IN THE CIRCUIT COURT OF THE COUNTY OF ST. LOUIS
STATE OF MISSOURI

- -x

TIM BAYLESS as the Administrator of the Estate of Gary Bayless, deceased, and TIM BAYLESS, BARBARA BAYLESS, JESSICA CASPER and SHEILI SUTHERLAND, Individually,

Plaintiffs,

vs. Cause No. 12SL-CC04865

SSM HEALTH CARE ST. LOUIS, d/b/a SSM DEPAUL HEALTH CENTER a/k/a DEPAUL HEALTH CENTER, et al.,

Defendants.

- -x

DEPOSITION of BRUCE CHARASH, M.D., taken by Defendants at the offices of Fink & Carney Reporting and Video Services, 39 West 37th Street, Sixth Floor, New York, New York 10018, on Thursday, July 13, 2017, commencing at 11:00 o'clock a.m., before Tina DeRosa, a Shorthand (Stenotype) Reporter and Notary Public within and for the State of New York.

APPEARANCES:

THE LAW OFFICES OF DAVID N. DAMICK
Attorneys for Plaintiffs
211 Broadway
One Metropolitan Square, Suite 2420B
St. Louis, Missouri 63102

BY: DAVID N. DAMICK, Esq.

BRINKER & DOYEN, LLP
Attorneys for Defendant Dr. Chouhan
34 North Meramec, Fifth Floor
Clayton, Missouri 63105
BY: JAMES C. THOELE, Esq.
(Appearing via videoconference.)

BROWN & JAMES, P.C.
Attorneys for Defendants Imran Hanafi, M.D., IPC The Hospitalist Company, Inc. and InPatient Consultants of Missouri, Inc.
800 Market Street, Suite 1100
St. Louis, Missouri 63101
BY: PETER F. SPATARO, Esq.
(Appearing via videoconference.)

SANDBERG PHOENIX & von GONTARD
Attorneys for Defendants Dr. Lands and SSM Health Care St. Louis
660 Washington Avenue, 15th Floor
St. Louis, Missouri 63101
BY: KENNETH W. BEAN, Esq.
(Appearing via videoconference.)

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B R U C E C H A R A S H, M.D., called as a witness, having been first duly sworn by Tina DeRosa, a Notary Public within and for the State of New York, was examined and testified as follows:

MR. DAMICK: Before we get started I want to make a note for the record, Jim.

MR. THOELE: Yes, we are waiting.

MR. DAMICK: In conference with Dr. Charash just prior to this deposition we determined that there will be no claims made against any of the over readers, the EKG over readers. We will be dropping them from the case.

MR. THOELE: So that's me.

MR. DAMICK: It's you and Dr. Chouhan.

MR. THOELE: That's me. So you're going to dismiss us from the case. At this point from your prior designation I don't believe your

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other expert has any opinions as relates to Dr. Chouhan or the cardiologist.

MR. DAMICK: Could you repeat that last part.

THE WITNESS: The acoustics are --

MR. DAMICK: Jim, just to be clear your sentence started out we could hear it, but by the end of it the feedback was too bad.

THE WITNESS: I have a question for you.

Is it possible for you to mute that and call us on the phone?

MR. THOELE: I don't see a phone here. Let's try one more time and see how we do. Why don't we do this. Why don't we get the tech in to see if he can help.

(Discussion off the record.)

MR. THOELE: So again back on the record.

This is Jim Thoele and I

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represent Dr. Chouhan in this matter and it's my understanding that Dr. Charash is not going to have any opinions as it relates to criticisms of standard of care as it relates to the over read of the EKG in January; correct?

MR. DAMICK: That is correct. He will not be indicating that there is any breach of the standard of care by Dr. Chouhan or anybody over reading.

MR. THOELE: And based on the fact that your other expert witness is not identified as offering opinions against Dr. Chouhan I'm assuming you will dismiss me from this case.

MR. DAMICK: That is correct.

MR. THOELE: Based on that I don't think I'm going to have questions. I probably think other people in the room do.

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EXAMINATION

BY MR. SPATARO:

Q Can you state your name for me, sir?

A Bruce Charash.

Q Hi, Dr. Charash. My name is Pete Spataro. I'm an attorney in this case representing Dr. Hanafi and his corporation IPC. I'm going to ask you some questions today about opinions you have. Please let me know if you don't understand or can't hear me or understand what I'm saying through the microphone and I'll repeat it for you; okay?

A Yes.

Q Can you tell me when you were first contacted regarding this case?

A It would have been in the fall of 2012. My first invoice was October 8, 2012. I didn't have the original cover letter, but it would have been probably within two weeks of that date.

Q And how were you contacted?

A I have no memory.

Q Who were you contacted by?

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A I don't know. Obviously either Mr. Damick or someone on his behalf. I don't know. It's been five years.

Q Do you have any written communications from Mr. Damick or someone from his office?

A No.

Q Even to this day do you have any written communications or e-mail communications from Mr. Damick or someone in his office?

A No.

MR. SPATARO: Jim is going to interrupt.

MR. THOELE: Yes, I would interrupt just for a second based on your representation previously I'm going to leave. So I'm assuming nothing will change in the interim here and I appreciate at least the knowledge at the outset before we got too far into it. So see you all later.

MR. DAMICK: Take care, Jim.

(Whereupon, at this time

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James Thoele left the deposition.)

BY MR. SPATARO:

Q All right, Doctor. You were saying that you have never received any written communications or e-mail communications from either Mr. Damick or a member of his office from 2012 to the present time.

A No. I said I don't have any. Let me clarify. I was sent the records in 2012. I was not reapproached about this case for a few years. I had been in transition and moving and because this case was at least three years old I think I accidentally sent it off to be shredded. So I don't know what was sent originally. I had the records resent to me via Dropbox. So there is no e-mail communication other than a Dropbox file. So I don't have any e-mail communications and I don't have any cover letters, but I was sent all of the records via an electronic transmission.

Q When was that?

A Within the last month.

Q Have you prepared any reports or anything in writing regarding your review of

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this case?

A I had written a report in 2012.

Q Do you have a copy of that with you today?

A Yes, I do.

Q All right. And did you prepare any other notes in your review of the case other than the report you prepared in 2012?

A No.

Q You said you had a copy of that there with you?

A Yes.

MR. SPATARO: Ms. Reporter, can we mark that as an exhibit, please?

(Report was marked as Deposition Exhibit No. 1 for identification, as of this date.)

BY MR. SPATARO:

Q Doctor, I'm going to have you look at now what has been marked as Exhibit 1. I take it that's a copy of a report that you prepared?

A Yes.

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Q And what was the date of the report?
A December 20, 2012.
Q And do you believe that reflects your review of the case following your initial receipt of the records?
A Yes. Those are my opinions up until the time of the preliminary records.
Q And do those remain your opinions today?
A Pardon me?
Q Do the opinions that you have on Exhibit 1, are those still your opinions today?
A Well, I think that the negligence opinions haven't changed, but the responsibility of who was involved in the care was clarified through deposition testimony.
Q All right. Is that just a one-page report?
A It's a four-page report.
MR. SPATARO: Okay. David, I don't know what you want to do. Do you want to fax that over here. We don't have that.

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MR. DAMICK: No. That was the letter of merit report that isn't disclosed unless you ask for it, but it's available now in his file, so how do you want to get it?
MR. SPATARO: Can we fax it over here?
MR. DAMICK: I'm sure they have a fax here if you have got a fax there.
MR. SPATARO: Yes.
(A short recess was taken at this time.)
(The deposition resumed with all parties present.)
B R U C E C H A R A S H, M.D., resumed, and testified further as follows:
BY MR. SPATARO:
Q Dr. Charash, I just want to clarify. I have now received by e-mail your report dated December 20, 2012 which is four pages as you mentioned.
I notice there's a yellow

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Plaintiffs' sticker Exhibit 3 on the bottom right. Was that placed today or do you know when that was placed?
MR. DAMICK: Actually since I was the one that placed it, it was just placed by my staff in preparation for this deposition in case we needed to use it and you didn't bring it up.
MR. SPATARO: You put it on there, David.
MR. DAMICK: I did, yes. The one that is here is marked with a white exhibit sticker labeled No. 1. The Exhibit No. 3 should be ignored.
MR. SPATARO: All right. So you have another copy because mine doesn't have Exhibit 1. I just want to make sure we're talking about the same thing.
MR. DAMICK: Yes. That is correct.

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BY MR. SPATARO:
Q All right. Dr. Charash, you mentioned in December of '12 you obviously had some medical records as reflected in the first paragraph of your letter on Exhibit 1, and since that time those records were shredded because you didn't think the case was active.
Is that basically correct?
A Yes.
Q All right. And then when you recently had records provided to you by Dropbox what materials were sent to you?
A I happen to have printed the directory of Dropbox because it's a lot of records. It lists all the doctors and hospitalizations. It's a lot. I could just attach it as an exhibit if you want.
MR. SPATARO: We will mark that as Exhibit 2.
(List of records was marked as Deposition Exhibit No. 2 for identification, as of this date.)
BY MR. SPATARO:
Q Dr. Charash, you said on Exhibit 2

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is a list of what, the medical records and other materials you received in the Dropbox?

A Yes.

Q Could you just read off the information that you were given?

A Sure. Okay. I'm just going to give a series of dates of different hospital admissions.

Q That's fine.

A Unfortunately, the years are cut off.

January 16th, I didn't know the year. February 4th, March 12th, March 25th, April 30th, August 8th, September 15th, September 25th, September 26th, October 31st, November 8th, November 20th.

Records from his cardiologist, Dr. Brunts, I think. The deposition of Dr. Chouhan. His death certificate. His DePaul Hospital admission for January and then July, 2011. Records from Dr. Bhutto, B-H-U-T-T-O. Gateway Ambulance.

The deposition of Dr. Hanafi. Something that says Maryland Heights and I'm not

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sure what the rest is. Mercy Clinic. Mercy Heart and Vascular. Multi-Specialty Medicine, and my signed report.

Q All right. Well, you mentioned the records you couldn't see the year, but you mentioned you had a number of months, days. Starting with January 16th what record is that? Is that from a hospital or a doctor?

A They are all hospital admissions. Most of them obviously after his heart attack in 2011 through his death in May of 2014. I think those all represent hospitalizations. I'm just sorry the year is cut off on this printout. I can easily go home and provide you that, but I just don't have it here.

Q Do you know what hospitals they are?

A Not by memory.

Q Okay. So you don't have, you have some dates listed on that sheet, but not how it correlates with what hospital admission?

