations on any of the medical records?
A. No.
Q. Have you been provided any summaries of those records?
A. No.
Q. Okay. What's the next thing?
A. The next thing is the -- the deposition of Dr. Samir Tulebaev.
Q. And do you have any notes within that deposition transcript?
A. No.
Q. Do you know Dr. Tulebaev?
A. No.
Q. Okay.
A. I have the Fayette County Hospital medical records that I've been provided.
Q. I see that they're kind of loose.
A. Yes.
Q. Has any portion of them been left behind or anything of the sort?
A. No.
Q. Okay.
A. Everything that I've ever been given is

Page 8

right here today.
MR. DILLON: With one exception.
A. We have a little bit of a debate. I can't -- I can't find the --
Q. Let me guess. Auerbach's depo?
A. No. Plaintiff's --
MR. DILLON: Garrett's.
A. Garrett's.
Q. All right. So the next thing is, within those Fayette records, do you believe those are a complete copy of the records from your review?
A. As far as I can tell.
Q. Okay. Any notations in them?
A. No.
Q. Any summaries of those records that were provided to you?
A. My own notations or summaries, I have none.
Q. Okay. Did they provide you with any summaries of the records?
A. Meaning Mr. Dillon?
Q. Mr. Dillon, someone from his office?
A. The only summary that he's ever given me is just a -- a letter from the office regarding the

Page 9

handling of the protected health information, and I think that's it.
Q. Okay.
A. That's it.
Q. We'll get to that, I guess, in due order.
The next thing you have is whose depo?
A. Barney Beaver.
Q. Okay. Do you know -- I noticed you called him Barney Beaver.
Do you know Dr. Beaver?
A. Well, I called him Barney Beaver because it says Barney Beaver.
Q. Okay.
A. I do know him. Yes.
Q. Well, I know sometimes people call him Doctor --
A. Oh, okay.
Q. -- or Mister. You seemed like you used a friendly description of his name.
A. I -- I -- I know him, but it says "Deposition of Barney Beaver."
Q. Okay. How long have you known him?
A. Ah, I don't know. Maybe eight or ten years, somewhere in there.

Page 10

Q. And have you ever practiced with him?
A. No.
Q. Ever do any training with him?
A. No.
Q. Did he do any of his training under you at any point?
A. No.
Q. The group that he is at, do you guys ever have any sort of referrals of patients back and forth?
A. No. We're at kind of separate institutions.
Q. Is there a local cardiology professional association that you're both members of?
A. Uhm, there's -- I don't think there's any local cardiology professional membership. He may be part of the Columbus Medical Association or OSMA, but I'm not very active in either of those, so I wouldn't -- I don't go to meetings with him on a regular basis.
Q. Okay. Do you have any notes from his depositions?
A. No.
Q. Have you ever spoken to him about this

Page 11

case?
A. No.
Q. What's the next stuff you have?
A. Well, the next is the handling of protected information, and then it is the -- the letter from Mr. Dillon's office stating what he has included to me.
Q. Okay.
A. And then finally is the deposition of Dr. Auerbach.
Q. Okay. Any notes within Dr. Auerbach's deposition?
A. No.
Q. Same kind of questions as with Dr. Beaver. Do you know Dr. Auerbach?
A. Yes.
Q. Okay. How long have you known him?
A. Uhm, eight or ten years.
Q. Have you ever socialized with him?
A. No.
Q. Obviously the fact that we're here today, you're serving as an expert witness on his behalf. Correct?
A. That is correct.

Page 12

Q. And he's somebody who you know and would recognize if you saw him in the community?
A. Yes.
Q. Do you ever do plaintiffs' work or do cases on behalf of patients who are claiming to be injured?
A. I have never been asked.
Q. Okay.
A. Oh, I -- I take that back.
I was asked once on a -- on a case where I was the defense -- I'm -- was the defense expert, and they dropped the -- the defendant and asked me to serve for the plaintiff.
And I was asked on another case to give an opinion, and I didn't think there was a case there.
Q. Okay.
A. But I did review the records thoroughly. And the attorney felt there was a much better case than I did. And since we didn't quite agree on it, I thought he would be better off finding an expert that was more suitable for the case.
Q. Okay. The plaintiffs' cases that you reviewed, were they ever on behalf of patients here in Columbus?

Page 13

A. No.
Q. Okay. Would you review a case for a patient in Columbus against a local physician here?
A. Yes.
Q. Okay. Would you review a case against Dr. Auerbach and Dr. Beaver?
A. Yes.
Q. Even though you know them and have had an eight- to ten-year acquaintance with them?
A. Yes.
Q. Okay. You don't believe that relationship in any way biases you or colors you one way or another in your review of a case?
A. I -- I -- It might. It might. But it's -- I never interact with them. I don't interact with them on a regular basis. I could go clearly years without seeing them.
Q. But the reality is you would eventually again see them and have to confront someone who you were critical of.
A. Right. I think that there is value to reviewing cases. I think that if you have competent physicians reviewing cases, you can make competent decisions.

Page 14

Q. In this -- this case here, have you ever prepared a report?
A. I was never asked to prepare a report.
Q. Do you have any notes that you generated?
A. No.
Q. Okay. So you just reviewed the stuff and have kind of kept it in your own mind?
A. Yeah.
Q. Okay. And you don't have a --
And by "notes," I'm including anything on a word processor or otherwise.
A. I would assume that's what you meant.
Q. Okay.
A. I have no notes.
Q. You reviewed the care and treatment, I assume, starting on June 18th?
A. Yes.
Q. Okay. And let me ask you first, what is your definition of standard of care?
A. Standard of care is the care that would be provided to a patient that is consistent with guidelines and is consistent with the care that is characteristic of your community, what a competent cardiologist in my -- in my field would be expected

Page 15

to provide to that patient under similar circumstances.
Q. And you have standard-of-care opinions in this case, I assume?
A. I do.
Q. Okay. Do you have any standard-of-care criticisms of any of the physicians involved in this case?
A. No.
Q. Do you believe that they all met the standard of care or there are certain people who you just simply have no opinions on?
A. I was really only asked to make an opinion about Dr. Auerbach.
Q. How about proximate causation? Do you have an opinion as to the cause of death for Jeffrey Lyons?
A. Yes.
Q. And when I ask you an opinion, I'm going to ask you only to give me opinions if you hold them to a reasonable degree of medical probability. Okay?
A. Sure.
Q. And that's obviously based on your

Page 16

education, your training, and your review of the records.
A. Okay.
Q. First, what is your opinion to a probability as to what the cause of death for Jeffrey Lyons was?
A. I believe he had sudden cardiac death.
Q. And obviously any cardiac death is going to be secondary to an arrhythmia.
What caused his arrhythmia?
A. Probably the myocardial infarction.
Q. Okay. And the myocardial infarction, not to keep going down the road, but was that caused by ischemia or a supply-and-demand issue?
A. I don't know.
Q. What are the possible causes for his myocardial infarction?
A. He probably had a blockage of an artery that caused some myocardial damage.
Q. Okay. And do you have an opinion as to which of the coronary arteries? And I don't mean "which" to be only one. There may have been multiples.
Do you have an opinion as to the

Page 17

distribution?
A. Yeah. You know, can I see -- I wanted to see the stress test result one more time.
Do you mind if I close this door?
Q. Absolutely not.
(Discussion held off the record.)
A. Yes. I'm sorry. Can you repeat the question?
Q. Okay. Do you have an opinion as to -- and again, this is to a probability -- as to what the distribution of his coronary disease was?
A. Yes.
Q. And what is your opinion?
A. My opinion was it involved the inferior wall of the left ventricle.
Q. Okay. And the coronary artery that would have been serving that, would that be the LAD or would that be the circumflex?
A. It would be in most instances the right coronary artery or one of its branches.
Q. Okay. Do you believe that that is the same area that caused him chest pain and what has been referred to in the depositions as a non-Q-wave MI on June 18th?

Page 18

A. Uhm, most likely.
Q. Okay. Do you agree to a probability that on June 8 -- on or about June 18th, the first day when he presented to the hospital, that he had had a non-Q-wave myocardial infarction?
A. He had a non-ST-segment elevation myocardial infarction.
Q. Okay. That's not something that you need the benefit of retrospect to know. That was something that you could tell from his clinical presentation combined with his laboratory values that day. Correct?
A. I'm not as clear on that comment. I would make my assessment based upon a retrospective analysis of this case.
Q. Okay. And what is it in retrospect that makes you conclude that he had a non-ST-segment myocardial infarction on June 18th, to a probability?
A. I believe the Cardiolite scan is very helpful in helping me make that diagnosis clearly.
Q. Did you actually look at the images from the Cardiolite scan?
A. No.

Page 19

Q. Okay. You're simply relying on the report that describes a fixed defect and also an area of reversibility of the ischemia?
A. Yes.
Q. And the area where you believe the non-ST infarct was that was on the 18th, would that be represented by the area of reversible ischemia or the area where the fixed defect was?
A. The -- I thought the Cardiolite was done on a different date.
Q. I know the Cardiolite was done on a different day.
I'm ask -- You said that that nuclear image --
A. Yes.
Q. -- allowed you to conclude that there was to a probability a heart attack on June 18th, an MI.
A. Yes.
Q. I am asking, what about that image allowed you to conclude it? Was it the fixed defect or was it the area of reversible ischemia?
A. The fixed defect.
Q. Okay. So you interpret that the fixed defect on that Cardiolite scan is representative of

Page 20

the damage that was done from that heart attack.
A. Yes.
Q. The area of reversible ischemia, is that representative of areas where there's a supply-and-demand issue between rest and stress?
A. I don't know what you mean.
Q. Okay. When we talk about reversible ischemia, let's make sure that I understand it correctly. I understand that reversible ischemia in a nuclear stress test, you're actually looking at sections cut of the heart, and you're looking at, for lack of a better term, the doughnut at rest versus the doughnut at stress to see if, in fact, there is a difference between rest and stress for reperfusion.
A. Okay.
Q. Is that accurate?
A. Simplistically, yes.
Q. I keep it as simple as possible so that I can understand it.
A. Okay.
Q. That is reversible ischemia, where there is a difference between the resting and the stress images.

