STATE OF OHIO,)
COUNTY OF LORAIN.) SS:

IN THE COURT OF COMMON PLEAS

HUBERT PORTER, Administrator of the Estate of Brad Porter, deceased,

Plaintiff',

vs. Case No. 96CV115689

MANHAL A. GHANMA, M.D., et al.,

Defendants.

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THE DEPOSITION OF E.F. KLEIN, JR., M.D.
FRIDAY, MARCH 26, 1999

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The deposition of E.F. KLEIN, JR., M.D., a Witness herein, called by Defendant Dr. Quansah for examination pursuant to the Ohio Rules of Civil Procedure, taken before me, the undersigned, Marcie S. Smith, a Registered Professional Reporter and Notary Public within and for the State of Ohio, taken at the offices of Spangenberg, Shibley & Liber, 2400 National City Center, Cleveland, Ohio, commencing at 10:35 a.m., the day and date above set forth.

APPEARANCES:

On behalf of the Plaintiff:

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On behalf of Defendant Dr. Quansah:

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DEPOSITION INDEX OF E.F. KLEIN, JR., M.D.

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E.F. KLEIN, JR., M.D., EXHIBIT INDEX

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PROCEEDINGS

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(Defendants' Exhibit Numbers 1 & 2 were marked.)

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E.F. KLEIN, JR., M.D.

of lawful age, called by the Defendant Quansah for examination pursuant to the Ohio Rules of Civil Procedure, having been first duly sworn, as hereinafter certified, was examined and testified as follows:

MS. HENRY: This is the deposition of -- well, you just go by E.F. Klein?

THE WITNESS: I spent 58 years hiding Elmer.

MS. HENRY: Elmer. All right. This is the deposition of Dr. E.F. Klein. And we're here by agreement of counsel. Obviously there's a waiver as to any notice or defects, and any qualification and all that stuff since you obtained the court reporter, correct?

MR. LANSDOWNE: Right. So waived.

EXAMINATION OF E.F. KLEIN, JR., M.D.

BY MS. HENRY:

Q Doctor, my name is Dierdre Henry and I represent Dr. Quansah in the lawsuit. She is one of the defendants, obviously the anesthesiologist. And we're here today to take your discovery deposition and your opinions in this case.

I'm sure you've had your deposition taken before, correct?

A Yes, ma'am.

Q So you know basically I'm going to ask you a series of questions. And if you don't understand a question, please don't answer it, tell me you don't understand it.

A Yes, ma'am.

Q Anesthesia is your specialty, obviously not mine, and I may have some inept questions, okay?

A Yes, ma'am.

Q Doctor, can you state your name and your current address for the record?

A My real full name is Elmer Floyd Klein, Jr. My home address is 58 River Ridge Road, Little Rock, Arkansas. My professional address is at the University of Arkansas for Medical Sciences in Little Rock, Arkansas.

Q Doctor, I'm going to give you what's been marked

as Defendants' Exhibit 1, and that is a curriculum vitae that we were provided in this case. I understand that this is not current; is that right?

A That's correct.

Q What is different about that?

A In the interim, from when this was submitted, I have stepped down as the chair of the anesthesia department, and so my current position is not professor and chairman but is professor of anesthesiology.

Many of the committees that this CV reflects my participation in are no longer accurate. And I currently only sit on the Malpractice Claims Review Committee and the hospital -- University Hospitals Credentials Committee.

And those -- and also I rotated off the -- as the examiner for the oral boards and the updated CV would reflect, under VII, Associate Examiner for the American Board of Anesthesiology from 1985 through 1998.

Q Okay.

A And I think those are the substantial changes that have occurred over the last 18 months since

the CV was submitted.

Q Doctor, what's the reason that you stepped down as chair of the anesthesia department?

A Because as I took the job -- in 1990 I had been the chairman at the University of South Carolina in Columbia for eight years and I had -- I knew that in eight more years my son was going to graduate from high school. And I, as part of my agreement to take the chair, I informed the dean of the College of Medicine that my tenure would last only until my son graduated from high school, which was eight years hence.

Q Okay.

A There was a secondary issue in that my vice chairman, who I very much wanted to assume the reins upon my ultimate stepping down, was on the short list for the position for the chairmanship at the University of Iowa. And not wanting him to be excluded from the potential chairmanship at the University of Arkansas, I actually informed the dean approximately five months earlier than I would have so as to include my vice chairman in the running for my position.

Q And did he get the position?

A No, he didn't. Deans do that you know.

Q Yes. And what was your role as an examiner for the oral boards?

A I gave oral examinations.

Q Okay. How frequently?

A Once or twice a year from 1985 through 1998.

Q Okay. What did that entail? How much time?

A The oral examinations are one-week in duration and one exam, between six and ten candidates a day, Monday through Friday. At its maximum, the board was examining somewhere around 1,000 to 1500 candidates with each examination. And with the reduction in the number of anesthesia residents over the last three or four years, that's been alluded to by your client, the number of examiners has gone down as have the number of candidates in the exam.

Q Okay.

A But, nonetheless, for the 13 years that I did it, I progressed from being a junior examiner to a senior examiner and examined 30 minutes a session. Each candidate gets two 30-minute sessions and they are between, as I said, Friday and Wednesday are half days, and so there's six examinations given. Monday, Tuesday and Thursday there are -- you go from 8:00 in the

morning until 4:00 in the afternoon.