A Well, for example, I know he was admitted to Mercy Hospital in St. Louis on February 24, 2014, but by memory I don't know

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the rest of the hospitalizations or dates. But I could easily provide that through an e-mail transmission.

Q So it looks like as far as depositions you reviewed Dr. Hanafi and was it Dr. Chouhan; is that right?

A I read three depositions, I'm sorry. That of Dr. Hanafi. That of Dr. Chouhan, C-H-O-U-H-A-N, and that of Dr. Brunts, B-R-U-N-T-S.

Q All right. Are you aware of other depositions that have been taken in the case?

A No.

Q All right. For instance, the treating surgeon was Dr. Maylack.

Are you aware whether he gave testimony and what he testified to?

A No, I am unaware.

Q How about any of the family members. I take it you have not reviewed their depositions and are not aware of what they said?

A Correct.

Q Have you been provided any information from Mr. Damick or anyone from his

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office about the testimony of Dr. Maylack or the family members?

A No.

Q Did you other than the Exhibit 1 which is your report dating back to the summer of '12, did you prepare any notes from your review of the records or the depositions?

A No.

Q And are there any from the beginning of the case until today any e-mail exchanges between you and Mr. Damick or a member of his office?

A If they do I don't have them. I don't preserve the e-mails, but I'm sure Mr. Damick would be more likely to have them.

Any e-mail exchanges we would have had though would have only been concerning scheduling this deposition.

Q You said that you had prepared an invoice back in 2012?

A Sorry?

Q You mentioned earlier that you had an invoice I believe October 8th of 2012?

A Yes. I brought all invoices

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except for actually the one I just sent which I can get for preparation for the deposition. But I have one here for October 8, 2012 for two hours of time, one December 20, 2012 for one hour of time, one on July 29, 2015 for an hour and a half of time, and then I just recently submitted my most current invoice for deposition preparation, for reviewing more complete records, depositions and factoring in my 45 minutes with Mr. Damick prior to today's deposition. And I don't recall if that's five and a half hour, but that's the ballpark. But I can get the invoice.

Q You have those three invoices with you today?

A They are in my hand.

MR. SPATARO: All right. We will mark those as group Exhibit 3.

(Invoices were marked as Deposition Exhibit No. 3 for identification, as of this date.)

BY MR. SPATARO:

Q So as I understood it you did an

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initial review in October of '12. I take it that that then led to you generating the report. You billed another hour on December 20th. So the work that you had done up until December 20th of 2012 amounted to three hours of review time and preparation of your report; correct?

A Yes.

Q Then you said you billed an hour and a half on July 29th of '15.

What did you do to generate one and a half hours of time on or before July 29th of 2015?

A I was sent some additional records and I don't recall if they were hard copy or not and I discussed the additional records with Mr. Damick. But at this point I just don't know which ones they were. I cannot find a record of it.

Q So do you know if he even sent them to you hard copy or e-mail or do you know?

A I don't know.

Q All right. So whatever you did in July of 2015 for the one and a half hours of

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time you are not able to recreate for us today?

A Correct.

Q Then I take it the five and a half hours that you are going to bill, roughly, currently constitutes your review of the Dropbox information and a meeting you had with Mr. Damick?

A Correct.

Q Back in 2012 when you wrote your report, Exhibit 1, you provided opinions about the care rendered to Gary Bayless?

A I did.

Q Do you today have any different opinions that have changed since the report from December of 2012?

A I think they are more focused than they were and the role of Dr. Hanafi as my principal source of criticism has evolved based on depositions.

So my opinions stand, but I think I have a slightly more focused way to present it.

Q All right. The first paragraph of your report basically says the information you

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reviewed, the DePaul admission for 1/11/11 and then some records from DePaul in July of 2011, and you're just stating at that point that you believe his care rendered in January of '11 was below the standard of care; correct?

A Yes.

Q And when you say the care was below standard, what health care providers do you believe fell below the standard of care that you're referencing in that first paragraph?

A Are you talking about now or when I wrote the report?

Q Well, if it's different tell me. But at the time of the report who did you think fell below the standard of care?

A It wasn't clear to me what role different people had in terms of the patient's care. So I always had Dr. Hanafi listed, but after reviewing his deposition it is now my opinion that he is the health care provider that deviated from the standard of care and I don't have criticisms beyond that.

Q All right. So then when we look at Paragraph 2, you thought that the doctors at

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DePaul deviated from the standard of care by failing to recognize the significance of Mr. Bayless' EKG changes. You are now able to say that doctors in the plural is just Dr. Hanafi?

A Correct.

Q All right. If I go to Page 2 of your report. I think it's the third paragraph, it starts with "I am also familiar with the standard of care of physicians including hospitalists and the other health care providers who treated Mr. Bayless."

How are you familiar with the standard of care of a hospitalist?

A Because I work with hospitalists on a daily basis. I have served as a hospitalist from the cardiac point of view. When I was hired at Lenox Hill in 1991 I was actually a cardiac hospitalist, the first one in the hospital.

But the standard of care in this case is a very fundamental standard of care which would apply to any physician that takes responsibility to read an EKG and sees an

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abnormality and at the most fundamental level they have a responsibility to inform a patient and their referring doctor about the need to have it followed up.

So this is really as fundamental an issue. That if you identify a problem you have a duty to inform the patient and their -- and the doctor responsible for subsequent care of that problem and that transcends specialties.

If a doctor sees a spot on a lung as an incidental finding and the patient is in for the same surgery, the same duty applies to notify the patient and their managing physician.

Once you identify an abnormality that is otherwise unaccounted for, this is the most basic responsibility in medicine of anyone who went to medical school.

Q Now, you mentioned that any physician who you said reads and interprets the EKG?

A No. I said anyone who is engaged in the patient's health care and reads the EKG.

Q When you said read EKG you mean actually pick up the strip and try to interpret

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it or are you just saying reads the report from either the machine or the reading cardiologist that is aware of what the findings are?

A No. You're mischaracterizing it. Any physician who is involved in the patient's care who is the primary medical doctor who is aware that there are two unexplained heart attacks on an EKG where the patient has no history clinically has a duty to inform the patient and to make sure that there is a mechanism by which a physician is aware to assume responsibility for follow-up.

It doesn't mean anyone who glances at the chart. It means that the doctor who is primarily the medical doctor who finds generously an incidental finding that reflects two previously unrecognized heart attacks, that doctor has the duty to insure there is follow-up for that problem.

Q Are you aware of any other health care providers from the January, 2011 admission who were aware of Mr. Bayless' EKG results other than Dr. Hanifi?

A Well, the doctor who read the EKG,

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but they are not clinically involved in the patient's care.

Q That would be Dr. Chouhan whose attorney just left the deposition earlier, that's who you are referring to?

A Correct. They correctly read the EKG and by their reading they had no duty to get involved in the patient's clinical management.

Q All right. Anybody else like the surgeon who performed the fracture repair or any of the nursing staff. Do you know if they were aware of his EKG findings?

A They may well have been aware of the findings, but there was only one doctor who was there from the medical side and that doctor takes the responsibility.

I'm not here to discuss the responsibility of a surgeon, especially in a case where surgeon called in a medical doctor.

If a surgeon did not call in a medical doctor and took complete responsibility for that EKG I would hold them responsible because they are expected to either know what to do with it or to call someone in who is expected

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to know what to do with it. So a surgeon doesn't have to know what to do with an EKG, but they can't not call in anybody and not know.

So if the surgeon did not get a medical consult and took the responsibility to clear the patient himself and had that EKG I would blame the surgeon for not getting somebody in who understood the significance of the EKG. But once the surgeon did call somebody in whose job it was to look at the overall medical side, then I don't hold the surgeon responsible because the surgeon did the responsible thing.

Q All right. Based on any information in the case are you aware whether Mr. Bayless was informed by Dr. Maylack that there were some issues with his EKG that caused a delay in his surgery?

A I don't recall.

Q All right. Are you aware then other than Dr. Hanafi any other physician involved in Mr. Bayless' care in January of '11 who would have reviewed and interpreted that EKG other than Dr. Chouhan?

A I don't recall and again it would

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not impact my opinion.

Q All right. Do you know, for instance, Mr. Bayless first arrived at the DePaul emergency room and whether the emergency room attending was aware of his EKG?

A Yes. I'm sure the ER attending was aware there was an abnormal EKG. And the ER doctor's responsibility ended when the patient was admitted to the hospital and Dr. Hanafi took other.

There wasn't anything in the ER that required an immediate reaction to the EKG. So if there was, for example, acute ST elevations and chest pain the ER doctor would have a responsibility to act immediately, but this was not a hyperacute emergency.

So once the patient was sent out of the ER Dr. Hanafi became responsible.

Q All right. And then once we get passed the ER would there have been any other physician who would have reviewed either the EKG strips or the EKG report or both as part of his or her treatment of Mr. Bayless?

A The anesthesiologist typically

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looks at the EKG and the strips.

Q Are you aware if the anesthesiologist did that in this case?

A I haven't read the deposition of the anesthesiologist, but I would be surprised if the anesthesiologist did not.

Q All right. And what reason would the anesthesiologist have to read the EKG?

A Well, their job is to see if there is any immediate threat to the administration of anesthesia and the ability to perform surgery.

Q And are you aware if the anesthesiology team did that?

A Not by memory.

Q And do you believe the anesthesiologist would have any responsibility to discuss Mr. Bayless' cardiac condition of him after having reviewed the EKG?

A I cannot answer the question the way you asked it limited it to a simple yes, no.

Q What problem do you have with my question that you can't answer it?

A The anesthesiologist's job is to make sure the patient is stable enough to go

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through surgery. It would not be the anesthesiologist's job to insure a follow-up of the abnormality.

In my original letter I pointed out and I stick to my letter that it was a deviation to operate without calling in a cardiologist because this EKG showed underlying heart disease that was unrecognized.

Indeed, there was no effort to get an old EKG and had they reached the patient's treating doctor they would have seen that it was radically changed from 2011.

I think that you could make a case that the anesthesiologist deviated from the standard of care by allowing him to go through surgery, but I have no causation to that because the patient didn't die in the operating room or after surgery. The patient did face increased risk by going into surgery blind to his cardiac condition.

I have a criticism that there was no cardiac follow-up after surgery. I think that's a clear deviation. No EKG after surgery. No enzymes after surgery. No cardiac follow-up

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after surgery, but as it is we know in retrospect that there is no causation to that because the patient did not have a deterioration after surgery.

So as a result of the only deviation that has causation to it is the failure for Dr. Hanifi to inform the patient and to insure there is a treating doctor to take responsibility for a cardiac workup upon his discharge or prior to his discharge.

But it was not a problem that expressed itself during the operating room and as result without causation attached to it it's a meaningless concern because we know in retrospect that nothing happened.