Page 21

A. Most instances.
Q. I am asking, the area where there was reversible ischemia seen in this case on Jeff Lyons's scan, are you able to conclude that that was representative of ongoing coronary artery disease?
A. No.
Q. Okay. Do you have any opinion as to why he had reversible ischemia on the Cardiolite stress test?
A. Well, do you mind if I just read the cardiac stress test?
Q. No, absolutely not.
A. The cardiac stress test interpretation is that there is a small amount of margin reversibility of the distal aspect.
Now, the distal aspect is in reference to the distal aspect of the inferior wall, if I'm reading this interpretation correctly.
Q. Okay. So you believe that there --
A. He has a very small amount of margin reversibility, which is characteristic of infarctions.
Q. So that's just further evidence that an

Page 22

infarction has happened?
A. Yes.
Now, the fixed defect implies that there had been a myocardial infarction.
Q. When we say that a marginal amount of reversibility, does that mean, though, that there's still heart tissue which is not getting blood during stress but at rest is able to reperfuse and is still not infarcted?
A. Perhaps.
Q. Okay.
A. Not always.
Q. What else could that reversibility account for?
A. It's not uncommon to have a small amount of margin effect even in a completed infarction. He's very early from the time of the infarction, so that area, it can take on many different meanings.
Q. Could it still be the progression of death from that infarction?
A. Yes.
Q. Looking at -- While we're on the Cardiolite image, we might as well finish off there. It does appear that he has good left ventricular

Page 23

function within an ejection fraction of 55 percent. Correct?
A. Yes.
Q. Do you believe, as of June 26th of 2000, which is when the Cardiolite stress test was done, knowing that an exercise stress test had been done before that, that there was any significant heart muscle damage that had occurred that would have impacted upon his quality of life?
A. The amount of heart muscle damage, according to the stress test, was very small. His prognosis typically in this type of report is quite good.
Q. One of the things, though, for his prognosis to be good is to stabilize the heart, make sure there's adequate perfusion so there's not another infarction.
A. Maybe.
Q. We'll come back to that.
A. Okay.
Q. What is angina?
A. Uhm, angina typically refers to -- what I talk about is angina pectoris, chest pain.
Q. And what is that symbolic of; or to you as

Page 24

a clinician, what does that raise your index of suspicion for?
A. As a cardiologist, my main job is to make sure that chest pain is or is not related to the heart.
Q. And chest pain or angina which is consistent with, you know, the heart as an underlying cause, does it have a typical type of presentation?
A. Yes.
Q. And can you describe that for me?
A. It's chest pain that usually is substernal. It's often not so much of a pain but a discomfort, a discomfort that's difficult to put into words often. It can be a pressure-like sensation. It often has modifying factors. Physical activity tends to bring it on, rest tends to relieve it, sublingual nitroglycerin can relive it; and it can be radiating to the jaws, to the arms, to the back. It can be in various places.
Q. As far as assessing whether or not somebody has had a myocardial infarction or the heart as a cause, I guess, for their chest pain, is an EKG in and of itself diagnostic one way or

Page 25

another?
A. It can be.
Q. Can an EKG be normal, though, and a patient still be having a myocardial infarction?
A. Yes.
Q. The EKG which was performed on June 18th, do you know how many leads that was?
A. This is not a trick question, right?
Q. No.
A. Twelve lead.
Q. Okay.
A. Okay. I --
Q. Why did you think it was a trick?
A. They're all 12 leads unless something -- I've never seen anything but a 12-lead in a long time.
Q. And are there specific types of myocardial infarctions that a 12-lead EKG is not going to be sensitive for?
A. The -- the least sensitivity that it displays is in posterior myocardial infarctions.
Q. Another way to test for a myocardial infarction is through laboratory testing, enzymes particularly, and markers.

Page 26

A. Correct.
Q. What is troponin?
A. It is a cardiac enzyme.
Q. Is troponin considered the gold standard as far as the utilization of enzymes to detect whether or not there's been loss of heart muscle?
A. I -- I think troponin and CPK-MBs are -- are the measures that we do, that we look at to determine myocardial damage.
Q. The troponins in this case went from 1 to 1.8 to 1.9.
Do you believe that those represented an increase in the troponin?
A. Yes.
Q. Okay. Do you believe that that was related to loss of heart muscle on June 18th and June 19th?
A. Yes.
Q. What else can account for that elevation in troponin other than a myocardial infarction?
A. There are other -- there are other causes of them.
You can have congestive heart failure, you can have left ventricular wall stress that are

Page 27

brought on by a variety of factors, and then you can have renal insufficiency. And those are just a few of the things that can cause spurious elevations in troponins without a true myocardial infarction being present.
Q. When it's brought on by a renal cause, renal insufficiency, is it usually accompanied by a chest pain which radiates to the shoulder?
A. It's not unusual for patients with renal disease to have chest pain.
Q. Does the chest pain, though, radiate to the shoulder typically?
A. It can radiate anywhere.
Q. Well, the other two causes that you gave me were both potentially cardiac in nature. One was left ventricular --
A. Disfunction.
Q. -- dysfunction, --
A. Yes.
Q. -- and the other was congestive heart failure.
A. Well, that's -- that's congestive heart failure. The other is -- Another cause is left ventricular wall strain.

Page 28

Q. The great majority -- When we discuss things legally, you're aware we discuss to a probability.
A. Yes.
Q. The most likely cause for an elevation, the significant -- the clear -- the clearly most likely cause of elevated troponin is myocardial necrosis; correct?
A. Correct.
Q. And when a troponin comes back that's abnormal, particularly when more than one comes back abnormal, is there an attitude that it's cardiac until proven otherwise?
A. When more than one comes back as abnormal?
Q. As abnormal.
A. We typically try to rule out coronary artery disease first.
Q. And when you're trying to rule out coronary artery disease where a patient is symptomatic with intermittent left-sided chest pain which radiates to the left arm or shoulder, time is of the essence; correct?
A. Sometimes.
Q. Well, it's not something that you are

Page 29

going to put on the back burner. It's potentially life-threatening.
A. Some myocardial infarctions need to be taken care of right away.
Q. Do you agree --
The ER impression from June 18th was that Jeffrey Lyons had angina. Did you see that in the records?
A. Yes.
Q. Do you agree with that?
A. Yes.
Q. Do you agree that it was unstable angina?
A. It's easy for me to say that he's had a myocardial infarction. Not being there to take his history, it would be much more difficult for me to say that this was unstable angina.
Q. What is stable angina?
A. It's angina that's occurred over and over again and is relieved with rest and is more of a chronic condition. Patients know what can make it come on. They know what can stop it. It has not changed in character, frequency over time.
Q. Does he give a history of this being consistent with a chronic problem?

A. No.
Q. He gives actually that it's been intermittent chest discomfort for two days, --
A. Correct.
Q. -- which wouldn't fall into the category of stable angina or chronic angina; correct?
A. That's correct.
Q. He describes this discomfort is heavier and harder than he's had in the past and radiates to his left shoulder.
That change in symptoms is also inconsistent with calling it stable angina; correct?
A. Correct.
Q. He has variations in the degree of pain, he says, between two of ten to six of ten. That's not consistent with stable angina, either; is it?
A. No.
Q. What more historical information do you need to know?
Other than the history and physical that was taken there, that it's intermittent for two days, it's different than any chest pain he's had in the past, that it's heavier and harder, it's now radiating, and it has fluctuations in degree, what

more information do you need to know clinically to know that this is not stable angina, if any?
A. The cardiac enzymes.
Q. We know that the troponin came back at 1, 1.8, and 1.9; the CPK-MB, I believe, came back within -- I think he came back within normal limits.
A. Yes.
Q. Does the CPK-MB being within normal limits somehow factor into whether it's stable or unstable angina?
A. They can.
Q. How?
A. Well, you like to see consistency in the enzyme elevations. That helps firm up your diagnosis.
Q. Can the body in essence, I guess for a lack of a better term, metabolize the CPK-MB enzyme easier than the troponin?
A. I don't believe so. You do get rid of CPK-MB quicker; but, you know, this guy had -- this gentleman had symptoms within the last two days. You would expect to see the CPK-MB elevation; you would still expect to see it elevated in the blood if there was enough of it released.

Q. Stable angina is a more reassuring finding than unstable angina; correct?
A. Yes.
Q. When you're dealing with the heart as a problem where you're not certain if it's stable or unstable angina, because of the potential life-threatening nature of coronary artery disease, do you treat the worst-case scenario until you've ruled it out?
A. Typically. You look for the worst-case scenario, and you may need to treat it.
Q. Looking at this as the worst-case scenario, that he believed there was angina and the troponin suggests an acute MI, he actually lists, do you believe the standard of care required a cardiac consult be ordered?
MR. DILLON: At what time? Are you still on the 18th?
MR. KELLEY: I'm on the 18th still.
A. No.
Q. At any point in time was it okay to say, you're fine; Go home; You never need to see a cardiologist, or did a consult need to be ordered at any point?

A. I think that cardiac consult is not an unreasonable thing to do, but I do feel that his condition at that time could be adequately handled by an internist.
Q. This patient had a lot of risk factors for coronary artery disease; correct?
A. Correct.
Q. Family history has a -- is a very prognostic risk factor; correct?
A. Correct.
Q. What was his family history?
A. I have to refer to the records.
Q. If I told you that his father had died from a cardiac disease at 62, would that qualify as a family history of coronary artery disease?
A. It -- You know, it depends on what the condition was. But in my own mind, in review of these records, I remember that he had a positive family history for coronary disease. I don't remember the specifics of it.
Q. The family history is something that has -- and risk factors are something that have to be weighed by the clinician when making decisions as to how to treat someone. Correct?

Page 34

A. Yes.
Q. In addition to family history, did you see that the physicians found any other risk factors?
A. Yes.
Q. First, the fact that he's a male, is that in and of itself a risk factor?
A. It is.
Q. He was 42 years old age. Is that in any way a risk factor?
A. No.
Q. He smoked, I believe, two and a half packs of cigarettes -- or was a two-pack-per-day smoker. Is that a risk factor?
A. Of course.
Q. He had central obesity. I believe he was five-eleven and weighed about 220 or 215. Is obesity a risk factor?
A. Yes.
Q. He had hypertension. Is that a risk factor?
A. Yes.
Q. He had hyperlipidemia. Is that a risk factor?
A. Yes.

Page 35

Q. Can you give me some cardiac risk factors that you're aware of that are common that he didn't have?
A. I don't think he was diabetic.
Q. If he had a fasting glucose of 132 that had been taken, would that qualify as a diabetic?
A. It all depends if he was truly fasting. You know, if you were certain that it was accurate, then I would be worried that he does have glucose intolerance and should be adequately tested.
Q. If, in fact, beyond possibly having or not having diabetes, is there any other relevant coronary artery disease risk factors that you can think of that our client, Jeff Lyons, didn't have?
A. Didn't have a previous MI that we're aware of.
Q. Okay.
A. That's it.
Q. Okay. Obviously, after June 18th, with the troponin level and the suggestion or the impression by ER, he now believes he has had an MI.
Do you see that within the emergency room notes?
A. Yes.

Page 36

Q. So at this point, now we know that he's had an MI.
With all of the other risk factors that we can think of absent diabetes, is this still a patient who is okay to be managed, in your opinion, by a family practitioner or an internist or does he need a full cardiac consult?
A. I still think at this point in time, you could handle him with an internal medicine evaluation.
Q. What would have to change with Jeff Lyons for you to say that he needed a cardiac consult?
A. He would need to go to the cath lab.
Q. Okay. How does he get to the cath lab without a cardiac consult?
A. An internist can call you and say, I believe -- or the emergency room physician can call a cardiologist such as myself and say, I have this patient with these symptoms; I believe he needs to go to the cath lab. That often gets them there.
Q. Okay. So an internist or a family practitioner in and of themselves has the ability to order or request from you to just take him straight to the cath lab?

Page 37

A. Yes.
Q. Is that the way it typically happens?
A. It's not atypical.
Q. Okay. And is another way that they actually defer to you, the cardiologist, for a full workup before the cath, stress test, nuclear imaging, things of that sort?
A. Yes. But all those tests can be done, short of a catheterization, by an internist, intensivist and often family practitioners.
Q. If a catheterization was performed that day, June 18 -- we'll say those days, June 18th or June 19th, do you have an opinion to a probability what it would have shown?
A. Yes.
Q. And what would it have shown?
A. Coronary artery disease with good left ventricular function.
Q. And do you have an idea as to -- Do you believe the distribution would have been single vessel?
A. It's hard to tell, but judging from the nuclear scan which occurred subsequently, it looks like it would have been single-vessel disease.