Q Okay. Do you still have hospital appointments at Arkansas Children's Hospital?

A I do.

Q John L. McClellan Memorial VA Medical Center?

A I do.

Q And of course at the University of Arkansas for Medical Sciences?

A I do.

Q At the Arkansas Children's Hospital, do you spend any time during a week at that hospital on a routine basis or how does that appointment work?

A When I first went to Little Rock, there was a severe manpower problem and I -- the CV reflected I was there and functioned not only as the chairman of the department but as the acting chief of the Children's Hospital, anesthesia division and had credentials at that time. There was a manpower problem in September so I worked pretty much clinically full-time the first year.

Q At the Children's Hospital?

A At the Children's Hospital. And then as faculty recruited -- were recruited for other children's

hospitals, my clinical role there virtually disappeared.

However, last August or last September the new chair was desperate for clinicians and I worked clinically at the Children's Hospital, since I still had credentials, and worked there for the month of either August or September. I'm not sure which.

Q So routinely, except for last August or September, you have not worked at Children's Hospital for approximately seven years?

A That's correct.

Q Did you work at all at Children's Hospital for that seven years after your first year and until this past August?

A Yes, I would work sporadically and did that for two or three years just because I wanted to keep my hand in the pediatric arena. But it would amount to probably more than 15 days a year.

Q And that hadn't been for five or six years though?

A That's correct.

Q All right. And the John L. McClellan Medical -- or Memorial VA Medical Center, what is the extent of your involvement with that facility?

A Well, I think it -- I worked there clinically five to ten percent of the time for the first three or four years.

It would be helpful, perhaps if you understood the -- what the working relationship between the three hospitals is.

Q Okay. Great.

A So it might make some sense.

Q All right. You came to be the chairman of the department?

A That's correct.

Q And then tell me what that entailed.

A Well, the chairman of the department is responsible not only for the university and hospital but also for the clinical faculty at the Children's Hospital and also for the clinical faculty at the VA Hospital. And so one has lieutenants, if you will, that run the sections at both the Children's and at the VA Hospitals.

And as a matter of maintaining departmental -- continuity is the wrong word -- but to maintain the sense of three separate divisions belonging to the same department, I felt that it was in the best interest of the

department to work clinically, on occasion in all three locations, for the first three or four years when the manpower was very short. And when manpower's short, the morale is sometimes not as good as it should be.

So the chief of anesthesia at the VA is picked by the chairman, the chief of the Children's Hospital is picked by the chairman as is the clinical chief at the University Hospital is picked by the chairman.

Q All right. So then it would be fair to say that after your first three years in your new position as the chairman of the department, you did some work at McClellan VA but you have not done any since that time; is that right?

A No. I've worked on an occasional day basis. Probably less than --

Q Last year?

A Less than ten days in the last three years.

Q Okay. So then University of Arkansas for Medical Services has a hospital --

A Sciences.

Q Sciences, I'm sorry. Has a hospital associated with it?

A That's correct

Q Which you refer to as University Hospitals?
A That's correct.
Q Correct. And currently what do you do as far as clinical practice?
A When it was clear to me that I was going to step down, I began to work in the ambulatory arena that's at our institution clinically. And for approximately the last two to two-and-a-half years, I have worked in the operating room between three and four days, an occasional five days a week, in the ambulatory arena.

That's really a misnomer in our institution because although some of the patients that are handled there are, in fact, what's called commonly day patients, it is also an overflow unit for the main operating room. Since it is not physically detached, it is part of the complex. And so inpatients are operated on in that environment as well.

Q Okay. What type of cases -- strike that.

Would Mr. Porter have been operated on in the ambulatory arena?

A Probably -- probably not. By the same token, though, he may well have been operated on. We debride breast abscesses. We debride arm

abscesses and we do open cholecystectomies, open hysterectomies.

Q Let me stop you there, Doctor. You've reviewed the records from Mr. Porter?

A That's correct.

Q Now, based on what you see in the record from Mr. Porter, are you telling me it's probable that he would not have been operated on in the ambulatory setting at your facility?

A If there were physical space and time available in the main operating room, he would likely have been done in the main operating room.

Q Why?

A Because he came in the first night at 2:00 in the morning -- or 1:00 in the morning, or he was operated on some time around midnight the first night. And unlike the main operating rooms, the ambulatory facility is not staffed to run 24-hours a day.

Q Okay.

A His operation on Saturday would unlikely have been done because the ambulatory arena does not work on Saturdays and Sundays.

Q Okay. Let's just take that aspect out of this. Assume that Mr. Porter would have been operated

on for a second procedure on a day, like, say, a Tuesday or Wednesday. Would he probably have been in your main operating room or in the ambulatory arena?

A He -- it would depend on the availability of operating room time in the main operating room. The first choice would have been likely in the main operating room since that's where the trauma orthopaedists generally operate. But had there not been space in the main operating room, if the trauma orthopaedist also worked in the ambulatory arena, the patients are transported to that area and are transported back to the hospital.

Q So the last two, two-and-a-half years you've had three or four days a week in the operating room in an ambulatory arena?