I think he was at high risk for surgery. I think he was at high risk to die within the six weeks after surgery. He is just lucky he didn't.

But as it is, the standard of care having survived surgery is to insure that this patient be aware that he has had evidence on his EKG of two heart attacks that he was unaware clinically and that responsibility fell on Dr.

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Hanafi, the medical doctor, to insure the patient was aware and to insure there was a communication directly to a health care provider that was going to assume responsibility. And that could include calling in a cardiologist while the patient is recovering or reaching the patient's primary care doctor explaining the situation, getting them the EKG and informing the doctor and the patient of the concern.

Q All right. If we just go to standard of care for a moment. I want to make sure I understand what you are saying. And again leave your causation opinions out of it for a moment, but did the standard of care require both Dr. Hanafi and the anesthesiologist to assure that a cardiology consult was had before the surgery?

A I think it falls on Dr. Hanafi, but I think you would have to call in an anesthesiologist to see if the anesthesiologist fell below the standard of care.

Q And you say causation, assuming that either the anesthesiologist or Dr. Hanafi would have called a cardiologist into the case,

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do you have an opinion what the cardiologist would have done?

A Well, the minimum they would have done is subject him to a full cardiac workup after surgery. Before surgery a cardiologist would have gotten an echocardiogram to confirm there was cardiac damage. I think the patient would have been shown to have cardiac damage.

A cardiologist would have then in accordance with the standard of care required postoperative EKG's, postoperative cardiac enzymes, and would have requested the patient be put on a monitored unit to make sure the patient doesn't die of sudden cardiac death during recovery.

Q All right. So it does sound like whether it's Dr. Hanafi's failure, the anesthesiologist's failure or anybody else's failure to call in a cardiologist, a mechanism would have been put in place at that time that would have altered his treatment according to your view because the cardiologist would have done a number of things that weren't done?

A True.

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Q What is your understanding of Mr. Bayless' medical history before he came to DePaul with his fracture in January, '11?

A Well, my understanding is that he had well recognized hypertension. He had a history of asthma. He was a cigarettes smoker. Remotely or not remotely he had an appendectomy in the past. I don't know when. And that's pretty much it.

Q All right. And how did you become aware of these conditions?

A Through the medical chart.

Q So smoker, asthma, appendectomy.

Are you aware if he had any pulmonary problems?

A Asthma.

Q Other than asthma?

A No. At least I don't recall.

Q Did he have a primary care doctor before January of '11?

A Yes. I think his name was Dr. Rifkin. R-I-F-K-I-N, I believe.

Q All right. And how do you know that?

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A I've seen his records.

Q And do you recall you going through this list with me on that exhibit. I think it was two.

What identifier do you have that would contain Dr. Rifkin's records?

A It's probably and I'll have to get back to my file to open it. It maybe the Multi-Specialty Medical Group.

I'm sorry, Maryland Heights maybe. Maryland Heights, that's it.

Q All right. And to your knowledge did Dr. Rifkin at any time perform or asked to be performed an EKG on the patient?

A He did one in 2009. I don't remember the date.

Q Have you seen that strip?

A Yes.

Q And what is your opinion or conclusion about that?

A It was a normal EKG. He did not have evidence of either an inferior wall or an anterior wall heart attack.

His EKG upon presentation to

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DePaul was dramatically different than his last established EKG.

Q Do you have that handy, Doctor, the EKG strip that was performed?

A Yes.

Q Let me be sure we are together on the dates.

What is the date you understand that test was done?

A Well, it's blurred. So the month I'm not sure, but it's something 23, 2009. There is a marking over the year so it's hard to tell.

Q All right. And I think the record will reflect that Mr. Bayless also had an office visit on February 23rd of '09. Assuming this was performed the same day. Tell me what your interpretation is of the EKG.

A That it's a normal EKG.

Q All right. I don't know if it's the printout or it comes from Dr. Rifkin, but it has two things on it that says sinus rhythm and then left atrial abnormality.

A Yes.

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Q Borderline ECG.

Do you agree with those statements?

A I don't see the evidence for left atrial enlargement. The P wave does not look enlarged in Lead 1 or L.

I'm not sure what the basis of this computer is saying left atrial enlargement. It may or may not be true, but it's a soft reading at best and borderline EKG is only because they think there may be left atrial enlargement.

Q Okay. You don't know any other reason for borderline EKG?

A This is otherwise a normal EKG.

Q And do you know what Dr. -- well, did Dr. Rifkin do anything as a follow-up to the EKG interpretation or suggest anything?

A No.

Q Did he tell Mr. Bayless that he should follow-up with a stress test?

A I can't establish what he said.

Q What do you understand his records to reflect?

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A You asked me what he said. The records do not reflect a recommendation for a stress test.

Q And on what basis did you reach the conclusion that his records do not recommend a stress test?

A At least that's by my recollection. I don't have them in front of me.

Q Did Mr. Bayless have a family history of coronary artery disease?

A His mother had a bypass in her 70's.

Q All right. Based at least on Mr. Bayless' family history of coronary artery disease and Dr. Rifkin's acceptance of the EKG showing that it showed left atrial enlargement, did he recommend to Mr. Bayless that he undergo a stress test either at St. John's or Missouri Baptist Hospital?

A I don't recall.

Q And do you know if Mr. Bayless ever had a stress test performed following his exam by Dr. Rifkin in February of 2009?

A There is no record of that.

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Q All right. If we go back to Exhibit 1 which is your report, the second to last paragraph there says "as part of his pre-op workup Mr. Bayless had a ECG performed and that it showed marked abnormalities."

A Yes.

Q All right. Do you have that EKG strip available?

A Yes.

Q All right. And then as your paragraph continues, I take it that when you say showed marked abnormalities were these your own diagnosis of the ECG?

A That's my characterization of it.

Q All right. So you first say that it includes evidence of a possible old inferior wall myocardial infarction?

A Yes.

Q And that's also stated on the printout of the report, right, possible inferior infarct?

A Yes.

Q What blood vessels supply blood to the inferior wall of the left ventricle?

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A In most people the right coronary artery.

Q All right. So is it fair to assume in this case that if you see a possible old inferior wall MI there could have been an occlusion probably of the right coronary artery?

A Yes.

Q And when it says, it says possible on the EKG and also possible in your report, why do you use the term possible as opposed to probable or that he, in fact, did have an old inferior wall infarct?

A Because he had significant Q waves in Lead 2, 3, and F. That raises it to possible.

If he had dramatically reduced voltage in the QRS complex that could, to the degree the QRS complex is diminished would lead you to probable or near certain.

Q You then say evidence of possible anterior wall infarction and a similar question, what blood vessels supply the anterior wall?

A It's the left anterior descending artery.

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Q And in your report you say possible anterior wall infarction. The printout from the EKG says intralateral infarct, age undetermined.

So do you have a difference of opinion of what the EKG printout says versus what you see?

A Actually there closer to the truth. I always say possible because you can confirm with an echo with certainty, but this pattern of EKG by a complete obliteration of all of the R waves in the anterior leads and with the ST segment abnormalities makes it extremely likely, but actually it either is or isn't and an echocardiogram would determine it. But I would say that the evidence for the anterior wall heart attack is far stronger than even the inferior.

Both are only possibilities until you get an echocardiogram. But I would say in pure EKG level the anterior wall is far more likely by EKG criteria than the inferior wall even though they both may well be true.

Q All right. And you mentioned

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anterior wall and then the machine as well as Dr. Chouhan I guess also talks about the inferolateral wall.

Are you saying the same thing or is the machine talking about more area than you are?

A No. They are just extending the direction of the same thing. They are implying a greater magnitude which I agree with also, by the way.

Q You next say there are ST segment elevations with inverted T waves in Leads V4 and V5 suggestive of a possible acute MI.

A Or acute ischemia, yes.

Q And do you know if anything was done to rule out whether he had an acute MI when he was admitted?

A Well, he had an initial set of troponins that were negative, which would mean that he was not having a heart attack in the last -- if he was having a heart attack within the last four hours it would be normal. If he was having a heart attack between four hours and 48 hours ago the troponin should have been

elevated.

So that troponin meant that he was not having a heart attack anywhere between four hours previously and 48 hours previously.

Q The possible acute MI that you mentioned with the information in Leads V4 and V5, what part of the heart would that have been?

A The anterolateral wall.

Q So, in other words, if he had old damage in his anterolateral wall this would be essentially further MI injury in that same area?

A It's possible. It could be either -- there are several possibilities. He had a relatively recent heart attack and these are resolving changes.

Possibility two is he had an old anterior wall heart attack and had some extension of it recently, and the third possibility is, which would be unlikely just by timing, that the fall triggered an acute heart attack at that moment and the enzymes weren't picking it up yet.

Q Okay. So then again we discussed a little bit earlier, but the last paragraph on

Page 2 going into Page 3 states, "It was inappropriate to allow Mr. Bayless to have the surgery on January 12th before he had a cardiology consult."

Is that your opinion?

A Yes.

Q And again your opinions would be that inappropriate medical care would be Dr. Hanafi and I take it also the anesthesiologist?

A No. I'm saying that I would put that on Dr. Hanafi, the medical doctor. You would need an anesthesiology expert to say if the anesthesiologist has a shared responsibility. That's all.

Since there was another doctor whose job it was to be medical, then that doctor takes the responsibility. If the anesthesiologist did not have a medical doctor and took it upon themselves to read the EKG, then I would make the case that the anesthesiologist had to understand what they were doing or call in someone who knew what they were doing.

So I cannot testify to a standard

of care deviation to the anesthesiologist given that a medical doctor came in and cleared him.

I only criticize other health care professionals outside of my field which includes the surgeon and anesthesiologist if they rely on their own interpretation without getting help because then they are basically doing that job and if they don't know what they are doing then I criticize them for not getting in an experienced health care provider.

In this case Dr. Hanafi was the most medically trained to understand the meaning of the EKG. But I'm not here to testify that the anesthesiologist should have thought that he was unqualified to make that decision. He deviated from the standard of care, but I will not testify that the anesthesiologist should have trumped him.

Q Well, isn't it true that we have pre-anesthesia workups and that it is important for the anesthesiologist to know whether a patient can tolerate general anesthesia by knowing the condition of his heart, his lungs?

A Of course.

Q All right. Do you know that that's routine that an anesthesiologist would review a patient's available information about his heart including an EKG to determine whether that patient could safely undergo general anesthesia surgery?

A Well, again, some anesthesiologists may well be qualified to independently read the EKG and draw a conclusion. Others are permitted to rely on a medical or cardiac health care provider who does.