Page 38

Q. And with single-vessel disease, would he then be a candidate for stents, angioplasty as one of the methods of revascularization?
A. Perhaps.
Q. And do you have an opinion as to what the degree of occlusion would have been in his right coronary?
A. Uhm, judging from the nuclear scan, it's a greater likelihood than not that the vessel would have been 100 percent occluded.
Q. Okay. Do you believe it would have been occluded in the proximal or distal portion? Are you able to tell that from the scan?
A. There -- there is some evidence that this would have been a proximal right coronary artery stenosis blockage.
Q. If it wasn't amenable to revascularization by way of stents or angioplasty, would this have been the type of lesion that would have been recommended for bypass surgery?
A. Again, it all depends on what the catheterization showed, if there was multivessel disease, et cetera.
Q. And that's what --

Page 39

I'm trying to kind of sift through.
A. Uh-huh.
Q. To a probability, do you believe that it would have been multivessel disease or single-vessel disease?
A. The only way that you can decide that is on --
Q. Internal?
A. -- on the data that you are given, short of doing the heart catheterization.
Q. Okay.
A. If I had to predict based upon his presentation, his enzyme elevation, and his stress test results, I would predict he had single-vessel disease.
Q. And you believe it would be proximal single-vessel disease in the right coronary artery?
A. Right. But you don't absolutely know unless you do the heart catheterization.
Q. And I'm simply asking to a probability the most likely scenario, --
A. Okay.
Q. -- and that's what you believe most likely?

Page 40

A. Yes.
Q. And I'm kind -- trying to understand the treatment options.
Do you have an opinion to a probability which treatment option he would have required, whether it be angioplasty, stenting, or a bypass of that proximal lesion?
A. Assuming that it was single-vessel disease, there is a high likelihood he would not have needed bypass surgery. That's probably the easiest thing for me to say.
Then would he have been better off with medical therapy or angioplasty would only be determined by the angiographic appearance. But we know that with single-vessel disease, you -- the outcomes are similar with medical therapy versus balloons and stents or at least balloon angioplasty of single-vessel disease.
Q. And by "medical therapy," are we talking about things like beta blockers and calcium channel blockers?
A. Mostly beta blockers, aspirin, perhaps cholesterol-lowering agents.
Q. And obviously he would have required

Page 41

medications for his hypertension and cholesterol going forward.
A. More than likely.
Q. Had he received either --
Let's assume that it was single-vessel disease, had he been cathed, it showed what you believe it would have shown to a probability. Do you have an opinion as to what his life expectancy would have been with medical therapy?
A. The likelihood, based upon single-vessel disease, is excellent.
Q. Okay. And can we quantify what "excellent" means in terms of years? He's 42 years old.
A. Yeah. Uhm, the only thing that I could give you is, I know there was one study looking at medical therapy for single-vessel disease, and I think the event rates, the cardiac death rate with medical therapy was, I think, less than one percent within six months, clearly less than three percent.
Q. Do you have an opinion as to what his life expectancy would have been had he been diagnosed with single-vessel disease and either received medical therapy or, I guess, angioplasty or

Page 42

stenting, since you said they're kind of interchangeable as far as outcome?
A. Well, his -- his prognosis, based upon the stress test and the fact that he would have single-vessel disease with good left ventricular function, is excellent, so I think his 20 years -- he has at least a 50 percent 20 year survival.
Q. Okay. And if, in fact, we'll assume the worst-case scenario, that he had multivessel disease, based on the fact that we know he has preserved left ventricular function, would you have an opinion of his life expectancy in that scenario?
A. Then it would be less.
Q. Okay.
A. And much of that is determined upon how well his risk factors are modified and how well he takes care of himself.
Q. Okay. The plan at discharge by Dr. Tulebaev was a stress Cardiolite in eight days, if I understand correctly.
You believe that he didn't even have to order that test. He could have simply sent the patient back to the internist, but to request this was also reasonable.

Page 43

A. Did I say that?
Q. I thought you said earlier that this is something that could have been handled by -- he could have referred the patient back to the internist.
A. Oh, yeah. I do think an internist could have handled his situation in the hospital.
Q. Okay. Do you think as an outpatient he needed to be seen by a cardiologist?
A. I think that's desirable, but it -- you know, his internist, a competent internist can easily take care of this problem, also.
Q. A patient who has an MI or suspected myocardial infarction, a family history, who has elevated troponins, who has intermittent chest pain which radiates to the arm, and the other risk factors that we've discussed such as Mr. Lyons', if you are going to request a -- request a cardiac workup, is there a time frame that it should be accomplished?
A. Sooner is more desirable. In the -- The speed of the consult is dictated by the patient's stability and the nature of their complaints.

Page 44

Q. And by "stability," we're talking about the stability of their angina?
A. Stability of their presentation. Is their blood pressure okay? Is their heart rate okay? Are they -- are they having ongoing chest pain, or was it resolved with therapy at the time of presentation?
Q. Was his chest pain resolved with therapy?
A. Well, at the time of discharge, I believe he said he was not having any angina.
Q. But he had described intermittent angina up to that point in time for days?
A. On presentation.
Q. So do you believe at discharge he was a stable patient?
A. Perhaps.
Q. Okay. "Perhaps" --
A. Yeah.
Q. -- makes it at least a question mark, though.
A. Well, 'cause I wasn't there. So if I am just going by the assessment of Dr. Tulebaev, then I would say that he's assessed the patient and he does not believe he's unstable or having active angina.

Page 45

Q. Do you know how long it was before discharge that he last complained of chest pain?
A. No, I don't.
Q. Is that relevant?
A. Sure.
Q. Do you know whether or not --
If he -- if the chest pain came back, is that relevant, after he was discharged?
A. Depends upon at what time it came back and how long it was from the presentation of chest pain to the time he was discharged.
Q. Did you see the nurses' notes?
A. I -- I probably have seen them quite some time ago. I don't -- I did not review them in the last few days.
Q. His blood pressure, the nurse's note on June 18th, is 154 over 92. Is that hypertensive?
A. Yes.
Q. Is that concerning?
A. Yes.
Q. They list the admitting diagnosis as angina, rule out MI, rule out coronary artery disease.
Do you see that?

Page 46

A. I'm unclear of what page you are on.
Q. It's the first page of the nurses' notes. And to be honest, I went to it just because it's kind of a decent summary page.
A. Is that before she has her -- these notes? After the labs?
Q. I don't know in yours. We have tabs. I'll show you mine.
(Discussion held off the record.)
Q. Do you agree that those were the admitting diagnoses?
A. Yes.
Q. Going on, when he was discharged, what is your understanding factually of what the follow-up plan for him was?
A. The follow-up plan was per Dr. Tulebaev's note. That's the only plan that I -- I had.
Q. Okay. And let's go through.
A. Okay.
Q. What do Dr. Tulebaev's notes say is going to occur?
A. I prefer to read that to you so I don't misquote him or take him out of context.
Q. Absolutely.

Page 47

A. Let me just get to that. Here it is.
His assessment is, The patient is admitted with chest pain which I think is unlikely to be related to coronary artery disease since the patient is involved in heavy physical exertion on a daily basis and never experiences chest pain.
The plan is, I am going to discharge the patient home today and have him follow up with Dr. Gebhart in one week for a full physical examination. I think it would be useful also to follow up with Dr. Auerbach next Tuesday for a stress Cardiolite test.
Q. Okay. When he sees Dr. Gebhart, are you familiar with the history that he gave Dr. Gebhart?
A. I did review that.
Q. And what does he describe to Dr. Gebhart?
A. You know, I hate to take these things out of context.
Q. I don't want you to take any -- That's why I said earlier take as much time as you need --
A. Okay.
Q. -- to look at notes. I can give you mine from June 27th.
A. Okay. That would be great.

Page 48

Q. (Handed documents to witness.)
A. I remember this.
He was seen in the emergency room the other day because of an episode of chest pain. He has a pretty good story for angina, but his stress test was negative. We don't have the Cardiolite part yet. If it is normal, and it will be back tomorrow, then we'll have to decide that he does not have coronary artery disease. He abbreviated it C-A-D.
He does have a lot of epigastric distress, and this may be giving him esophagitis or reflux causing some chest pain.
Q. So according to a couple things that Dr. Gebhart --
We know Dr. Gebhart was aware he was in the hospital. Correct?
A. Yes.
Q. We know Dr. Gebhart was aware of the stress test results.
A. Part of them.
Q. And it appears that he relayed to Dr. Gebhart that he was still having some chest pain?

Page 49

A. Yeah, epigastric pain.
Q. Well, 'cause we don't want to take anything out of context, --
A. Uh-huh.
Q. -- he says, He does have some epigastric distress, and this may be giving him esophagitis or reflux causing some chest pain.
A. Okay.
Q. You read that; correct?
A. He -- You know, his note says that he has epigastric distress. I don't know if he was referring to the chest pain as being remote or if that's another complaint of chest pain to him.
Q. Cardiac and epigastric pain can sometimes be difficult to distinguish; correct?
A. Absolutely.
Q. And in light of the troponins and things like that, his history in the emergency room, this would be relevant information that would make you question the stability of this patient. Correct?
A. Yes.
Q. It would call into question whether or not he's having an ongoing problem with coronary artery disease; correct?

Page 50

A. Yes. But at the time that Dr. Gebhart saw him, he had a normal stress EKG, so he's starting to be led down the path that this isn't his heart.
Q. He had the report of a normal stress EKG.
A. Yes.
Q. Have you been provided Dr. Garrett's deposition?
A. Uhm, I think so, but I -- I can't seem to locate it.
Q. Have you read it?
A. No, I have not read it.
Q. So you were either provided it and misplaced it, a filing issue, --
A. Exactly.
Q. -- or it hasn't gotten here for some reason or another?
A. Yes.
Q. But you have not read it as you sit here?
A. Right.
Q. Have you reviewed the stress test?
A. No.
Q. You have never reviewed the stress test to see whether or not if you agree if it was normal?
A. The EKGs?

Page 51

Q. The stress test that was performed by Dr. Beaver.
A. No. I read his interpretation of the stress test.
Q. Did you read the actual stress test itself?
A. Did I see all of the EKGs associated with it?
Q. Yes.
A. I don't believe I have.
Q. Can I see in your chart what portions of it you have?
A. Okay.
Q. You read stress tests here in your job; correct?
A. I know how to read them. I don't do them on a daily basis.
Q. Describe for me briefly, then, your practice. Is it mainly interventional cardiology?
A. Yes.
Q. What percentage would you say is noninterventional, if any?
A. Probably about 30 percent.
Q. And how often, if ever, do you oversee

Page 52

stress tests?
A. Rarely.
Q. Do you ever read them as part of your assessment of a patient before making the determination as to what interventional procedure to perform?
A. Yes.
Q. So you are qualified to read them.
A. Yes.
Q. Okay.
A. I'll be happy to go over the stress test if you have it for me.
Q. Do you -- Were you not provided it?
A. You know, I don't see it in here. No. It could be in another place, but I don't see it.
Q. Did you receive the medical records of Dr. Auerbach?
A. I received his letter that he wrote to Dr. Tulebaev.
Q. You mean to Dr. --
How about the one to Dr. Gebhart?
A. To Dr. Gebhart. I apologize. Yes.
Q. Does he describe it as a normal stress test or an abnormal stress test in that letter?