A That's correct..

Q How many procedures would be done a day, generally?

A By me or in the facility?

Q By you.

A By me? Anywhere from three to ten.

Q And the general type of procedures which you do in that ambulatory arena are what?

A Orthopaedic, gynecology, airway, laser work, ophthalmology, facial reconstruction, mandible fractures, facial reconstruction after major cancer surgery, breasts.

Q What are we talking about in the way of breasts?

A We're talking about not only needle localization with biopsy but radical and modified radical mastectomies with thigh dissections.

Q Okay. The ortho procedures that are normally done in your ambulatory arena are what?

A As a general rule, they are shoulders, knees, hands, arms. We don't do total joints. We don't have a laminar flow facility in the. ambulatory arena. But they are generally, as I said, hands, shoulders, knees, feet.

Q Are we talking about if you need a knee replacement it would be done there?

A I said we don't do total joints.

Q No total joints?

A We do not do total joints because we do not have a laminar flow facility.

Q If a patient, such as Mr. Porter who's a trauma patient, comes into the facility, is the first choice of operating suite in the main OR?

A Trauma is generally done in the main operating

suite because it is staffed 24-hours a day.

Q Okay. Would a trauma patient be done in the ambulatory arena if one of the OR suites was not available in the main OR?

A That's correct. That's what I was trying to allude to.

Q Yeah. Are you currently -- are these current as to your publications?

A There are basically no significant publication changes subsequent to that CV.

Q Is there anything in these publications that you feel is applicable to this case, specifically to this case?

A I believe that --

Q If you want to look at it.

A No, I think I know what I've done. Thank you.

Q Okay.

A Much of my time, the first half of my professional career, was done in critical care and respiratory therapy. And most of my significant lecturing and research has been in the areas of mechanical ventilation, ventilation in general. And so there are aspects of the case that I believe are, in fact, germane to the general topics of endotrach tubes,

tracheostomies, ventilation, mechanical ventilation, as such.

Q My question is: Do any of these, any of your publications, though, have any relevance to the facts of this case?

A Well, 44. 41 has to do with respiratory physiology. 40 has to do with respiratory physiology. 49 has to do with respiratory physiology. 38 has to do with respiratory failure. 37 has to do with respiratory disease. 36 has to do with hemorrhagic shock, so that's germane.

Q Can we stop a minute on this number 37?

A Yes, ma'am.

Q It's "Perioperative Management of Patients with Pulmonary Disease." Why is that applicable to Mr. Porter's case?

A Because the concepts of pulmonary physiology are germane in the patient with preexisting pulmonary disease and the patient without pulmonary preexisting disease.

Q You do not believe he had any preexisting pulmonary disease?

A No.

Q Okay.

A Prior to his injury.
Q Yeah. Just to be sure.
A 35 has to do with respiratory and cardiac function. 34 has to do with trauma. 33 is not germane. 32 has to do with pulmonary injury. 31 has to do with ventilation, mechanical ventilation and respiratory failure. 30 has to do with respiratory physiology.

So if you care to go through, I said the vast majority of my area of expertise has to do with lungs and blood gases and mechanical ventilation, and that's what I've talked about. And the vast majority of the publications have to do with the lungs and how the lungs work --

Q Okay.
A -- and how they interrelate to the heart.
Q Any of these specifically dealing with trauma cases?
A If you will recall, I just said, for example, that one of the invited national lectures was, in fact, in dealing with traumatic chest injuries.
Q And that is which one, Doctor?
A That's reference number 34.
Q Okay.

A Reference number 32 is pulmonary contusion and that is almost invariably secondary to trauma.

Q Okay.

A There were issues of -- there were issues of endotracheal intubation that were brought up and that's in reference -- in bibliography number two. The earliest areas of interest had to do with problems with endotracheal intubation, and that's reference number two and that's in 1972. So it's been an area of interest for nearly 30 years.

Q Okay. Doctor, what teaching responsibilities do you currently have?

A I teach residents and medical students daily.

Q Okay. How did you become involved in reviewing this case?

A I was called by the law firm that represents the plaintiff.

Q Have you ever testified for them in another case?

A I've never testified. I've given a deposition.

Q Was that a case in Cuyahoga County?

A Frankly, I'm not sure the geographic confines of --

Q Well, where did that take place?

A The deposition was in Little Rock, Arkansas. And, I'm sorry, I don't --

Q Do you know what hospital, what medical facility?

A No. Off the top of my head I do not.

Q How did you become involved with this firm on that first case? Is that how you -- do you recall how you got the case?

A Yes, I recall very clearly. A former resident of mine and colleague of mine who had been in the consulting business, was a surgeon first and then an anesthesiologist, had done some consulting work for this law firm, had sold his business and had been bought -- that business had been bought out, I believe, by another consulting company. And part of the stipulations were that he would not do any outside consulting work.

And I had known him since the days when he was a surgery resident and I was running the surgical intensive care at the University of Florida. And he called me and said, "Are you interested in doing any work for a group in Cleveland?" And I said, "I'd be happy to review.

Q When you say that this former student of yours --

A I didn't say he was a student. I said he was a former resident.

Q Resident, sorry, did consulting work, did he have a business where he provided expert --

A No.

Q What kind of consulting work did he do?