Since the patient was not having any hemodynamic difficulties and since the anesthesiologist was not relying on their own interpretation of the EKG I put the responsibility on Dr. Hanafi.

Now, if you want to criticize the anesthesiologist you should call in an anesthesiologist.

Q I'm not criticizing anybody, Doctor. I'm just wondering in this case you say the anesthesiologist relied on Dr. Hanafi. How do you know that. Wouldn't he have or she

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looked at the information about Mr. Bayless on his own and made his own determination that based on what he is seeing the patient could safely undergo surgery?

MR. DAMICK: Pete, let me put an objection here. Let this go because you are pretty much free to ask whatever questions you want, but there is an objection here to the extent that you keep asking him about the anesthesiologist's role and his duties and his standard of care and he has not been presented on those issues.

He is not an expert on those issues and he has pretty much told you the same, but we have not disclosed him as an expert relative to the anesthesiologist nor asked him to review the anesthesiologist's work. That's all.

MR. SPATARO: I am well aware of what he is disclosed.

A Well, my answer stands. I can't

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tell you what the anesthesiologist thought, but you have a medical doctor who cleared the patient based on the EKG.

So at this point I have criticism of Dr. Hanafi. I do not offer any independent criticism about the anesthesiologist.

Q You then, it's the third paragraph from the bottom on page you say, "There is nothing I see in the record to indicate Mr. Bayless was informed of the abnormalities found in his EKG," and again that's based on your review of the record and not on review of any other deposition testimony?

A Correct. Well, it's based on Dr. Hanafi saying that he has nothing documenting or by recollection informing the patient that he has had two heart attacks on his EKG strongly suggested without clinically having been aware of them.

Q The second to last paragraph says, "The subsequent records document that Mr. Bayless suffered a large heart attack on July 11, 2011. At that time it appears he had severe triple vessel disease and severe LV

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dysfunction."

So on July 11th of 2011 what MI did he suffer that was new compared to what he had preexisting?

A Again, I don't think it's a simple answer. We know that when he presented in July he had a significant rise of his cardiac enzymes, but there was no acute ST elevation to correspond which means that he almost certainly had reinfarcted into one of these two territories.

We know that as a result of the heart attack which is documented by a significant enzyme elevation. It was also noted by hemodynamic deterioration. So although the EKG can't note where it is, he already had a very abnormal EKG. So it would be very hard to detect a super infarction on top of it.

Q What part of the heart is the circumflex artery?

A In most people the circumflex covers the lateral wall of the heart and the posterior lateral wall of the heart. It can be greater.

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Q Do you see evidence in the July, 2011 EKG that the more recent MI that brought Mr. Bayless to the hospital was in the distribution of the circumflex?

A The EKG can't determine that. Many circumflex heart attacks are silent on an EKG because the posterior lateral wall of the heart is actually not observed on the EKG. So it's possible.

Q Are you able to say today what damage Mr. Bayless as far as infarcts, what damage he had preexisting his July, '11 MI and then what additional damage he would have suffered from the July, '11 MI?

A Okay. What we can say is that we with near medical certainty --

MR. DAMICK: Before you answer, Doctor, did you just say what damage he would have suffered from the July, '11 MI?

Q Well, let me rephrase it. I think I might have screwed up some months there.

So, Doctor, the question is can you separate out what damage had already

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occurred to Mr. Bayless' heart before July, '11 and then what additional damage he might have suffered from a new MI in July of 2011?

A Okay. Well, he definitely had a heart attack in July of 2011 by enzymes. He also suffered severe hemodynamic deterioration that never improved. He had some ups and downs in his echo, but he was always in Class III to Class IV heart failure afterwards.

It's very difficult to be able to quantify what his ejection fraction was prior to July because the workup wasn't done. But in cardiology the clinical experience myocardial damage is cumulative and the lower you get, every additional drop in point of ejection fraction becomes expedientially more catastrophic if you suffer preexisting damage.

So, for example, if your ejection fraction starts at 60 and drops to 50 that might go clinically unnoticed. If your ejection fraction starts at 35 and drops to 25 that's the difference between functioning and normal life versus being cardiac impeded and on the verge of death.

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So I don't have any ability to quantify the exact ejection fraction in January of 2011. The only thing I can say is that the additional damage he sustained in July of 2011 made the difference of him being a viable fully functioning person versus a person with a catastrophically reduced heart.

You also have to remember that before July of 2011 he was walking around with untreated coronary disease. His arteries had not yet been repaired.

So before July of 2011 whatever level of myocardial damage he had he also had untreated severe coronary disease and in spite of those two things existing simultaneously he was fully functioning to the best of my ability to tell.

After July he had his heart attack, they revascularized him with bypass surgery. So he had the added benefit of his arteries that existed being repaired to the best possible and yet with that combination he was catastrophically impeded.

So the amount of heart muscle

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damage between January of 2011 and July existed simultaneously with unrecognized, untreated severe coronary disease and yet he was highly functional.

So the fact that he not only had damage, but active coronary disease and you compare him to after the heart attack in July where his arteries are fixed and his ejection fraction is devastated, his clinical change was all due to the heart attack in July. That's the best you can quantify it.

Q What did his ejection fraction look like after the July, 2011 MI?

A It bounced around. It was originally in the 20's. At one point it went up to the 30's and then a couple years later it was down to the 20's again.

When you are revascularized and you have a heart attack often there is remodeling. There's changes to the heart that occur. So you would have to say based on all of his cardiac studies his ejection fraction was basically in the 20's. That increase to 30 was temporary and it fell again. Based on his

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severe limitations and based on the sum of all the information he never recovered from catastrophic damage in July.

I just need to take a momentary break, please.

MR. DAMICK: I could use a break. We'll see you in ten.

MR. SPATARO: That's fine.

(A short recess was taken at this time.)

(The deposition resumed with all parties present.)

B R U C E C H A R A S H, M.D., resumed, and testified further as follows:

BY MR. SPATARO:

Q Dr. Charash, are you able to determine based on the patient's electrocardiogram from January, 2011 what part of Mr. Bayless' heart was already infarcted or permanently damaged at that time?

A Well, he almost certainly had some damage to the anterolateral wall and he probably had some damage to the inferior wall.

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Q When you say some, can you quantify based on the EKG how much it was in the anterior wall?

A No.

Q Or in the inferior?

A No.

Q Wouldn't the information in the various leads tell you cumulatively how much damage there would be?

A You can't use an EKG to determine myocardial muscle strength. It can't be done. So as a result we don't have any way to compare ejection fractions. All we have is the clinical index of his functional status before and after.

Q Why didn't he improve after his bypass surgery in July of '11?

A Oh, I think he improved compared to where he would have been if they didn't do a bypass operation.

Q Well, tell me about his course postoperatively after the bypass to your understanding.

A Are you talking about the hospital course or his long-term course through his

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death?

Q Yes. How would you characterize just his medical condition and progress from the surgery until he died?

A That he developed end stage heart failure. He required the placement of a defibrillator with biventricular pacing to optimize performance and in spite of optimal medications and the pacemaker he remained in Class III to Class IV heart failure until he died.

Q Now, assuming that he had a cardiac consult back in January, what do you believe the consult would have led to?

A He would have had an echocardiogram which would have confirmed damage to his anterior wall and probably some to his inferior wall.

Knowing that, if they proceeded with surgery he would have to be monitored for arrhythmias in the post-op environment, but then after recovery from his leg surgery he would need to be catheterized especially because he had the certainty of coronary disease. If a

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cardiologist got his previous EKG it would have been clear he had suffered these heart attacks in the past two years and didn't know he had them.

So he would be catheterized and revascularized before the additional heart attack burden that destroyed his heart.

Q And how do we know that a bypass surgery between January and July of 2011 would have prevented further damage?

A Well, we know with reasonable certainty, not absolute certainty. Reasonable medical certainty it would have prevented his heart attack. But of course nothing is absolutely certain. That's why we deal with reasonable certainty.

Q All right. To effectuate the bypass or make it successful you would have to have revascularization of parts of the heart that were still functional?

A Yes.

Q And so hypothetically if he had already had damage to both his lateral and inferior walls that you said can't be determined

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as of January of '11, how do we know that a bypass after, shortly after that time would have effectuated enough revascularization to have him proceed without further problems?

MR. BEAN: I object to the form.

A Well, we know on several levels. No. 1, his EKG still showed prominent electricity coming out of his interior wall. Those are the R waves.

His catheterization showed a 75 percent right coronary artery obstruction. He may have had some damage to the inferior wall, but there is no reason to believe that it was complete. The LAD, the biggest of the arteries was occluded after the first diagonal. In all likelihood that territory was already dead.

His circumflex would have been bypassed or fixed by angioplasty, but the point is, and I'm just repeating myself, but it bears repetition, he was walking around with the damage that he had between January and July not only with damage to his muscle which we don't know the exact amount, but also with severe

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coronary disease that was not revascularized.

That means he had ischemia on top of left ventricular dysfunction and he was still functional. Had he been revascularized before July his ejection fraction would have remained at least as good as it was prior to his next heart attack and his functional status would have been dramatically improved.

Q Now, let's say from the period of time that Mr. Bayless was discharged from his hospitalization in January of '11 until July of '11, tell me what you know about his lifestyle, level of activity, things like that.

A Only that there is no report of him having any impairment until he came in in July.

Q When you say report of impairment what do you mean?

A No hospitalizations, no ER visits, no medical records to suggest that he was not functional. Of course I'll leave it up to the family. I was unaware that they were deposed, but they would have to testify about what they saw. But there were no medical events in

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between.

In fact, he tolerated the surgery very well given his cardiac condition and he recovered from surgery. So it shows you that overall even with the problems he did have in January his heart was functioning pretty well.

Q So take me through this just based on what you would understand the patient's condition to be. If he had significant cardiac damage, but are functional, what kind of function would that be. For instance, would a patient be short of breath, unable to climb stairs without getting tired. What would that be like?

A Well, fatigability can come from having a fractured extremity and surgery. You know, we have even though the standard of care said he should have been followed by a cardiologist at the time of his surgery, we do know that with the anesthesia effect and having a fracture and recovering he didn't have any hemodynamic complaints while in the hospital in January which establishes that his heart actually held up better than it should have.

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If he were home and we know that he doesn't have chest pain to reflect ischemia because he didn't even know he had two heart attacks, if he had severe shortness of breath limiting him from doing day-to-day activities on a chronic basis that would be a limitation and you would have to know what level of activity.

You have to separate that from whatever recovery he had from surgery. But it is unquestionable after July that he is catastrophically impaired from his heart damage.

Q When you say he held up better than should have, what did you mean by that?