Page 53

A. He described the Cardiolite as being abnormal.
Q. The exact phrase is, Mr. Lyons has unstable angina postinfarction. He had an abnormal stress test which I think underestimates the severity of the problem.
A. Right.
Q. Do you believe that's only referring to the Cardiolite portion?
A. Yes.
Q. Is that --
A. Dr. Beaver's interpretation is his resting and exercise electrocardiograms remain normal during the stress test.
Q. I understand that's what Dr. Beaver reported.
A. Okay. Would you like me to review the EKGs of the stress test? I would be happy to do that.
Q. I'm going to pull them out for you.
A. Okay.
Q. I don't know if I have them with me, so we are not going to do it. If you don't have it and I don't have it, I don't think we're going to have a

Page 54

way to do it.
A. I've never seen them.
Q. You have never seen them?
A. Now, either I have not received them or I have misplaced them, 'cause apparently I have done that, but I don't -- I have never seen them.
Q. You don't intend to walk in and render any opinions as to how they were read since you haven't read them or been provided them to date?
A. Unless you -- somebody asks me to interpret this, the actual EKG portion, but I have no reason to doubt Dr. Beaver's interpretation.
Q. The stress test was --
When a stress test is performed, are you looking to see whether or not the patient's able to obtain certain levels of cardiac exertion?
A. Yes.
Q. Was Mr. Lyons able to exert, reach 85 percent of his maximum heart rate?
A. I have to go back and look at Dr. Beaver's notes. I know that his exercise duration was not very long, but I don't recall what his heart rate was and his blood pressure at peak exertion.
Q. He achieved -- His target was --

Page 55

I will tell you from my review.
His max was 178 that they wanted. His target was 151. He achieved 136. He exercised for 5 minutes and 16 seconds before he had to stop.
If he is unable to reach the target, is that a normal -- and if he's only able to exercise for 5 minutes and 16 seconds and then has to stop, is that a normal stress test --
A. Uhm --
Q. -- or is it at least indeterminate -- or an undeterminable stress test?
MR. SEWARDS: Objection.
A. Yeah. I object to the form of the question.
Q. You're going to start objecting to me, too?
A. Well, I -- You know, "normal" is an interpretation as to what the electrocardiogram shows and what the Cardiolite shows the -- so I don't think "normal" is correct terminology there.
I think that it's --
Did he achieve his target heart rate, did he achieve an ideal heart rate? He did not. And there are many factors for that, but he did not stop

Page 56

the stress test portion because of chest pain. So he went as long as he could from a physical standpoint without precipitation of the symptoms that brought him to the emergency department. He did not have an ideal stress test by traditional measures.
Q. Well, the words -- The thing that's strange is you objected -- you objected to the word "normal," Mr. Sewards objected to the word "indeterminate," I think --
MR. SEWARDS: I objected to the whole question.
Q. -- and they are words that I got from the stress test report.
A. Okay.
Q. And I'll show it to you.
A. All right.
Q. I don't make these things up.
A. Okay.
Q. I would be a much better lawyer if I could make things up.
A. Okay.
Q. It says, The clinical impression was submaximal negative.

Page 57

A. Correct.
Q. What does that mean?
A. He did not exercise to the target heart rate; or sometimes we use a double product, so he did not get to his predicted heart rate. He was submaximal.
Q. Okay. And the level beneath that would be indeterminate, at least according to this sheet?
A. Yes. That's a clinical impression, not a stress test.
Q. And then this is where you objected to me.
A. Uh-huh.
Q. It says, This electrocardiogram is --
And it doesn't say "this Cardiolite," does it?
A. No. You said the stress test. This is the EKG. It says normal. The stress EKG is normal. That's a correct term.
Q. Okay. You believe that that refers, then, to only the EKG portion, absent and apart from his inability to exercise --
A. Correct.
Q. -- to his maximal?
A. That interpretation is solely of the

Page 58

electrocardiogram. It has nothing to do with his duration of exercise or the interpretation of his exercise performance or to the Cardiolite interpretation.
Q. Have you seen his deposition as to what he described that this meant?
MR. SEWARDS: What -- Who is "his"?
MR. KELLEY: Dr. Beavers.
MR. SEWARDS: Thank you.
A. I did read his deposition.
Q. That's your understanding.
What if we assume hypothetically that -- 'cause he says things on that box like, Cardiolite images pending, things of that sort -- that the stress electrocardiogram being normal is the conclusion, for lack of a better term.
A. The stress electrocardiogram is normal.
Q. From the exercise portion and the EKG portion?
A. Yes.
Q. Does that make sense where I'm at right now?
A. Yes.
Q. Okay. If we assume that, was it, in fact,

Page 59

normal, since he was unable to reach his target heart rate, he only reached 76 percent, and he was only able to exercise for 5 minutes and 16 seconds?
A. His stress electrocardiogram was normal. His exercise duration was submaximal.
Q. Why was his exercise portion submaximal? Was it secondary to his cardiac disease, most likely?
A. I don't believe that.
Q. Okay. Do you have any opinion as to why his exercise was submaximal?
A. Well, his exercise duration could be submaximal due to his coronary disease, but it can be -- it could be explained that way if the patient stopped because of cardiac symptoms.
Dr. Beaver stated that he -- he denied precipitation of clinical symptoms with the stress test, so my impression or my assumption would be that the stress test was stopped for other reasons. And some of those reasons that people stop or don't go to target heart rates are they are out of shape or they have orthopedic problems to prevent them from exercising in a faster rate on the treadmill.
So the answer to your question is, I do

Page 60

not know what made him stop his -- his stress EKG early, --
Q. Okay.
A. -- but it's doubtful that it was cardiac-related symptoms, because he specifically stated he denied precipitation of clinical symptoms.
Q. First, what's your definition of a consultation?
A. Uhm, a consultation is when I am asked as a consultant to be involved in the care with another physician from a cardiac standpoint and assess their cardiovascular status and make recommendations in their care.
Q. Okay. Reading the chart -- And do you have his -- You have right in front of you the second page of it.
Does it actually say on there "Report of consultation"?
A. Yes.
Q. Do you interpret this to be a cardiac consultation based on your review of the records?
MR. SEWARDS: Object.
A. I don't know.
Q. What -- If it says it's a cardiac

Page 61

consultation and a report of a consultation, does it look like a consultation?
MR. SEWARDS: Object. It doesn't say "cardiac consultation."
Q. I'm sorry. It says "Report of consultation."
A. He has a physical examination and history of present illness. He has many features that are consistent with a consultation.
Q. And it also actually says --
Under "Chief Complaint," it doesn't say we were asked to perform a single stress test. It says we were asked to evaluate this patient regarding chest discomfort. Correct?
A. That's correct.
Q. Which would be consistent with a consultation; correct?
A. Perhaps that --
Yes, that may be the case.
This isn't the form of -- that my consultations take.
Q. At the end of his report of consultation, it actually says, Should his nuclear --
It's the nuclear imagining, the

Page 62

scintigraphy.
-- be abnormal, we would recommend diagnostic coronary angiography.
Do you agree with that recommendation?
A. Maybe.
Q. Okay. You say "maybe."
What are the other options or why do you hesitate?
A. Because medical therapy can be a reasonable option, also.
Q. Okay. Would you start medical therapy without visualizing the coronary arteries if there was an abnormal Cardiolite?
A. You may. Depends on the degree of abnormality of the nuclear scan and it depends on the patient's clinical presentation.
Q. This patient's clinical presentation, we know at this point in time there's no reference in this history to the prior MI.
When you perform a consultation, do you get the records from the prior hospitalization?
A. As often as possible.
Q. And you can see this is a report of consultation on Fayette County Memorial Hospital

Page 63

letterhead. That's the same institution he was at before; correct?
A. Yes.
Q. And laboratory values appear to be computer generated; correct?
A. Yes.
Q. The fact that he was just hospitalized with a suspected MI is relevant; correct?
A. Yes.
Q. Obviously, they know he's there for some reason. Someone asked him to go for some form of cardiac workup. Correct?
A. Correct.
Q. In what situations do you not get the prior medical records?
A. When they're not available.
Q. Okay. You always try, though.
A. Yes.
Q. Okay. And the reason you try is because it allows you to provide the best care for the patient.
A. Yes.
Q. Is the failure to even look for the past records, in your opinion, beneath the standard of

Page 64

care?
MR. SEWARDS: Object to all the facts left out of that question, but go ahead.
MR. KELLEY: Facts left out of a question is not a formal objection.
(Discussion held off the record.)
A. Could you read that back to me, please?
Q. I am asking whether or not it's beneath the standard of care if a physician does not look -- even try to get the prior records?
A. You know, it all depends upon what the clinical situation is. Sometimes -- sometimes past medical records are irrelevant, so they wouldn't matter at all.
Q. In this case, were the past medical records relevant?
A. They could be relevant. They became more relevant after the stress test was done.
Q. When the Cardiolite stress test comes back, we also know that he is also having -- as described by Dr. Gebhart, is having some ongoing epigastric pain and/or chest pain; correct?
A. Correct.
Q. The plan is to do a cardiac

Page 65

catheterization. You agree that that was a reasonable plan by them?
A. Yes.
Q. Do you believe that at this point he had unstable angina still?
MR. DILLON: Talking about the 26th?
MR. KELLEY: Yes.
A. He -- he -- The -- Dr. Beaver says he currently denies any symptoms of palpitations, tachycardia. And in -- I -- It's hard for me to make that call on unstable angina, 'cause it doesn't really say in there whether he has chest pain at the time of presentation again.
Q. Okay.
A. Now, he did have pain at the time of his emergency room visit. He obviously had some epigastric pain leading up to his visit with Dr. Gebhart, but --
Q. Well, it says under "History of Present Illness" --
A. Yes.
Q. Remember, before it was two days --
A. Yes.
Q. -- history, going into June 18th.

Page 66

We're now about nine days later or eight days later. We're at June 26th.
He says for two weeks he's been experiencing intermittent midsternal chest tightness; and when laying down, there is radiation into the left arm associated with dyspnea.
First, what is dyspnea?
A. Shortness of breath.
Q. Shortness of breath, chest pain, or midsternal chest tightness radiating to the left arm, that's consistent with angina; correct?
A. It could be.
Angina related to coronary disease?
Q. Yes.
A. Yes.
Q. And that's -- I understand that this note does show that he has knowledge of what appears to be ongoing intermittent chest pain.
A. He does have intermittent chest pain, according to this note.
Q. And this intermittent chest pain is also associated with radiation to the left arm and shortness of breath.
A. Yes.