A He was, to the best of my understanding, involved in an organization of physicians along the lines of developing physician groups to negotiate with HMOs and PPOs.

Currently he is -- and that's about as good as I can tell you. His current endeavor is he's put together, to the, once again, the best of my understanding, a group of anesthesiologists who are staffing outpatient orthopaedic facilities in and around Washington, D.C. and is involved in the business, in management aspects, in putting it together.

Q What's this gentleman's name?

A Alan Delaney.

Q In the first case you gave a deposition for, what basically was that case about?

A It had to do -- it's the only deposition I've

ever given. And it had to do with a ruptured pulmonary artery during placement of the Swan-Gantz catheter.

Q How many times have you been involved in anything having to do with giving expert opinions in the medical/legal area?

A Before I went to -- before I came to Arkansas, I probably had not done more than ten or 15 in the preceding 20 years. Over the last eight years, I have probably picked up three to four cases a year.

Q And how --

A Some of those go on and on and on and on and I've got a file --

Q Like this one.

A I've got a file that has a dozen cases that I've not heard from the lawyers in three years and don't know what the status of them is.

Q Generally how do these lawyers get your name, do you know?

A As the chairman of an anesthesia department who is somewhat outspoken in a state of two million, with one medical school, one gets to be known reasonably quickly.

Q Are these people who are from Arkansas or are

they from out of Arkansas?

A The majority of the consulting work that I've done, the medical/legal consulting work that I've done has, in fact, been in the mid-south area. And probably 75 percent of it is in the state of Arkansas.

Q I'm sure that you're going to tell me you review cases for plaintiffs and defendants both?

A I didn't. I didn't until approximately four years ago.

Q Okay. Before four years ago was it all defense?

A That's correct.

Q Okay. Four years ago that changed?

A Yes.

Q Why or how did it change?

A We had just done a very difficult deposition and as we were walking to the parking garage, plaintiff's counsel made some comment about "nice deposition." And I said, "I'd be happy to work for you if you give me a call."

And I did that because the defense attorney had -- who happens to be related to me but by marriage and lives down the street from me, had said previously if I'm going to maintain any credibility, I'm going to have to be willing

to at least review plaintiffs' cases if they have merit. Otherwise, I would gain the same reputation as some plaintiffs' attorneys have, which is testimony for-hire. And I have accepted in toto probably five or six plaintiffs' cases for review.

Q And have you been able to provide reports that are helpful to the plaintiffs in those five or six cases?

A In some segment I have.

Q How many?

A I would say probably five of them but -- but a report that's helpful, there are --

Q Let me put it this way: Were you critical of the care that was provided by the defendant anesthesiologist in those cases, all of those cases?

A Not being able to recall each and every one of them, I believe that the care rendered was so blatant as to be able to say that. I don't generally get asked to review cases where -- for plaintiffs where there is a major discussion as to liability or lack thereof.

Q What do you mean by that?

A Because the amount of plaintiffs' work that I do

is so limited --

Q Uh-huh.

A -- it has come generally either from the work that I've done here for the group in Cleveland or it has come at the recommendation of other faculty in other specialties at the university who have friends. Let's go through them if --

Q Sure.

A There was a case in Pensacola, Florida where I was referred by the chairman of radiology because he was asked by a friend of his, "Do you know an anesthesiologist who is respectable who will give an honest opinion for a plaintiff?" And, in fact, I accepted that case.

Q And gave an opinion for the plaintiff?

A And gave an opinion, yes.

Q Okay.

A I was called in a similar circumstance by a group in Pascagoula, Mississippi, because they had a relationship or knew the group that I had worked with out of Pensacola.

And are -- the four cases I think that I reviewed for this law firm have come in a fashion which has been identified to you. And I have been asked to review a case in Arkansas by

a lawyer that I have worked with on four separate occasions in defense work who is now doing plaintiffs' work.

Q So you've reviewed four cases for this firm?

A That's an approximation. There are -- and I think that's accurate.

Q You've given one deposition?

A One deposition.

Q In each of the four cases that you've reviewed for this law firm, did you find the care of the anesthesiologist fell below the appropriate standard?

A I don't believe that I have -- that I issued an opinion letter. I don't recall an opinion letter in two of the cases that, in fact, were critical, but I viewed my role as one that raised issues that needed to be explored further before one could determine whether or not there was relevance to the case.

Q Now, in those two cases where you did that, are those cases complete or are they still pending?

A I believe they have settled because I have -- I reviewed some charts, made some initial contact and have heard no more from them.

Q Are you currently reviewing any or involved in

any cases for this law firm other than Mr. Porter's case involving Mr. Porter?

A Unless those other two are still out there sleeping somewhere and I get a call back on them.

Q Your answer is no then?

A To the best of my knowledge.

Q Okay. Have you ever testified at trial?

A Yes.

Q How many times?

A Probably more than six and less than 12.

Q What are your fees for your review of records?

A $300 an hour.

Q And your depo fee?

A $500 an hour.

Q And your trial fee?

A I have tended -- I have done so little that I have tended to say that if I take a day away from work, I'm going to charge what an anesthesiologist who's giving clinical anesthesia would charge for a day's work.

Q Which is?