A Well, he had some level of cardiac damage and untreated coronary disease and with the stress of surgery and anesthesia he did not go into heart failure. He easily could have, but he didn't.

Q Well, does this then tell you he did have significant heart damage as of January of 2011?

A No. It just tells you that he was lucky that he didn't suffer a heart attack, but it shows you that the level of heart muscle

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damage in January of 2011 was not on the cusp of cardiac disability which happened after July.

Q Based on your review of the EKG from January of '11, are you surprised that Mr. Bayless had two different MI's and did not know it, didn't feel anything?

A I'm not surprised. It's not a matter of surprise. It's just a matter of his EKG demonstrated he probably had two heart attacks and he had been clinically unaware.

And we know from his 2009 EKG that those heart attacks occurred in the last two years. It's not a matter of being surprised. It's a matter of understanding the man's medical condition.

Q You did say that, and this is on Page 3 of 4 of the second to last paragraph, you said that in July of 2011 he had severe triple vessel disease, severe LV dysfunction with an ejection fraction to 25 percent.

Did that 25 percent improve after the bypass?

A As I mentioned it went up at one point to the 30, 35 percent range and then it

fell again to the 25 percent range.

When you have that kind of terminal damage you can see fluctuations in ejection fraction. There can be transient ups and downs and eventually remodeling takes place and you're left with your permanent ejection fraction which was for him low 20's.

Q So if I'm understanding you correctly, the combination of his prior heart damage prior to July of '11 and then adding to it damage that occurred from another MI in July of '11, that tipped the scales such that even with the bypass he was not able to recover long-term?

A Yes.

Q Were there any other factors that Mr. Bayless' medical condition or care or how he took care of himself that influenced his recovery after the bypass?

A I think you have to be more specific because I'm not sure what you're referring to.

Q Well, Is there anything, anything about his, if he had any comorbidities, anything

he was doing, smoking, anything else that would have inhibited his recovery after the bypass surgery?

A Well, my understanding is he quit smoking after his bypass, although it wasn't immediate, but he did quit smoking.

I also understand, and this is only from conversations with Mr. Damick, that he had a problem with opioid use, I believe. And I believe in 2013 -- well, I just think he was having opioids. I mean I'm not sure. I don't know that history very well, but that would not have interfered with his recovery.

Q Did Mr. Bayless have COPD?

A Well, by definition anyone who has asthma, that is COPD.

Q And do you know what disability, if any, the COPD had caused him before the July of 2011 MI?

A His lung disease would not have deteriorated between January and July. His abrupt functional status occurred at a single moment in time with his heart attack in July. He quit smoking after his heart attack. So his

lung disease would not be an advancing problem. So his problem was due to his heart and only his heart.

Q Hypothetically if he did smoke after the bypass would that cause greater progress?

A It depends for how long he smoked and how much he smoked. Many people who quit smoking don't do it as an absolute cutoff. They slip and smoke again.

So if you never quit s smoking and lived for another four years potentially smoking could be a factor.

Q You said you reviewed the death certificate?

A Yes.

Q It was dated May 14th of 2014. It said in the small print immediate cause of death chronic obstructive pulmonary disease?

A Yes.

Q Do you agree with that report that that was the immediate cause of death?

A No, it makes no sense. He was never diagnosed with end stage emphysema. His

problems were shortness of breath which we could date to the immediacy of his heart attack. So he didn't die of pneumonia. He didn't develop clinically diagnosed bronchitis. He never was diagnosed with emphysema.

So at the end of day there is no evidence to suggest that he had any significant COPD. So I don't know what the basis is, but his entire life was devastated and his management was focused on his end stage cardiac condition with his defibrillator, biventricular pacer, his medications and clinical course.

So I'm not too sure where that comes from, but there is no foundation that's the reason for his death or even a factor in his life.

Q All right. So it sounds like you would agree he had COPD, but not agree with the death certificate that that would be an immediate cause of his death?

A Well --

Q Or for that matter any causative factor?

A I said COPD is a category of any

form of obstructive lung disease. He was known to have asthma which wasn't that bad. He was never diagnosed with bronchitis and he was never quantified with emphysema.

So I don't know what lung disease, what specific pathway of pathology is being referred to in this death certificate. It doesn't make sense.

Q I note when he had his MI in 2011 that there was also a ventricular aneurysm that required resection?

A Yes.

Q Describe that for me. What is a ventricular aneurysm?

A It's an area of heart muscle that not only fails to beat, but when the rest of the heart contracts it balloons outwards so it absorbs energy from the heart.

Q And how long did he have that ventricular aneurysm?

A It's hard to say.

Q Do you know if he had it, for example, had he undergo a workup and had a cardiac cath subsequent to his surgery in

January, '11 would they have found that ventricular aneurysm?

A It's possible. We don't have any way to know. There was no testing. All we can do in the absence of the standard of care having been performed is look at the impact of his cardiac condition before and after his heart attack.

By that impact we see that his life was devastated by the July heart attack. That's the only metric we have. There were no tests done on him. We will never know with certainty what he had.

All we know is that whatever the cumulative heart disease was before July in spite of having active coronary disease and preexisting damage he was functional and after July he was destroyed.

Q I noted they said in the op note that they had to resect about 30 percent of his myocardium with the aneurysm.

Did you see that?

A Yes.

Q Did that have any impact on his

recovery, the fact that they had resect 30 percent of the myocardial tissue?

A Well, they removed 30 percent of his tissue that was actually working against his cardiac strength.

So getting rid of the aneurysm further helped him along the way and in spite of that assistance he still was doing terribly.

Q So I understand we're talking about COPD. To the extent that he had COPD was that caused by asthma or some other condition rather than from his heart or congestive heart failure?

A Well, he had some asthma. He was a smoker. We always assume that people that smoke have some level of structural lung change, but there was nothing quantified in him and he had no limitations prior to his heart attack.

Q But what I'm getting at is if he has some measure of COPD after the MI are we attributing that to some other cause other than some residual issue with his heart or his bypass surgery?

A I don't understand the connection

of COPD and heart disease. They are not connected.

Q All right. Assuming he was addicted to narcotics would that have impacted his cardiac recovery?

A No.

Q And would COPD at all affect a patient's ejection fraction?

A No. I mean COPD could be a comorbid condition, but again there would be no evidence that his lungs had any functional change from January, 2011 to July, 2011.

Q What to your understanding was the reason that he was taking narcotic pain medications?

A I don't recall.

Q So I will go back to your report again, Exhibit 1, the last paragraph of Page 3. "Based on the information I have, I believe there is reasonable basis to pursue a claim and further investigation as to Fallon Maylack, M.D., Imran Hanafi, M.D., Lalithkuma Chouhan, M.D., and the hospital and its staff and its nurses for failing to use such care as a

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reasonably prudent and careful health care provider would use under similar circumstances."

Now, when you had the -- at the time you prepared this report in December of 2012 you had all the medical records, correct, from that January admission or the July admission?

A I had everything from January and I think partial from July.

Q All right. And really other than having Dr. Hanafi's deposition and Dr. Chouhan's deposition you had everything you needed -- well, you had the same things that you have today other than those two depositions, you had all of that back in 2012?

A Yes, except I didn't have Dr. Hanafi's deposition.

By reading his deposition it became clear he was fully responsible.

Q Well, let's back up a minute.

You knew in July of '11 that Dr. Maylack was the orthopedic surgeon; correct?

A Yes.

Q You knew in July -- excuse me, you

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knew in December of '12 that Dr. Maylack had asked for a consult from a hospitalist and that the hospitalist was Dr. Hanafi?

A Yes.

Q You knew Dr. Chouhan by reviewing the EKG report was the over reading cardiologist; correct?

A Correct.

Q And then you commented about the hospital staff and nurses and again what the nurses did or didn't do. That was all stated in the record; correct?

A No. See, the point is it's what I was unaware of as of the time of that report.

For example, Dr. Hanafi might have testified that he called Dr. Chouhan and asked him to consult and Dr. Chouhan never showed up.

Dr. Hanafi might have testified that he told the surgeon that the surgeon should follow-up with another doctor and let him know and he signed off on the responsibility.

Dr. Hanafi might have testified that he told the nurses to call a cardiology consult and thought it was called.

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So when I wrote this report without knowing what Dr. Hanafi would testify or what the real role was I couldn't be sure, and this is obviously in the very early part of this case to establish the basis. I knew what the deviation was, but I did not know who was or was not involved in the bad decisions made here.

Dr. Hanafi did not blame anyone else for a failure of communication which he could have and then that would have had to have been factored into my thinking.

So I did not know what Dr. Hanafi and whether or not there were other intermediaries he would testify to. So I am now confident that no one is responsible but Dr. Hanafi.

Q Knowing what you know about the extent of the heart damage as of January, '11 and I understand the extent to which you know is probably limited by the EKG, would you not have expected Mr. Bayless to have had some kind of symptomatology from those events?

A Again, it's not about expectation. It's about understanding who a patient is.

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What we know with certainty is that Dr. Hanafi -- Mr. Bayless did not know he had two previous heart attacks, which means he either never felt a symptom or he didn't realize it was a cardiac symptom and that he was relatively functional and that he withstood surgery.

Now, that's the clinical information we know. There is no expectation. You take the information and you work with that information. You don't sit there expecting things. In the vast heterogeneity of patients everything is seen eventually.

Q I understand some patients, for example, diabetics may be more prone to suffer silent heart attacks. I was just wondering if you had any opinion about anything in Mr. Bayless' medical history that would support the view that despite whatever heart attack he had prior to 2011 that he didn't feel it.

A There is just no way to determine that. Now, if a history had been taken one could have asked him whether or not he had a bad period of indigestion or a chest cold that he

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thought was just a flu and then you may or may not make a correlation that that was a possible episode.

So we don't know if it was silent. We only know that he had suffered heart attack or heart attacks without clinically being aware of it. It could have been silent and even though diabetics are more likely it's not exclusive to diabetics.

Q I noted that during his recovery that he was at one point diagnosed with pneumonia. Did you see that?

A Yes.

Q What caused, if you have an opinion on it, what caused him to develop pneumonia?

A After you have open heart surgery your ability to clear secretions is reduced by the pain and the surgical changes. So it's common to be vulnerable to pulmonary infection after bypass.

Q What about all the COPD that he had?

A Again, all we know is he had some

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asthma. There is no evidence of him having significant lung disease at any point in his life.

Q Was there any other doctors who treated him after his bypass comment on his COPD?

A The term COPD is mentioned, but never quantified. We don't have any evidence of him having anything more than asthma and the predictable structural changes that comes with smoking. But he was not diagnosed or quantified with COPD and again whatever his lungs were at the time of his bypass they were the same in January.