Page 67

Q. Shortness of breath is another symptom that's potentially consistent with a cardiac problem; correct?
A. Potentially, yes.
Q. The radiation into the left arm is consistent with a cardiac cause for the chest pain; correct?
A. It can be.
Q. And I'm not saying it's -- You know, I'm not trying to use a big word -- pathopneumonic for it, but that is consistent with that, as well, is what I'm saying.
All of these things are consistent with a cardiac cause.
A. Yes.
Q. He describes severe exertional dyspnea or shortness of breath which he feels is secondary to smoking, but that's also consistent with a cardiac cause. Correct?
A. It can be.
Q. And it says he has a strong family history of atherosclerotic heart disease, as well. Correct?
A. Correct.
Q. So although, as you pointed out, he denied

Page 68

palpitations, tachycardia or syncope, he does describe shortness of breath with exertion, shortness of breath when laying down, intermittent chest tightness which can last from minutes to hours with spontaneous resolution. Correct?
A. Yes.
Q. So there is a clinical history there which is consistent with unstable angina.
A. Maybe. I'm not -- I'm not convinced of that.
Q. You're not saying I'm wrong, but it's one of the possibilities?
A. It -- it is a possibility.
Q. Is there anything more likely than angina as to the cause of his symptoms as of June 26th, 2001?
A. Is there anything more likely than coronary artery disease?
Q. Artery disease.
A. That would be the -- the leading suspicion.
Q. Okay.
A. He -- These are not perfectly classical symptoms, either. If they were perfectly classical,

Page 69

Dr. Beaver probably would not have done the stress test, so he was not convincing enough for a cardiologist to disregard his symptoms and go straight to catheterization.
So my impression is, if -- if I felt that these symptoms were clearly related to unstable angina, as you call it, he wouldn't have done the stress test. I'm sure he would have done the heart catheterization right there.
Q. And I'm just saying that the symptoms that we have described --
I am not asking what he felt. I'm saying the symptoms that he put in his own note.
-- are consistent with unstable angina, among other things.
A. They may be consistent with unstable angina.
Q. Which is secondary to coronary artery disease?
A. Yes.
Q. He also has knowledge in here, in addition to that clinical history, he documents the strong family history, hypertension, obesity, hyper- -- I said hypertension. We know he has the history of --

Page 70

he has every risk factor for coronary artery disease with the exception of possibly diabetes.
A. Correct.
Q. And he knew all of that at the time, 'cause he actually describes the multiple risk factors. Correct?
A. Yes.
Q. Now, when he makes the recommendation for coronary angiography if the nuclear scan is abnormal, the nuclear scan does come back as abnormal. Correct?
A. Yes.
Q. Is there a time frame in which that has to be accomplished to comply with the standard of care?
A. No.
Q. When we say that it's abnormal, I know that there are -- I've seen five categories for reporting a nuclear scan. I have seen I think it's strongly abnormal -- it's abnormal, slightly abnormal, equivocal, slightly positive, and positive, or you know what I'm saying.
How would you, on that five-scale prong by the American Heart Association, categorize his test, or are you unable to since you haven't seen the

Page 71

images?
A. I have not seen the images. And in my own style of practice, I use my own interpretation of the images to -- or the -- the interpretation of the images to categorize the patient, and that is in conjunction with the patient's clinical syndrome.
Q. So you don't review the scans in and of themselves. You review them in conjunction with the clinical picture.
A. Yes.
Q. And you believe that the clinical picture here in some way --
Does it make the scan more abnormal, less abnormal?
A. I -- I don't think his clinical symptoms make the scan any more or less abnormal. The scans are what they are. The clinical decision is based upon what the scans show and the patient's clinical syndrome.
Q. And do you believe it was reasonable at that point to not schedule a catheterization in light of the abnormal nuclear scan, the clinical presentation this patient had in the next 24 hours?
A. I -- I think it's -- it's -- it's not

Page 72

unreasonable to not have done the heart catheterization within 24 hours of the scan being done.
Q. Do you know Dr. Kolibash?
A. Yes.
Q. How do you know him?
A. He's a cardiologist at Ohio State University.
Q. Do you respect him?
A. Yes.
Q. Is he somebody who you ever refer patients to?
A. Ah, no.
Q. You have been provided a deposition, but I know you haven't had a chance to read it yet; correct?
A. That's correct.
Q. Do you agree that if you have a patient referred to you for an outpatient consultation following a non-ST or a non-Q myocardial infarction, patient continues to have chest pain which you believe may be cardiac related, an EKG had been performed which was normal, would you still want to get that patient into the hospital within 24 to 48

Page 73

hours for a heart catheterization?
A. Maybe.
Q. Maybe.
What are the factors that you would look at to say "yes" or "no"?
A. I would want to talk with the patient and examine them.
Q. Dr. Kolibash, on page 45, line 17, so everybody knows where I am, responded, "... I -- I would admit them that day or the next day, so I would do it within 24 hours. More likely that day."
Do you agree that that's a reasonable position?
MR. SEWARDS: What page did you say?
MR. KELLEY: Page 45, line 17.
A. And he would admit them based upon the stress test result only or --
Q. No. He said a normal EKG; based on the fact that you had a known MI and continued chest pain.
A. If he was having active chest pain at that time. I think that's the key, is what is the patient's symptomatology? That's why you would want to know how the patient is feeling.

Page 74

Q. Well, you see how he's feeling according to Dr. Beaver's notes.
A. Yes.
Q. He's having intermittent chest pain, he has exertional dyspnea, he has chest tightness that's lasted over -- had been intermittent over two weeks that could last minutes to hours, it radiates to his arm. That is ongoing chest pain; correct?
A. He must not have had it at the time that he put him on the treadmill or else he wouldn't have put him on there. So he was having no symptoms at the time most likely. He did not have precipitation of his symptoms with the stress test, so it's very reasonable to reassess the patient. That's what I would have done. I would have -- I would have reassessed the patient.
Q. He actually describes on page 37 of his deposition that if there's further chest pains, there's guidelines that the patient should be taken straight to the cath lab after a non-Q-wave MI.
A. There are -- there are guidelines. You know, those guidelines were established after 2001. And the question that you had asked him was, the patient is having ongoing chest pain. I think

Page 75

that's the key.
Q. Well, if a patient is having --
MR. DILLON: Just for the record, he's referring to the prior question.
A. Ongoing chest pain is different than I had chest pain two days ago before I came in for the stress test.
Q. His chest pain is intermittent by his own history; correct?
A. Yes.
Q. Which means it comes and goes.
A. I -- I agree with your definition of intermittent.
Q. It's been coming and going consistently for two weeks by his history; correct?
A. I agree.
Q. So obviously you can pick moments of time within that two weeks to say he's symptomatic or nonsymptomatic.
A. Correct.
Q. You treat the fact that he's symptomatic, though, at points; correct? You react to the worst possible scenario, not best possible scenario when it's potentially cardiac.

Page 76

A. Again, it depends upon the information you have available to you.
Q. I'm not trying to make up information.
A. Yeah.
Q. I'm trying to go on the information that you see in Dr. Beaver's own note.
A. Yes.
Q. That's a sign of ongoing problems with chest pain after that first hospitalization, isn't it?
A. I agree with that.
Q. One of the things you said to me earlier was that at discharge, it was important to you that he did not have chest pain.
A. Correct.
Q. We now know eight days later he's had the chest pain back.
A. Okay.
Q. As reassuring to you as the fact that the chest pain was gone, is the fact that the chest pain keeps coming back of concern to you as a cardiologist?
A. Yes, it is of concern.
Q. And is it a concern because it raises your

Page 77

index of suspicion for a cardiac problem?
A. Yes.
Q. Does it make timing of the therapy or intervention more relevant?
A. Yes.
Q. Knowing that he's had two weeks of additional pain after that emergency room presentation, should he be cathed a week later or 24 to 48 hours later to meet the standard of care?
A. In 2001?
Q. Yes.
A. No one knows.
Q. Has medicine changed in the last three years that significantly as it pertains to diagnostic catheterizations?
A. The guidelines are clearer.
Q. And the guidelines, as we sit here today, are cath within 24 to 48 hours.
A. Not necessarily.
Q. Okay. What guidelines are we talking about?
A. ACC guidelines for treatment of unstable angina, --
Q. Okay.

Page 78

A. -- acute coronary syndromes.
Q. Are you telling me that before 2001, there was dispute as to whether or not there should be a catheterization?
A. No. I'm saying there's variability in methodology of when the patient goes to the cath lab.
Q. Okay. And what is the outside range when you have a patient with an acute coronary syndrome or unstable angina that you wait to take them to the cath lab?
A. Well, you can elect to treat these patients with medical therapy alone.
Q. What medical therapy was instituted to treat Jeffrey Lyons on June 26th?
A. I think he was on an aspirin daily.
Q. Was he on any beta blockers?
A. Not that I'm aware of.
Q. Should he have been?
A. I don't think that that's unreasonable therapy.
Q. If he was your patient, would you have put him on a beta blocker that day while you waited for the cath?

Page 79

A. There's a high degree of probability I would have recommended a beta blocker.
Q. And that's because -- What benefit do you believe a beta blocker would provide to a patient such as him?
A. Well, if you're convinced that he has coronary artery disease, I try to treat as many of those patients as possible with beta blockers.
Q. And you wouldn't wait for --
You would start the medical therapy immediately?
A. Not necessarily.
Q. When would you start after June 26th the medical therapy for him?
A. Probably after I had seen the stress Cardiolite study.
Q. Okay. But before the cath?
A. Yes.
Q. Would you do one or the other? Am I kind of hearing you right, that you would either try him for a period of time on medical therapy or cath him?
A. No. I'm just saying those are options. You never asked me what I would do.
I would -- The -- It is very legitimate to

Page 80

treat this gentleman with medical therapy to see if he has recurrent symptoms or to do a heart catheterization once you know the Cardiolite results.
Q. Okay.
A. Those are both very reasonable.
Q. Okay. And if you were going to choose the medical route, that first reasonable route, would you start with -- in addition to beta blockers and aspirin, is there anything else you would put him on?
A. Yes.
Q. What else?
A. Cholesterol-lowering agents.
Q. Okay. Would you use a statin, --
A. Yes.
Q. -- a lipid-lowering agent?
A. Most likely a statin.
Q. Okay. Anything else?
A. Perhaps nitroglycerin.
Q. Okay.
A. That would be about it.
Q. Would the nitroglycerin be on an as-need basis?

Page 81

A. Yes.
Q. Okay. Would you start those medical therapies immediately after receiving the Cardiolite results?
A. Refresh my opinion about who am I. Which doctor am I?
Q. You are right now the cardiologist on June 26th, 27th, who has seen the patient.
A. Okay.
Q. You are waiting for the Cardiolite result, which we know comes back on June 26th, as well, from Dr. David Reece (phonetic). He actually dictates it on the 27th, so that information is back in the chart as of the 27th.
A. I -- As soon as I became --
If this was a formal consultation for me to see the patient, as soon as I became aware of the Cardiolite results, I would probably instruct my nurse to call the patient, to put that patient on beta blockers and see me in the office at their earliest convenience and to seek care in the emergency department if their symptoms became significantly worse.
Q. Okay. Why would you undertake that plan

Page 82

of therapy?
A. Because now it is absolutely clear that this man has known coronary disease.
Q. Okay. So as of June 27th when the Cardiolite result comes back, it's clear he has coronary disease.
A. Yes.
Q. And it's clear it needs to be intervened upon by either medical therapy or some other intervention.
A. Yes.
Q. Okay. If you're not going to choose to place him on medical therapy such as what you have described, does a catheterization quickly become more relevant?
A. Uhm, I don't think that's a fair question.
Q. Okay.
A. He should be on medical therapy regardless of your decision to cath him.
Q. If you're not going to be on medical therapy -- Well, no matter what, he should be.
Putting him on medical therapy, then, as you believe he should be, when should he be cathed, if ever?