A It's in the neighborhood of $2,000. So whether I work for six hours or eight hours or 12 hours, if it required me to take a vacation day --

Q Okay.
A -- I tend to be a flat fee on that.
Q All right. Doctor, we have Exhibit 2 here which is dated April 28, 1997, which is your expert report in this case, correct?
A Yes, ma'am.
Q Prior to rendering this opinion, what did you review?
A I reviewed the medical record. I have a list of what I've reviewed all in total here.
Q Why don't we get that marked as an exhibit..
A Certainly, if you can read my writing.
Q Oh, I think I probably can.

MS. HENRY: Let's mark that, please.

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(Defendants' Exhibit Number 3 was marked.)

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Q Doctor, you have reviewed the medical record with your emphasis on anesthesia?
A That's correct.
Q Did you review it -- do you have any opinions as to any of the other entities involved in this case on your review of your record, such as the surgeon or anyone?

A I try not to exhibit either criticism or support of specialties other than the areas of which I have documented expertise

Q So your answer is no?

A Yes. ma'am

Q Okay Two depositions of Dr Quansah. deposition of Dr Ghanma?

A Shapiro --

Q Shapiro?

P -- deposition. but you must realize that this is not responsive to your original question. which was in fact --

Q What did you review?

A What I reviewed.

Q Right.

A And I don't know what I had reviewed prior to this letter It may have been the initial Quansah deposition

Q Okay.

A And the Ghanma deposition It clearly did not include the Shapiro deposition. the San Diego pathologist's deposition. the blood pressure summary as generated from the pictures of the monitor. and the opinion letters from the various experts

Q So let's go back to the blood pressure summary. Is that a piece -- is that something separate than the pictures themselves? Is there something that was given to you by the law firm?

A Mr. Lansdowne, based on better eyes than I have --

Q Could you -- do you have that with you?

A I don't have that with me.

THE WITNESS: Dennis?

MR. LANSDOWNE: I think it's in the other room.

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(Recess taken.)

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(Defendants' Exhibit Number 4 was marked.)

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Q Doctor, we've marked Defendants' Exhibit 4. Is that the blood pressure summary?

A Summary.

Q And you used this in giving your opinion in the case?

A No.

Q Okay. What was the purpose of this?

A This was some time after my opinion. And in retrospect, it had to be, to some degree, after

one of Dr. Quansah's depositions where there was a discussion of the record and the pictures and the hard copies and all. I received some pictures.

Q Okay.

A And when we met yesterday, I confided that I couldn't --

Q Read the pictures?

A I could read some of them but I couldn't read all of them. And some of the blue did not transmit. And so this was provided to me as representing a summary of the medical record as well as what came from the pictures that were taken from the data bank from the monitor.

Q Did you review this in conjunction with the record and the pictures to determine if it was accurate, or you didn't do that yesterday?

A There were some that I could tell. There were others that I had to take on face value.

Q Okay.

A Can we -- you always say if there's something I'd like to clarify that I have the option to go back on that. May I have that option, please?

Q Certainly.

A When asked about my opinions about surgical

issues or being critical of other people, I wanted to just clarify that, you didn't pick up on it and/or didn't ask me about it, but I alluded to the fact that I do have subspecialty certification in critical care and for the first -- we went through that, the bibliography, and almost discussed in detail, but for the first half of my career I ran respiratory therapy departments and critical care services and interacted with surgeons much of the time.

I did hold, up until 1990 in every place I'd worked, dual appointments in the department of surgery. Now, that does not qualify me to do surgery or be critical of surgery per se, but there are many surgical decisions that fall outside of the surgical arena itself that have to do with patient care. And I do have some -- I do have opinions in that area.

And for -- and to complete, since you were very complete about what I've done clinically over the recent past, there was a time while I was -- in the last year and I was still chairman, where the one and only critical care member, certified member of the department had gone, and being the only member of my department

with subspecialty certification in critical care did not make rounds as part of the ICU team with the trauma surgeons, so I can't -- you've asked me about my operating room experience, but I just want to point out that that is not the in total amount of my back -- what I've done professionally.

Q Well, let me --

A My opinions -- my opinions, though, I'll say of surgical -- purely surgical issues I'm deferring to the surgical expert, Dr. Shapiro, and will not offer judgment as to surgical decisions.

Q Okay. Well, then, let me try and clarify this a little more. As to issues having to do with critical care, what should have been done or what was done outside of the operating room, do you intend to give any opinions?

A No.

Q So all your opinions are going to be as to the anesthesiologist, or are you going to have additional opinions other than the anesthesia -- about the anesthesiologist?

A I have concerns about the interaction between the surgeon and the anesthesiologist but I'm not going to express -- I'm going to defer those

opinions to the surgical expert for the plaintiff. But critical care and surgery and anesthesia can't be divvied up like three separate things. It is -- you have to make decisions based.on integration of a lot of pieces of information and --

Q Okay. Doctor, your report, let's get back to that --

A Surely.

Q -- which we have marked as Exhibit 2. You believe that was authored prior to having received many of the deposition transcripts in this case. You believe you had at least one of Dr. Quansah's and one of doctor -- and Dr. Ghanma's?

A And the medical record, and I think that's all I had at the time.

Q Since that time you've reviewed the balance of the things which appear on your yellow sheet, which is Defendants' Exhibit 3, correct?