Q Who is Dr. Brunts?

A I don't recall. How do you spell the name?

Q B-R-U-N-T-S, Brunts.

A Oh, Brunts.

Q Yes.

A I believe Dr. Brunts is his treating cardiologist after his heart attack.

Q That's one of the depositions that you said you read?

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A It is.

Q What, if anything, did you get out of the deposition of Dr. Brunts?

A That's way too general. I don't know what you are asking.

Q Well, tell me anything of significance that you remember reading about from Dr. Brunts' deposition.

A Way too general. Nothing in his deposition has changed my opinions in this case. But you're asking an extraordinarily broad question which I do not know how to answer.

Q Did Dr. Brunts document in his records that Mr. Bayless had severe COPD?

A I don't recall. I don't know and if he did I don't know how this man ever had COPD measured. There was no objectification of preexisting lung disease.

Q Did you review any parts of the deposition where Dr. Brunts was asked if he had, could quantify the impact of COPD on Mr. Bayless' death?

A I don't recall that.

Q All right. After a bypass, after

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a patient has significant heart damage and has coronary bypass can they fail to thrive and suffer the kind of picture that Mr. Bayless had even when they did not have symptoms leading up to their bypass surgery?

A I'm not sure I understand, but he had Class III and Class IV heart failure consistently after his surgery and he went into acute heart failure when he presented in July. So --

Q Yes. Here's the question. I have to make a hypothetical. Let's assume Mr. Bayless had, everything you know about him. He had that bypass surgery, let's say, in April of or May of '11, so before the July '11 MI.

Is it within the realm of how patients do postoperatively after coronary bypass surgery that he could have had the same course even without the event of his MI in July of '11?

A Well, there are two parts of that answer. The first is that he may not have needed a bypass and certainly would have been eligible for an angioplasty before his heart

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attack, but once he presented with heart attack and severe hemodynamic deterioration they had no choice but to do a bypass. It was too urgent. He lost the option of an angioplasty.

So the option of an angioplasty was still on the table. The LAD was already closed, but his right coronary artery and circumflex could have easily been dilated and, in fact, statistically in a non-diabetic they would have been angioplastied. It's much easier to fix those arteries by angioplasty when a patient isn't having their heart collapse and you're running out of time and need to go on bypass pump.

No. 2, he was in severe heart failure and if you're having left ventricular dysfunction which is clearly objectified it makes the course of complications much worse after bypass surgery.

So is it possible he could have had a catastrophic course, of course, but it's unlikely. It's reasonable certainty he would have done better and reasonable certainty he would have had an angioplasty.

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It's possible he would had a bypass, but he lost that ability to have an angioplasty because of the heart attack.

Q So when you talk about angioplasty, we're talking about hypothetically it's May of 2011. It would have been to the right coronary artery and the circumflex?

A Most likely. The LAD was probably the one chronically occluded. So his right and circumflex probably would have been dilated with stents.

Q And assuming that those two arteries had been dilated with stents, what percentage of the ventricles do those arteries nourish the heart with blood?

A I have no idea. All I know is that he was completely functional with those obstructive disease. Had they been fixed he would have been even more functional. Instead, after the heart attack he was catastrophically destroyed.

We can't discuss the numeric cardiac damage before his heart attack because we have no information. The only information we

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know is the catastrophic change in his life because of the heart attack.

Q You mentioned catastrophic change. He basically lived close to three years after his bypass surgery?

A Yes.

Q What caused him to live for three years if he had a catastrophic change?

A In medicine like in life we can predict when people are at extraordinarily high risk for death. When you have a massive heart attack your annual chance of death goes up significantly.

He did have a defibrillator which removed the arrhythmia risk, but we don't know when high risk will become expressed. He could have lived ten years. He could have lived one year.

But the amount of heart muscle damage he had and with Class III to IV heart failure, he faced an extreme risk of death every year. It might have been 20, 30 percent a year. If those are the numbers you might live 15 years, you might live 15 days. No one knows

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when high risk will be expressed. But you can say knowing what we know now, his death was a direct result of his heart attack in July because his heart disease was not diagnosed when it should have been.

Q At the time of his MI in July of '11 he would have been how old?

A Fifty-eight.

Q Excuse me. Fifty-eight?

A I think so.

Q All right. Do you have any opinion then what his life expectancy would have been, first of all, if the bypass or any other heart treatment, stents, whatever would have been done after July of '11, but before -- excuse me. After January, '11, but after July, '11?

A Sure. It would have been ten to 15 years.

Q And would he still have been at increased risk of a cardiac death given his preexisting heart disease?

A Of course. That's why it's only ten to 15 years.

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Q Okay. And you believe that during those ten to 15 years he would have been asymptomatic or suffered from increasing heart failure?

A I think he would have been asymptomatic given that he was fully functional before the heart attack in July. With the additional revascularization he would have been in even better shape.

Q And when you say fully functional, what do you mean by those terms?

A Able to work, carry on activities of daily living. Do most of the things he wanted to do in life.

Q Do you believe that any activities that he would have performed would have been inhibited by whatever cardiac damage he already had?

A No, because there was no evidence he was limited before his heart attack in July. And if he was revascularized before that heart attack he should have been even better than he was. So he should have been as functional as he was before his heart attack and in all

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likelihood even better.

Q And when you say as functional, what was Mr. Bayless' level of function, for instance, after his surgery of January, '11 for his fracture up until July. Do you have a feeling or knowledge of what kind of things he was doing in his daily life?

A No, but I certainly would expect him to have had limitations due to surgery on his leg and the normal recovery from that kind of surgery. People can take months to recover.

I would say that what you need to look at is his functional ability over the six months before and after his knee, leg I mean, and see what his functional ability is, but I'm not a fact witness. I can't testify.

Q And, Doctor, you mentioned that you had prepared some invoices for Mr. Damick. You charge by the hour?

A Yes.

Q How much do you charge?

A $450 an hour for work I can do at home and $500 an hour for testimony.

Q All right. So I take it that all

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of your billing to date including what you would bill meeting with Mr. Damick would be at the rate of 450 an hour?

A Well, no, that rate went into effect January 1, 2015. So the first two invoices were 400 an hour and I raised it for the first time in ten years in 2015 to 450.

Q All right. And so today your charge would be $500 per hour for the time you spent in the deposition?

A Correct.

Q If we have to try this case and you were to come to St. Louis from New York what would your charge be?

A It would be $500 an hour for every hour of work I miss on a 9:00 to 5:00 schedule, which means assuming obviously I would lose an entire day for trial that would be $4,000.

If I could fly to St. Louis and leave for the airport after work I would not charge -- the night before I would not charge for the travel time. But if I was expected in St. Louis at 6:00 and I had to leave work at 2:00 to get to the airport or whatever the

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timing is I would charge for the hours of work that I'm forced to miss due to the trial.

Q All right. Can you tell me when you did your residency in the mid-'80's it looks like you did internal medicine and then fellowship from '84 to '86?

A That was my fellowship. My internship was '81 to '84.

Q Right. And so in relation to after you finished your fellowship in '86 when did you first start to review medical/legal cases?

A '87.

Q And by medical/legal what I mean is that you were asked by a lawyer to evaluate whether the standard of care was met by a physician similar to this case. Is that what you understand medical/legal to mean?

A Yes.

Q And have you consistently been reviewing medical/legal cases from 1987 to the present?

A Yes.

Q How often are you contacted on a

monthly basis to look at a case?

A In the last five years it's one a month.

Q So you would say about 12 new cases a year a lawyer contacts you and asks you to look at a case?

A Yes, that would be a fair approximation.

Q And had that number been different prior to five years ago?

A Yes.

Q What was the number then?

A It varied dramatically. The first few years it was very few. There were years where it was much more.

I would say legitimately in 30 years I reviewed 900 cases, but I deliberately slowed down in the last ten years and in the last five years.

Q Why have you slowed down?

A I started a number of non-profit initiatives and I wanted more time for that.

Q Of those 900 approximate times lawyers contacted you, how often or how many

times were those attorneys representing the defendant as opposed to the plaintiff?

A Fifteen percent.

Q Have you ever provided a deposition in a case where you were defending the conduct of a physician?

A Yes.

Q When is the last time you did that?

A I don't recall. In New York State there aren't depositions and I have appeared in trial within the last two years. In Florida I have done depositions and that may be three years ago.

Even though 15 percent of my reviews are for defense, under five percent of my testimony is for defense cases.

Q Do you have any estimate as to the number of times you provided deposition testimony as a medical/legal expert?

A Approximately 330 times in 30 years.

Q Okay. And so what you were just telling me, less than five percent of the 330

would be for where you were testifying on behalf of the defendant?

A Correct.

Q Do you keep track of the income you make from medical/legal consulting separate from any other income you make?

A I can approximate it.

Q So going to 2016, for example, did you know what income you made strictly from medical/legal consulting?

A No, because I deferred 2016 taxes until October for personal reasons, but I can estimate it would be about $75,000.

Q All right. Are you on track to earn that on an annual basis for 2017?

A I don't know. I mean we're halfway through the year. It might be in the same ballpark. I don't know.

Q How about before 2016, were you tracking it at 75,000 a year or more or less. How does that work?

A Ups and downs. I would say that for three years it's been 75 to 80. Before that there were a number of years where it was 50 to

60. Before that there were some years it was 90. I mean it varied. And in the earlier years it was very little.

Q Right. And you have never tried to average it out. You just give estimates like you just did?

A I don't know what you mean. I can't tell you what I have done for 30 years. I don't have that mapped out.

Q Right. Have you worked for other attorneys in Missouri other than Mr. Damick in this case?

A I don't think so.

Q Have you ever worked with Mr. Damick before other than Mr. Bayless' case?

A I think we've worked on one or two other cases. This may have been the first case I had with him, but I'm not sure.

Q Okay. To your knowledge is your name attached to any expert witness services that assist lawyers in providing expert witnesses?

A Not with my consent or permission. I have at times discovered that a lawyer reached

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me through some service they employed to find experts, but not with my cooperation.

Q Have you otherwise advertised yourself for expert witness services on the internet or any other media?

A No, I never have.

Q Do you take cases for plaintiffs within the City of New York where you live?

A Yes, I do.

Q Have you ever been asked to give lectures or seminars or Power Point presentations to either doctors or lawyers on how to be an expert witness in a legal case?

A No.

Q In your report, Page 4 of 4, the first paragraph there towards the end, "Mr. Bayless should not have been discharged home without being informed of his abnormal EKG."

Do you know one way or the other if Mr. Bayless was informed of his abnormal EKG while he was in the hospital?