Page 83

A. That all depends upon his clinical symptoms. If he has ongoing chest pain despite medical therapy, cardiac catheterization should be the next option if you've chosen to delay catheterization.
Q. Now, from June 27th to July 3rd, do you see any documentation that he was placed on beta blockers?
A. When Dr. Auerbach saw him, he was placed on beta blockers.
Q. Which was on July 3rd?
A. Yes.
Q. Had he been placed on beta blockers as early as June 27th, would that have altered the outcome to a probability?
A. It's doubtful.
Q. Doubtful?
A. Yes.
Q. Is it possible?
MR. SEWARDS: Objection.
A. Perhaps.
Q. Are you able to quantify the percent of likelihood that it may have altered the outcome?
MR. SEWARDS: Objection.

Page 84

A. It would be very small.
Q. By "very small," less than 10 percent, more than 10 percent?
A. Much less than 10 percent.
Q. If you put him on calcium -- or beta blockers with nitroglycerin and with statins, would those medications in combination have altered the outcome to a probability?
A. Probably not more than beta blockers alone.
Q. Okay. At the time that he is seen on July 3rd --
And let me go back to one housekeeping question for June 26th.
You believe that Dr. Beaver met the standard of care?
A. Yes.
Q. You do still agree, though, that had a catheterization been performed on or about June 27th, it would have revealed the same thing, single-vessel proximal disease in the right coronary artery?
A. Well, my initial evaluation was based upon the Cardiolite, so that hasn't changed at all.

Page 85

Q. Okay. I'm just saying that had for some reason the course for this patient been altered, they cathed him on the 27th, he still would have been amenable to treatment with that same excellent prognosis you testified to earlier?
A. That's because all of the information that I used to make the assessment initially is the same.
Q. Okay. But I just want to make sure I have it clean in the record.
It's your opinion, based on a reasonable degree of medical probability, that had he been catheterized on June 27th or the 28th, we'll even give another day, that it would have revealed a proximal lesion of the right coronary artery; and with either medical therapy or revascularization, he would have had an excellent prognosis because of his good left ventricular function. True?
A. That would be the most likely scenario based upon his stress test results.
Again, I don't have privy to his angiogram.
Q. Okay. June -- July 3rd, that's the visit with Dr. Auerbach?
A. Yes.

Page 86

Q. At this point you've seen the letter from Dr. Auerbach to Dr. Gebhart.
A. Yes.
Q. And in Dr. Auerbach's very first paragraph, second sentence, he says that, Barney saw him, "him" being my client, Jeff Lyons, last week for evaluation of chest discomfort.
A. Yes.
Q. Do you see that?
A. Yes.
Q. Does that appear to be consistent with the chief complaint that was on the report of consultation?
A. Yes.
Q. If you were asked to do an evaluation of chest discomfort, to you, would that be a complete workup of the patient's chest discomfort?
A. From a cardiac standpoint, yes.
Q. The next thing he specifically says, that his nuclear scan showed evidence of a previous infarction.
You agree with that; correct?
A. Yes.
Q. He describes here, as of July

Page 87

3rd, continued intermittent episodes of chest discomfort associated with physical activity.
You saw that?
A. Yes.
Q. That's exertional; correct?
A. That's correct.
Q. And he's also had brief episodes at rest; correct?
A. Yes.
Q. He concludes, as of July 3rd, Mr. Lyons has unstable angina postinfarction.
Do you agree with him?
A. I think --
I would have used different terminology.
Q. Okay. What terminology would you have used?
A. I would have used he has angina postinfarction.
Q. Do you disagree that it was unstable angina postinfarction?
A. Ah, I -- I'm obviously not there to see the patient, but in his physical assessment of the patient, he said the patient looks fine. So I would assume that he -- he is stable at the time that he

Page 88

sees him in the office. His blood pressure was 140 over 90, his pulse was 88. To me, the patient sounds stable. My terminology would have been he has angina postinfarction.
Q. What benefit is there to the patient in waiting? Is there any single medical benefit you can think of?
A. In waiting for what?
Q. Is there any singular medical benefit that's conferred upon this patient by waiting to have his catheterization done till early next week, as Dr. Auerbach suggests in his letter?
A. Well, he just started him on medical therapy. I don't think there's any detriment to waiting. He had been on no medi- -- He had only been on aspirin previous to that visit.
Q. At this point in time, July 3rd, we are 17 days following his presentation to the emergency room. Correct?
A. That's correct.
Q. Where he -- We now know, and even Dr. Auerbach knew, he had a myocardial infarction; correct?
A. Correct.

Page 89

Q. He had given at that point a two-day history of pain that preceded that visit; correct?
A. That's correct.
Q. So we're 19 days into him having cardiac symptomatology.
A. Correct.
Q. He receives his first medical therapy at this point; and according to Dr. Auerbach, the angina is unstable, he's had an infarction, he has all of the risk factors that you described, and he even notes he has mildly elevated sugar but does not carry the diagnosis of diabetes. Even that's becoming a clouded issue now; correct?
A. Except for the part that he'd received no medical care. Aspirin is considered to be medical therapy.
Q. He goes on to say that he had an abnormal stress test which I think underestimates the severity of this problem.
Do you agree with him?
A. That's his opinion.
I have -- I have no way of knowing that.
Q. Well, one of the things that you're doing here is you're here to say that he either met the

Page 90

standard of care or he did not meet the standard of care. And it impacts all of the parties in the case, obviously. And so what you've undertaken to do is to assess whether or not he, in his care and treatment, was reasonable.
A. I do believe he was reasonable. That's the opinion of the stress test.
Q. Do you agree with that opinion?
A. I don't think that it's wrong, but I can't honestly tell you that it's correct.
Q. Okay.
A. He's taking a very conservative approach to the management of this patient. He is -- he is concerned about the coronary artery disease status of the patient.
Q. Let's take him at his word, then.
A. Okay.
Q. You say he's concerned about the coronary artery disease status of this patient. At his word, he has unstable angina; at his word, it is postinfarction; at his word, he has every risk factor with the exception of diabetes; at his word, he has an abnormal stress test; and at his word, it underestimates the severity of his problem.

Page 91

Is timing of the catheterization of the essence?
A. Do you think that he needs to be admitted to the hospital right now and be done right away? Is that the question you're asking me?
Q. My question is, do you believe time is of the essence in performing this catheterization?
A. Yes.
Q. And what time frame is the reasonable time frame in this clinical scenario?
A. I would say within a week he should have a heart catheterization.
Q. What's the basis -- If he needs it within a week, what medical benefit is conferred upon him by --
Does being on medications for that week make him a better candidate for a cath?
A. No. I didn't really get to finish that.
Q. Okay.
A. I said within a week would be a reasonable time frame for the catheterization if he didn't respond to medical therapy.
Q. So he may have responded to medical therapy in a week and it wouldn't have mattered?

Page 92

He wouldn't have needed the cath?
A. He has a fixed defect in his inferior wall, and he has had symptoms on no medical therapy. So he is receiving new therapy, and there is nothing significant in that nuclear scan that absolutely says that he would benefit from coronary intervention.
Q. So is it your belief that a week later, if that therapy had worked, he may not even need the catheterization?
A. It's very reasonable to put this man on medical therapy and follow him clinically.
Q. And not do a cath?
A. Correct.
Q. Why, then, were you so strong in your answer that medical therapy started on June 27th, a week earlier than that, would not have altered the outcome for this patient? You just sat here and told me that medical therapy on the 3rd may have negated even the need -- you said very reasonable that he may not have even needed the catheterization.
Why, then --
If therapy was started a week earlier,

Page 93

isn't it just as very reasonable that he would have not ended up having this myocardial infarction that led to his death?
A. I think you put a lot of words in my mouth.
Q. I'm not trying to cause --
And the record is going to speak for itself.
A. Okay.
Q. Remember when we talked earlier and I said, do you believe that medical therapy to a probability would have altered the outcome in this case. Do you remember that?
A. Yes.
Q. Do you remember telling me that it was significantly less than 10 percent chance?
A. That's correct.
Q. That was any of the medications, whether it was beta blockers alone or all of them in combination; right?
A. That's correct.
Q. But now I understand you to be telling me that since he had never been on medical therapy as of July 3rd it's reasonable to wait a week, 'cause

Page 94

medical therapy may have negated the need for a catheterization.
A. Absolutely.
Q. I am asking you how, then, can you answer the question the other way if you -- if you're telling me here that, Hey, I can put him on medical therapy and in a week he can be great and not even need a catheterization?
A. That may be the case.
Q. And you say that's very reasonable, was your exact words.
A. Yes.
Q. Do you stand by those?
A. Yes.
Q. Because I want to put no words in your mouth.
A. Good.
Q. Why, then, wouldn't medical therapy on June 27th be very reasonable in stabilizing this patient and preventing the need for a catheterization and the myocardial infarction that killed him?
A. He already had the myocardial infarction before June 27th.

Page 95

Q. Not the one that killed him.
A. How do you know that?
Q. When do you believe he had the myocardial infarction that killed him?
A. He had his myocardial infarction in documentation at the time of his admission to the emergency room.
Q. Do you believe that's the myocardial infarction that killed him or do you believe that it was a subsequent one?
A. I believe it was the one that killed him.
Q. The first one?
A. Yes.
Q. Okay. Do you believe it was a continuation of that one infarction or that it was that fixed defect happened to cause an arrhythmia?
A. I believe that the fixed defect caused an arrhythmia that caused him to die.
Q. Okay.
A. That's -- Although there can be other causes, that's what I believe happened to him.
Q. And I must have misunderstood you earlier, because I thought that what you said was that with revascularization or medical therapy, he would have

Page 96

lived an excellent life to a probability.
A. That's not what I said.
Q. What did you say?
A. I said the odds are with medical therapy he has a very good prognosis, and the odds are with revascularization he has a very good prognosis, either way, based upon his Cardiolite defect in his LV function.
Q. Okay.
A. But he defied those odds. He had sudden death.
Q. And you -- What is your evidence that he had sudden death only from that fixed defect?
A. I have no other evidence that he had another infarction.
Q. Does dead tissue continue to hurt --
A. It can.
Q. -- in the heart?
A. You can have peri-infarct ischemia. There is nothing to say that he didn't have pericarditis following the myocardial infarction. There are other causes of postinfarct angina.
Q. Did he have a fever or any symptoms of pericarditis that any of these physicians picked up

Page 97

on?
A. I don't know.
Q. Did you see anywhere in the records that he had a single symptom of pericarditis?
A. I'm just saying that he could have had other causes.
Q. And I'm questioning you on the things that you're throwing out there.
A. Okay.
Q. You said he could have had pericarditis. I want to know what symptom in the records you see that supports that.
A. I said he could have had pericarditis. I didn't say he had it.
Q. I'm asking this -- I'm not attacking you. I'm asking you a simple question.
What symptoms -- You say he could have had it. What's your basis?
A. Because patients who have myocardial infarction often have pericarditis after that.
Q. Okay. So it's a general medical statement, but you don't have a single clinical thing or finding in any of these tests that support it.