A Correct.

Q And are your opinions different in any way or is there anything supplemental to your opinions after your review of the rest of those records?

A Not materially, no.

Q Okay. You said in your report that there was no -- "without meaningful communication between the anesthesiologists and the operative surgeon." You are now telling me that you are going to defer any opinions as to the interaction between the anesthesiologist and the surgeon to Dr. Shapiro, correct?

A No. I'm going to defer the subsequent medical decisions after interaction.

Q Okay. All right. You have stated in your report here that, if you look at the first paragraph, second line towards the end of it, that there was "a lack of comprehension of the magnitude of physical derangements which were manifest almost immediately after the beginning of this second anesthetic."

Do you see that?

A Yes.

Q Can you tell me what the physical derangements were?

A Profound and medically significant hypotension.

Q Anything else?

A No.

Q At what time did the profound and medically

significant hypotension exhibit itself?

A 9:12.

Q And what was -- what is in the record that tells you at 9:12 that was a profound and medically significant hypotension?

A A recorded blood pressure in the 60s systolic.

Q Tell me your understanding of what the sequence of the administration of the anesthetic agents and vasopressor drugs was in this case based on your review of the record from the time Mr. Porter came into the OR.

A May I re --

Q Sure you can look at the record.

A -- refer to the record?

Q Including the amounts that were given.

A Certainly. It's my understanding from both the deposition and the anesthesia record that Mr. Porter had some degree of pain prior to the beginning of the anesthetic and that the anesthesiologist provided a dose of fentanyl.

Q At what time and how much?

A It's not recorded in the anesthesia record. I believe the deposition suggests that it was 100 micrograms. And it would have occurred either -- and I can't remember whether it was

after they came in the operating room when he was uncomfortable, because he slid down in bed, or whether he had expressed that he was uncomfortable while he was in the hallway while the anesthesiologist was talking to him. But if memory serves me correct, there was a bolus of 100 micrograms of fentanyl given prior to the administration of the other anesthetic induction drugs.

Q Let's stop there. Is that, for Mr. Porter's height and weight and physical condition at the time he came to the OR, an appropriate dosage?

A It is not inappropriate at all.

Q Okay. Prior to his coming to the operating suite, did he have any pain medication on the floor in, say, the 24 hours before?

A Well, certainly he did.

Q Well, Doctor, I'm just here to ask you questions, okay?

A Yes. Yes. He had a PCA of Demerol that was begun at about 3:50 in the morning, or thereabouts, after his first surgery and continued on, by my review of the record, until somewhere the evening before this final surgery.

I was unable to determine what he had in

regard to additional pain medication from somewhere in the early to mid-evening hours of the 14th until the morning of surgery on the 15th.

Q So you don't know when he last had Demerol from his PCA, correct?

A No. But I can find that for you and be happy to tell you what the medical record says. There is, in the nurses' flow sheet, there is a sheet which identifies a running total of the amount of Demerol that has been given. And the only record that I have that I'm familiar with goes from 3:44 a.m. in the morning of -- the morning of the 14th through 9:18 p.m. on the 14th.

Q Uh-huh.

A And I'll admit I could not find or did not -- did not find what was given for pain subsequent to this last recording for the PCA pump, which has on its time 9:18 p.m. on the 14th.

Q Okay.

A But there presumably was some pain medicine provided for him between that early evening hour that I alluded to earlier and 9:00 in the morning when he came to the operating room.

Q But we don't know that from the record?

A I don't know that from the record.
Q Okay.
A I would assume that to be true but I don't know it specifically at the present time.
Q Did he get any Valium before he went to the OR?
A If my memory is correct, he received a dose order of ten milligrams of Lim PO and ten milligrams of Versed.
Q Do you know when he was given the Valium IV?
A There was a discussion on that and it was felt not to be working And it was somewhere between 3:00 and 3:30 most likely, but I can't give you the exact ti on that.
Q How long does that Valium given IV take to work for someone like Mr. Porter with his condition?
A Well, assuming normal absorption rate, one would anticipate that the Valium would be providing some anxiolysis within 30 minutes to an hour.
Q Let's use regular words What's the purpose of the Valium?
A To treat anxiety. That's from the word anxiolysis.
Q That's all right. I don't need you to explain it Let's just use basic words, you know, regular words We don't have to worry about the

court reporter spelling these things, okay?

A Yes, ma'am.

Q And the Reglan was given at about the same time, right?

A Yes, ma'am.

Q So we have 100 micrograms of fentanyl. What happened next?

A Well, presumably there was another 100 micrograms of fentanyl given.

Q When was that given?

A On or -- the medical record -- the medical record, the anesthesia record reflects 100 micrograms in titrate dose, and the 200 is centered on the 9:15.

Q So when you gave your opinion in this case and looked at the records, when did you assume the second dose of micrograms of fentanyl to be given?

A I assumed that the -- all of those dosages were given but not recorded correctly and were given some time between 9:00 and 9:15.

Q So by 9:15 he's had 200 micrograms of fentanyl?

A That's correct.

Q And what would the second 100 micrograms be given for?

A As part of -- it is generally given to attenuate some of the hypertensive response that is associated with visualization of the vocal cords and intubation.