A There is no evidence of that and I'm not talking about saying you have an

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abnormal EKG. I'm talking about the specifics, that you probably have suffered two heart attacks that you are unaware of. That's what I mean. Not -- abnormal can mean anything. But I'm talking about specifically telling him the implications, that there is evidence that he has suffered heart attacks and he has no idea he suffered them and he needs an emergency cardiology consult.

So I didn't mean to imply the generic sense of abnormal, but the specific sense of what was abnormal.

Q To your understanding was Mr. Bayless' surgery for his fracture back in January of '11, was that surgery delayed a day?

A I know it was delayed. I don't remember how long.

Q Okay. Do you know why it was delayed?

A I don't recall. I think that -- I mean they were waiting for the EKG, but I don't recall.

Q Did you know if it was delayed because Dr. Maylack did not have clearance

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because of the abnormal EKG finding?

A I don't recall, but that may well be true. I don't know.

Q And do you know if hypothetically that's true that Dr. Maylack made Mr. Bayless aware of that fact that we have to delay your surgery because your EKG is abnormal and we have to run more tests?

A Well, Mr. Bayless would assume that if he had surgery everything was okay. It's not enough to tell a patient even if he were aware that surgery is being withheld waiting for clarification on his EKG and then going forward with surgery is vastly different than telling him what he needs to know; that his EKG has proven evidence that he has suffered a heart attack which he is unaware of.

So there is a big difference between even being told that surgery is being delayed until I get clarification on your EKG and then you move forward which tacitly means there isn't a problem.

Q All right. The bottom line is you are not aware of what communication, if any,

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took place between Dr. Maylack and Mr. Bayless as related to his heart condition back in January of '11; is that fair?

A Correct.

Q In the next paragraph it says, "In addition to the discharge without instructions or advice, the hospital either did not have proper protocols in place or did not enforce them."

Is that an opinion you still plan to provide at trial?

A No.

Q Why are you withdrawing that opinion?

A Because I had no evidence that there were protocol violations. Again, it would have depended on what Dr. Hanafi said in his deposition.

Q Well, you must have had in mind when you wrote this that there would have to be protocols in place for instructions upon discharge?

A I left it open to find out what would be said in discovery, and if something

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came up then that would be significant, but nothing has come up to make that a point that's valid.

Q Were your questions ever answered about what protocols the hospital had or didn't have as far as instructing a patient at discharge?

A No. Dr. Hanafi never mentioned anything with the protocol that he considered an issue.

Q Well, was he asked?

A No, but it wasn't brought up. So right now I have no foundation for that.

Q All right. So back in 2012 in addition to the discharge without instructions or advice, the hospital either did not have proper protocols or did not enforce them.

Since writing this in 2012, your letter of December 20, 2012, you have not been given any information one way or the other whether the hospital did or did not have protocols?

A Correct. And I have not had any reason to believe the protocols were involved

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with the lack of compliance with the standard of care. So as a result I don't have an independent hospital criticism.

Q But you did have that criticism back in the time you wrote this report; correct?

A No. I had that as a possible area depending on what discovery showed. This was written before discovery. As a result it included all the potential ways that the failure for Mr. Bayless to have his heart addressed occurred. But at this point I have no specific criticism of the hospital or its staff outside of Dr. Hanafi.

Q All right. Well, at least as I read this you didn't say I need to know about protocols to determine if the hospital should have done something or not. You say in addition to the discharge without such instructions or advice, the hospital either did not have proper protocols in place or did not enforce them.

I don't read any hesitation on your part here. I read this today they either didn't have protocols or didn't enforce them and, therefore, they are guilty. Is that what

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you are saying at the time?

A I guess it wasn't artfully written. It was intended to open the door to discovery to make sure that every base was covered to see where the negligence occurred.

My negligence opinion never changed. It just was difficult to know at what level the breakdown occurred.

Q All right. And the same thing, we get back to the statement you made at the bottom of Page 3 going to Page 4 when you were saying there's reason to pursue a claim against Dr. Maylack, Dr. Hanafi, Dr. Chouhan, the hospital staff, the nurses. You did not say in your report at that time either that this would depend on what information those people knew or didn't know.

A Well, I disagree. I said I believe there is reasonable basis to pursue a claim. I didn't say that there was a certainty. I said a reasonable basis until discovery was done.

Q Okay. Doctor, I don't know if Mr. Bean has any questions or not, but I'll let

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him take over.

A I just need a five-minute break actually.

(A short recess was taken at this time.)

(The deposition resumed with all parties present.)

B R U C E C H A R A S H, M.D., resumed, and testified further as follows:

EXAMINATION

BY MR. BEAN:

Q Doctor, my name is Kenneth Bean. I'm here on behalf of SSM DePaul Health Center and I want to ask you a few questions.

So first this report marked Exhibit 1 dated December 20, 2012, I need some clarification on something. When you wrote that report you had the January 11, 2011 DePaul Health Center chart and portions or perhaps all of the DePaul Health Center chart for the admission of July 11, 2011; correct?

A Yes.

Q So since issuing your report you

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have received the three depositions mentioned, Dr. Chouhan, Hanafi, and Brunts, along with the death certificate and multiple other medical records including those from Mercy Hospital, Mercy Clinic, Mercy Heart and Vascular, and Dr. Brunts; correct?

A Yes.

Q And it sounds like based upon your review of now the original set of materials along with the new materials you got including the deposition of Dr. Hanafi that you have formed and developed a different focus, if you will, for your opinions in this case; is that fair?

A Well, I mean I think the better way to phrase it is that it codified who I felt was responsible for the deviation that I brought up in my report.

Q Okay. So as you sit there now as Plaintiff's cardiology expert having reviewed everything you have reviewed, is it true that the only individual who provided care to Mr. Bayless during his January 11, 2011 admission to the DePaul Health Center is Dr. Hanafi?

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A Yes.

Q And I think you said it before, but let me make sure I confirm it on my questions. Do you intend to express any opinions critical of the care rendered by any of the nurses or personnel at the DePaul Health Center?

A No.

Q And do you intend, and I think you have expressed this already, intend to express any opinions critical of the institution, the hospital itself, DePaul Health Center?

A No.

Q Let me then just cover a few things. I had specific notes about some of what you said that I just want to understand.

Can you help me understand your concept of silent MI's, what does that mean in the cardiology world?

A Okay. You have to break it down into two categories. We know that there are people who have heart attacks that are only discovered after the fact by an EKG. In fact, eight percent of heart attacks are discovered on

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an EKG where a person never went to the hospital, right.

Maybe 12 percent in woman and eight percent in men of heart attacks are found out by accident after the fact which raises only one of two possibilities. Either they had a heart attack with zero symptoms which would be a truly silent heart attack or they had a heart attack with symptoms that the person did not recognize to be cardiac and dismissed as something else.

Now, we can know with certainty with someone has a silent heart attack in the hospital, for example. We will witness the heart attack and they have no symptoms. That's very common postoperatively. So we can sometimes document a truly silent heart attack of a person in front of us.

In terms of a person who has a heart attack discovered by accident on their EKG, all you can do is inquire, and in a case like this we have a two-year timeframe because we know those were not present in 2009, that somewhere in those two years he suffered a heart

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attack.

So you would take an extensive history to see if there was any symptom he may have had that existed that could be interpreted as having been the heart attack.

Now, if the man said I have had no complaints and no symptoms and I have been feeling total health for two years, then you would have to conclude they were silent.

If he said, yes, I had really bad heartburn last summer and it knocked me out for two days we wouldn't know if that was cardiac, but would raise a concern that was his cardiac equivalent. Some people say yes, I had pressure in my chest, but I just thought it was a bad week.

So what we can say with absolute certainty is that Mr. Bayless had unrecognized heart attacks discovered by his EKG. There was no history obtained by anyone to pierce out whether in the two years that these may have occurred he may or may not have had a symptom that we could later look back and say was a heart attack.

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Q I know that since he went in in July of 2011 he had seen multiple cardiologists, he saw a chest surgeon, Dr. Theodoro. He had seen his internist again; right?

A Yes.

Q Have any of those people asked him that historical question about how come we found two heart attacks on your EKG in January of 2011 and you didn't know about it?

A I don't know. After his heart attack in July that somewhat became less relevant on some level because he had been revascularized and at the end of day it has some value, but it wouldn't have changed the course of treatment. It might just change the threshold of recognition.

Q So in his case I think you mentioned -- I thought the word silent was in the report, but I could be wrong about that. In Mr. Bayless' case it would be fair to either call these two -- well, strike that.

You looked at the EKG from his internist's office that we have already talked about and what was the date of that?

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A I'm sorry, what's that?

Q The internist. I think it was Dr. Rifkin. What was the date of that EKG?

A It was like February, 2009, I think.

Q Okay.

A I don't remember the date.

Q Let's just use those timeframes.

Is it your judgment that between the time he had, Mr. Bayless had the EKG done by Dr. Rifkin and the time he came to the Emergency Department in January of 2011 he had two heart attacks?

A Yes.

Q And when you say heart attacks, is that the same as a myocardial infarction?

A Yes.

Q And when you call those two heart attacks, myocardial infarctions either silent, meaning there truly were no symptoms or just unrecognized by the patient?

A Right. There is no way to distinguish. So you work on the assumption that it's silent unless you can go back and prove it

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was something else.

Q And you don't know why he might have had two silent or two unrecognized MI's between the EKG by Dr. Rifkin and the EKG of January, 2011 at DePaul; true?

A I don't understand the question. We don't know why somebody has a heart attack when they have it. We just document it and treat it.

Q No, let me be more precise.

If they were silent MI's are you able to tell us why they were silent to the patient?

A We don't know.

Q Okay. And if they were unrecognized it's typically because the patient has I think you mentioned like a chest cold or some GI discomfort and they don't think it's their heart; right?

A That's a possibility.

Q Okay. So here's my question. Do you know if he had any silent MI's or unrecognized MI's between January 11, 2011 and July 11, 2011?

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A There's no evidence of it. Anything is possible, but what makes this whole equation a little difficult is he actually had a symptom of his heart attack in July. He had chest pressure and it brought him to the hospital. So we can't be absolutely certain.

All we know is that in July whatever happened at that period of time marked an astronomic change in his functional status. And that's the only thing we could really measure. We can only measure the impact of his cardiac function which was night and day from before his heart attack in July to afterwards. So that's the only metric we have.

Q And I know originally, let me go back for a moment just to Dr. Maylack, the surgeon. Now that you have read the deposition of Dr. Hanafi, it's your judgment that it's clear that Dr. Maylack consulted with Dr. Hanafi and, therefore, Dr. Maylack had no independent or personal duty to talk to this patient about his two prior MI's?