Page 98

A. Correct, just as you do not have anything to support another heart attack.
Q. Let's go on, 'cause --
A. Okay.
Q. -- I'm not testifying here.
A. Okay.
Q. I'm trying to understand your opinions.
The next thing that you say it could be is you say it could be some sort of ongoing pain caused from the first heart attack.
A. My -- my impression is that he has coronary artery disease, he's had one myocardial infarction, and there's a likelihood that he still has coronary artery disease causing his symptoms of angina. That's what I believe is going on with him at this present time.
Q. The fixed defect that he had would not account for his pain, would it?
A. Why do you ask me that? Why -- why are you assuming that?
Q. I'm not assuming.
Do you agree or disagree?
A. You can have pain with fixed defects.
Q. Is there an adage in the -- in all of the

Page 99

major cardiology texts that pain equals death?
A. Say that again.
Q. Is there an adage -- and we'll use Hurst's --
You've heard of Hurst's textbook; correct?
A. I have.
Q. -- that pain equals death?
A. I -- I have never read that.
Q. Okay. Have you heard that --
A. That pain --
Q. -- spoken?
A. Pain of?
Q. That chest pain is symbolic of actual cells dying in the heart.
A. Oh, that -- that can be true.
Q. Okay.
A. That's not what you said. You said death. I thought you meant --
Q. Not of the patient.
A. Oh, okay.
Q. I'm talking about heart muscle.
A. Chest pain is very consistent with myocardial cells dying.
Q. Do you believe, then, that there were

Page 100

on- -- to a probability, there was ongoing myocardial cell death from the first documentation of the heart attack on the 16th through the time he died?
A. No.
Q. Okay. When do you believe the death to the heart muscle cells stopped?
A. Probably at the time of his initial presentation.
Q. Okay. So June 16th of 2001?
A. Yes.
MR. DILLON: 18th.
Q. The 18th. I apologize.
A. June 18th.
Q. From there forward, did he have any additional death, in your opinion to a probability, of any of his myocardial cells?
A. I don't know.
Q. Okay. Do you have an opinion as to what was the mechanism? Was it a supply-and-demand issue from coronary artery disease that was causing his ongoing angina?
A. Yes.
Q. Okay. And when we say that, that's

Page 101

actually an infarction, not necessarily necrosis, but an infarction of tissue or hypoperfusion of heart muscle.
A. It's hypoperfusion of heart muscle.
Q. You believe that was going on after June 18th?
A. Yes.
Q. Okay. Do you believe that that is what was accounting for his intermittent chest discomfort?
A. Yes.
Q. Okay. And do you believe that was also related to the right coronary artery lesion that you suspect was there?
A. I believe that the problem was in the right coronary artery distribution.
Q. Is it your testimony that Mr. Lyons was just that unfortunate individual that more likely than not was going to fall outside of the -- the norm?
A. Perhaps.
Q. Obviously, we don't have any studies out there where we don't treat certain patients intentionally. Once we diagnose someone, we usually

Page 102

treat them; correct?
A. Yes.
Q. But you believe that even with treatment, he, for some reason, would not have been amenable to any benefit from it, and he would have been an outlier who died?
A. No. I didn't say that.
Q. Okay. With medical therapy initiated on June 27th, to a probability, does he live?
A. No.
Q. Why not?
A. Because he died on medical therapy.
Q. How long do you have to be on medical therapy before you believe you have a maximum benefit?
A. Well, beta blockers begin immediately.
Q. Okay. So the fact that he was on beta blockers from July 3rd to the moment of his death you believe negates any risk or any question that they would have helped having been given earlier?
A. It would have been unlikely that they would have helped earlier.
Q. Same question with reperfusion. Had he been reperfused by some sort of intervention,

Page 103

stenting, angioplasty, or bypass, do you believe he would have died anyway?
A. I believe there's a good chance that he could have died anyway.
Q. Can you quantify what you mean by "good chance"?
A. The -- the value of the angiogram would have told you your chances of survival. So if you tell me -- If I assume that it's only single-vessel disease, revascularization conveys no mortality benefit compared to medical therapy for single-vessel disease. The nuclear scan says it's single-vessel disease.
Q. In addition to knowing he has a normal left ejection fraction, do you know whether there were gated images in his nuclear scan?
A. I don't know. I'd have to go back and look at the report.
Q. Do you know whether they found any dilatation of the left ventricular cavity?
A. I don't recall seeing that in the report.
Q. Do you know if they found a singular sign that was consistent with ventricular dysfunction, left ventricular disfunction?

Page 104

A. Not that I'm aware of.
Q. Left ventricular dysfunction is one of the best prognostic factors for revascularization of patients; correct?
A. That's correct.
Q. And obviously, my client, Jeff Lyons, had that in his favor; correct?
A. That's correct.
Q. The location of this fixed defect you believe is at the distal aspect of the heart, is it near the septum or is it on the back wall of the left ventricle?
A. I said it's the inferior wall, proximal inferior wall was affected by the stress Cardiolite study.
Q. Where's that in relation to the sinus node?
A. The sinus node? Sinus node is usually in -- in the -- it typically is in the valvular plane. It's between the septum -- It's in the high right atrium.
Q. Is that sometimes called the apical area?
A. No.
Q. Okay. Where the fixed defect is, is it

Page 105

close to the sinus node?
A. The sinus node tend -- typically is in the atrium. It's not -- doesn't involve the left ventricle.
Q. Okay.
A. Now, you can affect the sinus node by location of the coronary artery lesion, but it's -- that's not what's looked at by the nuclear scan.
Q. I'm just trying to look at things about this fixed defect.
What about this fixed defect would put it at high risk to cause an arrhythmia?
A. Once you've had a heart attack, you're always at risk for an arrhythmia. You can't stratify the risk of the arrhythmia based upon the nuclear scan unless the left ventricular function is abnormal.
Q. Does the location of the defect sometimes increase the likelihood of an arrhythmia?
A. Yes.
Q. Where this defect is located, is it in the location that's likely to lead to a fatal arrhythmia or are there other areas of the heart where a defect would be much more likely to cause a sudden

Page 106

arrhythmia?
A. I would approach it as two questions.
Q. Okay.
A. It can cause an arrhythmia.
The anterior wall is usually more suspect for causing fatal arrhythmias.
Q. Have you ever had a patient who died from an arrhythmia from a fixed de- -- a small fixed defect on the inferior portion of the heart?
A. Yes. I have been in practice a long time.
Q. The patient died on July 13th. You don't believe that anything that anybody would have done before July 13th would have altered the outcome; right?
A. I didn't say that.
Q. What, to a probability, could have been done before July 13th to alter the outcome?
A. Cardiac catheterization.
Q. And how would the catheterization have altered the outcome, to a probability?
A. It depends on what was found at the angiogram.
Q. If we assume what was found is what you suspect, how would it have altered the outcome?

Page 107

A. If there was only single-vessel disease, then it would not have altered the outcome.
Q. If there was multivessel disease?
A. It may have altered the outcome.
Q. Because there would have been revascularization?
A. More than likely.
Q. Dr. Kolibash testified at page 23 that he believed the most likely cause of death was from a myocardial infarction, but it's also possible he could have died from a sudden death from a cardiac arrhythmia from the scar that he had on his heart from his previous infarction.
Do you see that?
A. Yes, sir.
Q. So he clearly testified that he believes a second myocardial infarction occurred. You disagree with him?
A. He stated that he died from sudden death from a myocardial infarction.
Are you implying that he meant to say that he died from a second myocardial infarction?
Q. No. I think he outright says it.
A. Okay.

Page 108

Q. He says at page --
A. I'm just reading this for the first time, so I'm just reading it.
Q. I just wanted to read it out loud to you. I didn't want to blindside you with it.
A. I think I have exactly where you are on line 12.
Q. I'm not on line 12.
A. Okay.
Q. I'm on page 23. And I can hand it to you.
A. Okay.
Q. Line 16, it says, "The most likely cause is that he -- he -- he died from sudden death from a myocardial infarction; but it is also possible that he could have died from sudden death from a cardiac arrhythmia from the scar that he had on his heart from his previous infarction."
The fact that he uses "previous infarction" makes it pretty clear that he thought he had two; correct?
A. I would agree with that.
Q. Do you disagree with him as to the cause of death, then?

Page 109

A. I would put them in reverse order.
Q. Okay. You agree that they're both possible causes, but you believe the scar from the previous -- from the original infarction, we'll call it, was the most likely cause.
A. Correct.
Q. You do realize that Dr. Kolibash is the expert for Dr. Beaver and the group who employed Dr. Auerbach?
A. Okay.
Q. Do you believe there's any other potential causes that are out there for death that are reasonable other than those two?
A. It's unlikely that it's anything other than one of those two, but I still would consider these -- the arrhythmia more than likely number one.
Q. You have testified in other cases before; correct?
A. Yes.
Q. You have testified in other cases where scope and extent of consultation has been at issue, too; correct?
A. Maybe.
Q. Do you remember the Mary Boley case?

Page 110

A. I don't. Can you refresh my memory?
Q. Mary Boley was a patient who had a perforation of her aorta. The cardiologist requested an evaluation of why she was having an alteration of her vital signs.
A. Oh, yes, I do remember that. I sure do.
Q. Dr. Polinski?
A. Yes.
Q. The central issue in that case was -- between the two physicians was what was meant by a consultation; correct?
A. As I recall, you're correct.
Q. You stand by the testimony you gave in that case, I assume; correct?
A. Yeah.
Q. In that case you testified for Dr. Polinski, the cardiologist; correct? --
A. Yes.
Q. -- as to what was meant when a consultation was requested?
A. I'm sure I stand by my testimony.
Q. Okay.
MR. KELLEY: Take a second. I'm almost done.

Page 111

(Brief recess was taken.)
BY MR. KELLEY:
Q. Do you have an understanding as to why the catheterization wasn't performed the first day that Jeff Lyons went for it?
A. The only understanding I have is probably superficial. And I know he had an initial date and it was canceled; and I'm not exactly perfectly clear why it was canceled, but I thought it was by the patient.
Q. Do you have any criticisms of the patient in this case?
A. I think there are a few things he could have done better.
Q. And what are those?
A. Not smoke, hopefully have gotten his catheterization earlier.
Q. So you believe it was his fault that the catheterization wasn't done?
A. No, I didn't say that.
I know there was an issue with his insurance in not getting it done. Sometimes -- And often, patients in our practice, if there's that issue, are more proactive about getting it done,

Page 112

especially if the physician has recommended that.
Q. Do you see any evidence that he was ever told he had an MI?
A. I -- I have no knowledge of personal discussions between the patient and the doctor.
Q. Did you see the form he filled out for Dr. Auerbach when he first went to see him?
A. I -- I did review that.
Q. Did he specifically circle "No" where it says "History of Previous Myocardial Infarction"?
A. Right. I don't know if Dr. Auerbach informed him that he had a myocardial infarction. He was pretty clear in his letter to his referring physician, so it wouldn't surprise me if he told him he had a myocardial infarction.
(Discussion held off the record.)
BY MR. KELLEY:
Q. Why was Jeff Lyons starting to pass out in July?
A. I don't know that he had passed out. I know he filled it out on one of the forms in their office. That's the only knowledge that I have of it. I saw nothing else in the medical record other than Dr. Beaver's consultation that he had had no

Page 113

syncope. So I am -- I'm not sure when he passed out, if it was in relation to this visit or not.
Q. Do you -- You have read Dr. Auerbach's testimony?
A. Yes.
Q. He testified at page 43 that, heart pain greater than 20 minutes at rest is consistent with unstable angina.
Do you agree with that?
A. It can be consistent with unstable angina.
Q. He testifies at 44 that unstable angina is a more serious condition and the physician needs to be more -- needs to quickly diagnose and treat the situation.
Do you agree with what?
A. It's more unsta- -- it's more serious than what?
Q. If you look on 44, I'll let you look at his words. There is my summary of it. That it is a more serious condition, and there needs to be a quick diagnosis and treatment of the situation.
Do you see that?
A. It looks like he was comparing that to stable angina.