Q What's the succinylcholine and d-tubocurarine for?

A The d-tubocurarine and succinylcholine are used to paralyze the patient. The d-tubocurarine is used to prevent generalized muscle contraction that would otherwise occur from the dose of succinylcholine. And they are given together -- or, actually, the d-tubocurarine is given preceding the succinylcholine and that provides short term muscle relaxation so that the muscles of the jaw and mouth will be relaxed so that one may intubate.

Q Okay. Is fentanyl a narcotic?

A Yes.

Q Is it given for pain?

A Either to treat pain or in the anticipation f pain.

Q Okay. Are you critical of the second micrograms of fentanyl given?

A Not particularly.

Q Are you critical at all of that?

A My only criticism would be that I don't -- I don't know and did not read what was the basis -- what was the thinking basis for the second dose.

And in a patient who has acknowledged to have a blood pressure now that I believe is somewhere down from the previous baseline of 110/60 into the 90s, I don't -- I don't know and did not read what the rationale was, but I'm not particularly critical of 200 micrograms of fentanyl on what was presumed to be a previously healthy 20-year-old male.

Q And then what happened?

A On or about the same time --

Q Being 9:15?

A Well, actually, I don't believe it was 9:15. I believe it was prior to 9:12.

Q Okay.

A Because the blood pressure, from my understanding, had gone down significantly by 9:12, which would place the administration of the induction drugs prior to 9:12. And so I would presume that these drugs were not given at 9:15 as recorded but were given some time between 9:05 and 9:10.

Q Okay. Then what happened?
A And then the blood pressure went down. Did we ask about the propofol?
Q Doctor, I was asking if you would tell me from the beginning what your understanding of what was administered and when so --
A And propofol was given all at about the same time.
Q Let me finish --
A Sure.
Q -- because she is not going to be able to read this.

So we have 200 micrograms of fentanyl which you believe was given by 9:12.

Now, propofol was given when?

A As I said before, I have to believe that the fentanyl and the propofol were given before 9:12.
Q Okay.
A And --
Q And so when was the propofol, based on your review of the record and the deposition, given and what was administered and when?
A I have to believe that the fentanyl and the propofol --

Q No. I'm asking you about the propofol. We know what the fentanyl, your opinion is. Tell me when the propofol was given.

A The medical anesthesia record implies that it was given at 9:15.

Q And how much was given?

A The medical record suggests 100 milligrams.

Q You believe that it was actually given prior to 9:15 and that it was something different than 100 milligrams?

A No.

Q Okay.

A I think it was given before 9:15.

Q But at 100 milligrams?

A I have no reason to doubt 100 milligrams.

Q Is that an appropriate amount of propofol to give to someone like Mr. Porter?

A Actually, I would suspect that it is a reasonably light dose of propofol for someone like Mr. Porter.

Q And when I say "like Mr. Porter," you consider Mr. Porter to be reasonably healthy -- well, strike that.

When we talk about Mr. Porter, your

assumption is he's in good, physical status at the time of this operation; is that right?

A That's correct.

Q And explain to me what is your basis of your opinion that, at the time of this operation, the second one, he had good, physical status?

A He was advertised as being in good physical status. It was the assumption of the operating surgeon and the assumption of the anesthesiologist that he was, in fact, ill but was not critically ill. The anesthesiologist who evaluated him the night before listed him as a physical status and he circled two and a three and made it with an E.

Q And what does that mean to you?

A To me it means someone who's had recent trauma and has a major leg laceration.

Q What are the components of what you consider to be good physical status? Let's get those.

A He was awake, alert, coherent. He had had a fever but it was not overwhelming. His blood pressure had fallen from its previous levels but was not in a range at that point in time as to signify a critical decline of blood pressure. His pain was being controlled with reasonable

levels of narcotics. And except for this small drop in blood pressure from the previous baselines and the fever, there was not much else going on. He had -- that would suggest at that point in time that he had a major problem other than his thigh.

Q Well, at 4:30 a.m. on 7-15, he has a temperature of 102.3. Do you consider that to be an acceptable temperature for a young man such as Mr. Porter?

A In the -- under the circumstances I certainly do.

Q Okay. What are the circumstances?

A He had a thigh wound that was, in fact, likely, to some degree, infected. And that a nighttime temperature of 102, while not normal, does not -- does not fright me in and of itself a great deal to begin with.

Q Do you consider., at 4:30 a.m. with a temperature of 102.3 and the other findings, vital signs you saw in the record, that those were significant with a diagnosis of sepsis?

A The definition of sepsis has been bantered about. I believe that -- I believe that he had, to some degree, bacteria in his blood stream and

some would consider that sepsis, others would require more of a constellation of symptoms involving the heart and the lungs and the circulation to make a diagnosis of sepsis, or sepsis syndrome.

Q Okay. Let me get your definition of sepsis so we're working on the same page here.

A I believe he was bacteremic, but because he was cardiovascularly still reasonably stable, that it allows me to stand by my previous statement that he was felt to be a reasonably healthy but traumatized young man.

Q Well, on what do you base your opinion that he was bacteremic? What findings in the record?

A The fever that you just mentioned.

Q And that's it?