A Correct.

Q Or get him a cardiac consult;

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true?

A Correct.

Q And as it relates to the anesthesiologist, the physician for the approval of his surgery, you have concerns that that physician failed to get a cardiac consult, but are unprepared to say that failure was a deviation of the standard of care; true?

A Correct.

Q And in terms of the EKG, who actually saw the EKG from January 11, 2011 and made their own independent interpretation of it?

A Well, I have Dr. Hanafi's interpretation and then I have the over reading cardiologist.

Q Dr. Chouhan?

A Yes.

Q Did the emergency room physician, Dr. Galkowski, review the EKG himself?

A Yes, I'm sorry. He did.

Q So we know that there were three physicians, Drs. Hanafi, Galkowski, and Chouhan who actually looked at the EKG themselves and made personal interpretations of it; true?

Charash, M.D.

A Correct.

Q And we know that EKG is then computer read and then Dr. Chouhan over read it and issued the final report that went into DePaul Health Center chart; right?

A Yes.

Q And is it your judgment that Dr. Maylack saw the paper EKG interpretation done by the computer and by Dr. Chouhan?

A I can't testify with certainty. I haven't read Dr. Maylack's deposition.

Q Do you think the anesthesiologist who approved the patient going to surgery saw the paper printout and the interpretation of the EKG?

A I don't know. Probably, but I don't know.

Q You mentioned the potential for angioplasty if cardiology had been consulted. Let me understand the sequence of events here, if I can.

It's your belief and testimony that the EKG changes seen in January, 2011 required a cardiac consult and your judgment is

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that the cardiologist would have then obtained an echo and determined and discovered the underlying coronary artery disease; true?

A No. Would have discovered wall motion abnormalities which would have confirmed that there were heart attacks which would then require a catheterization.

Q Okay. So the sequence of events is referral to cardiology and typically that would mean an echo which would find the wall motion abnormality?

A Right.

Q And then after the echo the next step is typically a cardiac cath?

A In a 58 year old man, yes.

Q And can you tell us what you think the cardiac cath if done in January of 2011 would have demonstrated?

A Probably a totally closed LAD which he had which was probably his big previous heart attack.

It would have shown his 75 percent right coronary artery lesion which was accountable for some damage to the right and his

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circumflex artery would probably have been open, but I don't know how obstructive. But probably to a degree that required repair.

So with reasonable medical certainty he would have had a angioplasty of his right coronary artery and circumflex prior to his final heart attack that threw him into virtual shock.

Q So you believe that the cardiac cath in January would have shown a totally occluded LAD, a 75 percent occluded right coronary and some occlusion of the circumflex, but the circumflex would have been open?

A Yes.

Q Okay. And in that circumstance would some patients get an open heart CABG?

A I'm sorry, I couldn't hear you.

Q Sure. In that circumstance with those predicted lesions do some patients go on to get an open heart CABG and some go on to get an angioplasty?

A Some do.

Q So would it have been inappropriate for a surgeon to have taken

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Mr. Bayless to an operating room for a full open heart procedure in January of 2011 to fix those things?

A Well, it would never be inappropriate. The point is what would be more likely to have occurred.

Given that he would have had two-vessel disease that required repair. I think the LAD was long and done damaged. Statistically most people in that situation would be repaired by subsequent angioplasty, but of course bypass surgery was a possible requirement.

I can't say with absolute certainty he would have required an angioplasty. Just more likely than not he would have.

Q And if we continue down this road, after his cardiac consult he gets the echo, then the cath, and it's in your judgment probably angioplasty.

Does he then need continued follow-up and periodic studies by cardiology?

A Of course.

Q And does he need medications?

Charash, M.D.

A Of course.

Q And what medications?

A Well, he already had some heart damage. There are a number of drugs you would put him on. Beta blockers, ACE inhibitors, and antiplatelet agents. Aspirin which he was already on and either Plavix or an equivalent drug.

Q And does he need periodic things like echos or stress tests, EKG's?

A EKG at least twice a year, a stress test every one to two years, Echos once to two years.

Q And what is coronary artery disease?

A That's any disease involving coronary arteries.

Q I assume you have seen the diagram from the cardiac cath done in July, 2011 showing the blockages?

A Yes.

Q Would you call that severe coronary artery disease?

A Of course I would.

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Q And how long had that existed?

A Well, we know that from the coronary artery world that we don't, I mean any individual can have an outlier, but an average if you have a catheterization and you want to delay bypass surgery, this is from 30 years of bypass surgery before angioplasty, the roadmap of the angiogram was considered valid for up to a year. So if he came back a year later they would have to repeat it. If he came back six months later they absolutely wouldn't. And between six months and a year maybe.

So the point is that we basically expect a high likelihood of change that may be meaningful if it's more than a year and we don't expect any meaningful change in less than six months absent a new clinical event.

Q But let me ask you this way. You said that you believe the LAD would have been closed. When do you think it closed?

A Somewhere between 2009 and 2011.

Q And is this coronary artery disease what is typically called plaque that builds up in the arteries?

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A Yes.

Q And you have read the deposition of Dr. Brunts where he said that's years to decades long process; right?

A Well, the underlying pathology takes years to decades. You know, you have, we find in 30 year olds plaque that's undetectable developing inside the wall of the artery. But the macroscopic disease, as I said, we can pretty much say that within six months you don't expect much change or difference. In more than a year you can start seeing significant differences.

Q In Mr. Bayless was his COPD due to his smoking?

A Some of it maybe. He also had asthma which is usually an intrinsic disease.

Q What do you mean by intrinsic?

A Most people who have asthma have a predisposition that can be worsened by smoking, but that's defined by reversible muscle contractions. Smoking doesn't usually create asthma in a person who doesn't have asthma.

Q So you think the asthma may have

Charash, M.D.

been independent of his COPD?

A Sorry.

Q So is the asthma independent from his COPD?

A No. Asthma is one form of his COPD.

Q What is the risk for reocclusion with angioplasty?

A With the drug eluting stents that were available in 2011 the rate of restenosis was in single digits. The likelihood of acute coronary thrombosis if the person took the necessary meds was less than five percent in a year.

Q Is that a cumulative risk?

A No. The risk gets less over time.

Q So the risk is greater in the first year. It's a five percent risk of thrombosis in the first year?

A Yes. In the following years it becomes very little. We don't really know because some studies say you can stop in a year. Some people suggest indefinitely. So there is an increased risk especially under stress states

Charash, M.D.

in the second year, but we pretty much suspect every year that goes by the risk gets less.

Q Have you listed for us today both in the deposition and in this report Exhibit 1 all of the documents you have reviewed and been sent?

A Yes.

Q Did you do any independent research for purposes of your review in this case?

A No.

Q Did you send to Mr. Damick or did he send to you any citations or literature?

A No.

Q Okay. Have we now covered all of your opinions you hold regarding this case at this point in time?

A Yes.

MR. BEAN: I think that's all I have. Let me look at my notes, but I'm going to turn you back to Mr. Spataro.

FURTHER EXAMINATION

Charash, M.D.

BY MR. SPATARO:

Q Doctor, very briefly, when Mr. Bayless had his acute MI in July of '11 do we know, you may have answered this already, do you know what vessel led, occlusion of what vessel leads to the MI at that time?

A It's probably the circumflex.

Q And you say probably. What other vessel could it have been?

A You never know. A clot could have formed in the right that dissolved, but it was probably the circumflex.

Q And when we look at the EKG's from January to July, did they demonstrate that there was any -- let me back up a minute.

The circumflex again supplies blood where?

A Generally to the posterior lateral wall of the heart.

Q All right. So it would not have added to the anterolateral damage that had been previously caused by the LAD occluded?

A Well, it would add to the total amount of heart muscle damage.

Charash, M.D.

Q How much it added there is really no way of knowing?

A What?

Q How much additional damage the circumflex occlusion added to his overall heart damage we don't know?

A Well, we do. Only based on the clinical metric of the man that went from functional to devastated. So it was a devastating additional amount of damage. But we will never be able to quantify it outside the man's functional status.

Q Do you know if Mr. Bayless ever took nitroglycerine for chest pain prior to July of '11?

A I don't know of that.

Q That's not something you noted in any of his medical records?

A I have no recollection of that.

MR. SPATARO: Okay. That's all I have.

Ken, do you have anything else?

MR. BEAN: Nothing else.

(Discussion off the record.)

MR. SPATARO: I just want an E-Trans and then you can scan the exhibits.

MR. BEAN: I want an E-Tran and a Mini by mail. So E-Tran by e-mail and Mini by U.S. mail.

(Discussion off the record.)

(Whereupon, at 2:00 o'clock p.m., the deposition was concluded.)

C A P T I O N

The Deposition of BRUCE CHARASH, M.D., taken in the matter, on the date, and at the time and place set out on the title page hereof.

It was requested that the deposition be taken by the reporter and that same be reduced to typewritten form.

The Deponent will read and sign the transcript of said deposition.

C E R T I F I C A T E

STATE OF_____:

COUNTY/CITY OF_____:

Before me, this day, personally appeared BRUCE CHARASH, M.D., who, being duly sworn, states that the foregoing transcript of his/her Deposition, taken in the matter, on the date, and at the time and place set out on the title page hereof, constitutes a true and accurate transcript of said deposition.

_____

BRUCE CHARASH, M.D.

SUBSCRIBED and SWORN to before me this_____

day of _____, 2017, in the jurisdiction aforesaid.

_____ _____

My Commission Expires Notary Public

DEPOSITION ERRATA SHEET

RE:

FILE NO.

CASE CAPTION: TIM BAYLESS, et al. vs. SSM HEALTH CARE ST LOUIS, et al.

DEPONENT: BRUCE CHARASH, M.D.

DEPOSITION DATE: JULY 13, 2017

To the Reporter:

I have read the entire transcript of my Deposition taken in the captioned matter or the same has been read to me. I request for the following changes be entered upon the record for the reasons indicated.

I have signed my name to the Errata Sheet and the appropriate Certificate and authorize you to attach both to the original transcript.

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SIGNATURE:_____ DATE:_____

BRUCE CHARASH, M.D.

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EXHIBITS

CERTIFICATE

STATE OF NEW YORK)
) ss.
COUNTY OF NEW YORK)

I, TINA DeROSA, a Shorthand (Stenotype) Reporter and Notary Public of the State of New York, do hereby certify that the foregoing Deposition, of the witness, BRUCE CHARASH, M.D., taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

I further certify that I am neither counsel for nor related to any party to said action, nor in any wise interested in the result or outcome thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this 19th day of July, 2017.

_____
TINA DeROSA

S