Page 114

Q. Do you agree with that statement?
A. Yes.
Q. Do you agree that unstable angina patients are at more risk for future cardiac events and death than patients with stable angina?
A. Yes.
Q. Do you agree that troponin -- that's page 56 of his deposition -- is now a preferred biomarker to diagnose myocardial infarction?
A. I think that it's a useful biomarker for diagnosing myocardial infarction.
Q. Did you see his testimony on page 69 regarding when he would have cathed this patient?
A. Tell me that again. I have page 69 here.
MR. SEWARDS: It's at the bottom of the page, I think.
A. Okay. I see this.
Q. Does he describe when he would have performed a catheterization on Jeffrey Lyons?
A. Yes.
Q. When does he say he would have?
A. He -- When they're talking about schools of invasive strategies for acute coronary syndromes, he refers to being a believer in an early invasive

Page 115

strategy, early being within that hospitalization. And I thought they were generally talking about acute coronary syndromes in that -- in that regard.
Q. Do you agree that he was a high-risk patient, Jeff Lyons, based upon his family history, the risk factors we've gone through, his troponin?
A. Yes.
Q. On page 70, Dr. Auerbach says, With unstable angina and high risks, he would cath the patient before they go home.
Do you see that?
A. Yes.
Q. Do you agree that that's a reasonable position to take for a physician?
A. Yes.
Q. Do you know why that wasn't done here?
A. I think the real key is the -- the examination by the doctor; did they truly have unstable angina?
Q. Do you see on page 161 of Dr. Auerbach's testimony that he believes Dr. Tulebaev should have noted the troponin?
A. I see that.
Q. Do you agree with him?

Page 116

A. Yes.
Q. It's a relevant biomarker; correct?
A. I agree.
Q. Do you see on page 162, where he says he disagrees with Dr. Tulebaev that possible coronary artery disease was unlikely at that time?
A. Yes.
Q. Do you agree?
A. With?
Q. Dr. Auerbach's assessment that Dr. Tulebaev's assessment of possible coronary artery disease being unlikely was wrong, that he disagreed with it.
A. Uhm, you know, it's -- it's easy to say that in retrospect. It's -- it would be much easier to have seen the patient, make a comment. But at this point in time, I would agree with Dr. Auerbach.
Q. He also says on page 162 he believes more likely than not that his presentation was consistent with coronary artery disease. Correct?
A. Correct.
Q. You agree with that; correct?
A. Yes.
Q. Do you see page 88 of Dr. Auerbach's

Page 117

testimony?
A. Yes, sir.
Q. He says that Dr. Tulebaev called for a consult with stress test.
Do you see that?
A. Yes.
Q. What do you take that to mean?
MR. SEWARDS: Object.
A. Can you give me exactly where you're talking about again?
Q. I just have in my notes that it was on page 88 that he testified that Dr. Tulebaev called for a consult with stress test.
I'll show you page 88 here.
A. It says here there's a requisition for the stress test.
Q. So it would have been his call whether or not --
(Discussion held off the record.)
BY MR. KELLEY:
Q. On page 118, he describes that nothing on the 26th, that's the note of Dr. Beaver, was inconsistent with unstable angina.
Do you agree with that statement?

Page 118

A. I agree with that statement.
Q. He also testifies -- I think it's around page 98 -- that he believes the acute myocardial infarction was 24 to 48 hours before the 18th, which is when he presented.
Do you agree with that?
A. I have no reason to dispute that.
Q. Dr. Beaver -- I think it was on page 13 -- testified that he didn't even know the patient was in the hospital on the 18th when he saw him on the 26th.
Did you see that?
A. I'll go find that.
Will you give me the page one more time, please?
Q. It's 13. I think it's line 13.
A. Okay.
Q. Do you see that Dr. Beaver testified he didn't even know he had been hospitalized on the 18th?
A. Correct.
Q. Do you have any understanding as to how that could occur?
A. Uhm, yes.

Page 119

Q. Can you explain it?
A. I'm not sure of the answer, but I -- I do see how that can occur.
Q. Obviously, you get paid for imposing on your time.
How much do you charge?
A. For this deposition?
Q. For first your review of cases, then obviously depositions and trials.
A. I charge $400 an hour to review cases, $450 an hour to do deposition.
Q. And do you have any idea of how much --
First, were there any other letters that were provided to you that you didn't keep, any cover letters or things that came afterwards?
A. Everything I have is right here.
Q. Okay. And when you get paid for your deposition, will you charge $900 for it or is it an hourly rate and we'll owe you more if you go over?
A. You could owe me more if this keeps going.
Q. What I like to hear. Like to keep the economy going.
A. Yes.
Q. I think I have one last question.

Page 120

Are you licensed to practice in the state of Ohio? Goofy question. I got to ask it, though.
A. Yes, sir.
MR. KELLEY: All right. I have no further questions.
MR. SEWARDS: I have just a couple. I promise not to take long, 'cause I know that it's later in the evening and everybody wants to go on to other things.

- - -

CROSS-EXAMINATION

BY MR. SEWARDS:
Q. Doctor, when a patient has chest pain, there are lots of ways that physicians can evaluate the nature, extent, and cause of chest pain. Is that fair to say?
A. Yes.
Q. One of the things that can be done to evaluate a patient who has chest pain is to have them undergo a Cardiolite stress test. Is that fair to say?
A. Yes.
Q. In your review of the records, the hospital records, the office charts, and the

Page 121

deposition testimony of the various physicians as you have described, did you see anywhere where it had been directly communicated or indirectly communicated to Dr. Beaver that this patient had been hospitalized and had suffered a myocardial infarction?
A. Not that I'm aware of.
Q. I'm going to come over to you because it will be faster if I just show you things.
(Discussion held off the record.)
Q. And I'm looking at the Fayette County Memorial Hospital records, and specifically Dr. Tulebaev's typewritten discharge summary.
In his discharge summary, he makes reference that he was going to have the patient follow up with Dr. Gebhart, and then he also mentioned that he thought it would be useful also to follow up with Dr. Auerbach next Tuesday for a stress Cardiolite test. Is that correct?
A. That's correct.
Q. And he doesn't mention anything there about ordering or referring for a full cardiology consultation. Is that correct?
A. That's correct.

Q. A stress Cardiolite test does not equate with a full cardiology consultation. Is that correct?
A. Correct.
Q. Now, on the order sheet that Dr Tulebaev signed off on, he wrote, Follow up with Dr. Auerbach next Tuesday for a stress test Cardiolite.
Do you see that?
A. Yes.
Q. Did anywhere on there did he order a full cardiac consultation?
A. No.
Q. A moment ago, Doctor, you said in response to a question that you could understand how Beaver -- Dr. Beaver would not know that the patient was hospitalized.
Was there a particular circumstance or set of circumstances that you might be referring to?
A. Yes.
Q. Could you explain that to us?
A. Sure.
I -- I can imagine a circumstance where all patient records don't come over with the patient at the time of examination. That's happened to me

before. And if -- if you don't ask the question, Have you specifically been hospitalized recently, or if the patient doesn't volunteer that information, that can happen.
Q. And you have reviewed Dr. Beaver's report of consultation, as Mr. Kelley will certainly remind me that's what it's called, --
A. Yes.
Q. -- the two-page typewritten report?
Did it appear to you that he had questioned this patient --
A. Yes.
Q. -- and asked him about his problems and pains and difficulties?
A. Yes.
Q. Did it appear to you that Dr. Beaver had just ignored the patient or not asked him very many questions and then just proceeded with the stress test?
A. No. I -- I don't believe he ignored the patient.
MR. SEWARDS: Thank you. Those are all the questions I have.
- - -

CROSS-EXAMINATION
BY MR. LODICO:
Q. Doctor, I just want to be sure that I understand your earlier testimony. And I represent Dr. Tulebaev.
As I understood your earlier testimony, it -- whether or not certain tests and so forth are ordered and conducted at the time depends upon the doctor's clinical evaluation of the patient at the time he's seeing him. Correct?
A. Absolutely.
Q. And based upon what Dr. Tulebaev was seeing at the time that Mr. Lyons was in the -- the hospital at Fayette County, it was, as I understood your testimony, reasonable for him to have sent the patient home to have follow-up examinations later.
A. As long as the patient was clinically stable.
Q. And again, that's based on a number of factors, the results of whatever testing was done, but also on the appearance of the patient as far as the doctor is concerned. Correct?
A. And discussion of the patient's symptoms with the physician.

Q. Right.
And based upon what you see in the records, it's your opinion that it was reasonable for Dr. Tulebaev to have sent this patient for a follow-up at a later time?
A. Yes.
MR. LODICO: Thank you, sir. I have no further questions.
MR. KELLEY: I don't have any follow-up.
MR. DILLON: Okay. We'll read it.
(Signature not waived.)
- - -
Thereupon, the deposition concluded at approximately 6:55 p.m.
- - -

AFFIDAVIT

- - -

THE STATE OF OHIO:
SS:
COUNTY OF FRANKLIN:

I, Steven Joseph Yakubov, M.D., do hereby certify that I have read the foregoing transcript of my deposition given on April 20, 2004; that together with the correction page attached hereto noting changes to form or substance, if any, it is true and correct.

_____
Steven Joseph Yakubov, M.D.

- - -

I do hereby certify that the foregoing transcript of the deposition of Steven Joseph Yakubov, M.D. was submitted to the witness for reading and signing; that after he had stated to the undersigned Notary Public that he had read and examined his deposition, he signed the same in my presence on this day of , 2004.

_____
NOTARY PUBLIC, STATE OF OHIO
My Commission Expires:

- - -

CERTIFICATE

- - -

THE STATE OF OHIO:
SS:
COUNTY OF FRANKLIN:

I, Beth A. Higgins, a Registered Professional Reporter and Notary Public in and for the State of Ohio, do hereby certify that before the taking of his said deposition, the said Steven Joseph Yakubov, M.D. was first duly sworn by me to tell the truth, the whole truth, and nothing but the truth;

That said deposition was taken in all respects pursuant to the stipulations of counsel heretofore set forth; that the foregoing is the deposition given at the said time and place by the said Steven Joseph Yakubov, M.D.;

That I am not an attorney for or relative of either party and have no interest whatsoever in the event of this litigation.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal of office at Columbus, Ohio, this 30th day of April, 2004.

_____
Beth A. Higgins, RPR
Notary Public, State of Ohio

My Commission Expires: July 17, 2005.

- - -