A Knowledge, hindsight, the people at the time did not have access to them but there was subsequent -- the circumstances of his injury, and there were cultures ultimately that showed that the wound, in fact, had bacteria present. And I don't believe that any of those cultures had time to make it back.

Q So getting back to your definition of sepsis, what is it?

A My definition would be an infectious condition where there are bacteria in the blood stream.

Q ***So*** you consider him to be septic at the time that he went for his second procedure?

A There is an entire spectrum of the sepsis syndrome. And it is -- because there is not one clear and separate issue that causes the definition -- the differences in definition that have been discussed, and anybody who has a sinus infection and a fever likely is, to some degree, septic.

Q Well, you're not trying to equate someone with a sinus infection and a fever, that septic condition, to the type of condition Mr. Porter was in, are you?

A Yes, as a matter of fact I am.

Q Okay. ***So*** how do you -- you said there's **a** spectrum?

A That's correct.

Q **And** the spectrum is what? I mean, mild sepsis, medium sepsis, how do you define your spectrum?

A It is not defined by me but it is defined by a number of authors. And my definition of the spectrum would be the initial appearance of bacteria within the blood stream, at which point

there may be no changes, there may be an increase in cardiac output, there may be a small decrease in peripheral vascular resistance, there may be nothing but chills and fever.

If the bacteria continued to grow and replicate, one can go to a period of myocardial depression, low peripheral resistance, drop in blood pressure and low cardiac output.

So it can go -- it goes all the way from something that is -- one can have bacteria in the blood stream and have something not much different than a person with walking pneumonia or a sinus infection with a severe fever.

Q well, someone with a sinus infection and a nighttime fever.of 102.3, would you consider them to be a good comparison to the condition of Mr. Porter on that evening of 7-15 at 4:30 a.m.?

A I would say that you can -- you can make as much or as little of the sinus analogy but any --

Q No. Doctor, my question is --

MR. LANSDOWNE: Wait a minute. You can't ask him questions and then stop. You've got to let him answer the question.

MS. HENRY: But he has to answer the question that I'm asking.

MR. LANSDOWNE: No, no. He gets to answer the question.

MS. HENRY: I'll ask the question again.

MR. LANSDOWNE: If you don't like his answer, ask him the question again.

MS. HENRY: I don't want to be here all day.

MR. LANSDOWNE: This is about the fifth time in a row.

MS. HENRY: We're going to be here all day if he doesn't answer the question.

Q If you don't understand my question, please tell me, because you specifically discussed this sinus infection and fever. So I'm going to ask -- get her to read the question back, and if you'll just tell me "yes" or "no" if you believe there's a correlation.

MS. HENRY: Will you read the question back?

Q And you have to wait until she puts her paper back in her tray.

- - - - -

(Record was read.)

- - - - -

A I would consider not only a sinus infection with a fever but any other infectious process where bacteria were present in the blood stream such that a fever is generated analogous to the circumstances of Mr. Porter on that evening.

Q Okay. Thank you.

Was there any progression in the bacteremia or sepsis that he had at 4:30 a.m. to the time that he had his induction the next day?

MR. LANSDOWNE: Objection.

Q Go ahead.

A That is unknown to me and I suspect is unknown to anybody.

Q He has a pulse of 120, didn't he, at the time --

A That's correct.

Q -- of induction? What was the cause of the 120 pulse rate?

A The cause of the 120 pulse rate can be the use of Demerol as the analgesic if, in fact, it was still being used. It can be because of the fever itself, it can be because of pain, or all of the above, or any segment thereof.

Q Or because of sepsis?

A I said because of the fever and that goes with

the sepsis. That's all part of the same thing. And I can't separate out which of those three differentials.

Q Okay. What was the cause of the blood pressure being 95/40 right before induction?

A It may well have been because of the 100 micrograms of fentanyl that was administered to get him comfortable and get him into bed.

Q Is that your opinion that that was the cause of that blood pressure?

A I don't -- I don't frankly know why his blood pressure dropped but he was -- the records say that he was given 100 micrograms of fentanyl in preparation for the induction of anesthesia. And that correlates with the blood pressure of 95 that was on or about 9:05, I believe.

Q Okay. So we're at the propofol, which you believe was given by 9:12, 100 milligrams; which you consider to be reasonably light, okay --

A Correct.

Q -- for someone in what you consider to be a good physical status which you believe Mr. Porter was in, correct?

A I believe that he -- good stretches the point. But critically ill, I would not have labeled him

as critically ill at that point in time.

Q Well, I simply used the term **good** because that's what you used in your report. ***So*** now you're saying he was not in good physical status but he was not critically ill. He was somewhere in between there?

A If I used the term "good", in the whole spectrum of illness, he was gooder than he was bad.

Q Okay. ***So*** we've got the propofol, which we've now given. It's 100 milligrams. Then what was the next anesthetic agent or anything administered by Dr. Quansah by way of time and amount?

A Well, the anesthesia record indicates something was started at 9:15 but is silent to what it was in the way of a volatile anesthetic.

Q What is the -- is there an amount?

A No.

Q So you have no idea what was given at 9:15 by way of a volatile anesthetic?

A The deposition indicates that it was Forane.

Q What are the potential volatile anesthetics that will be given in this type of a case?

A It depends on what's available in that institution. I suspect that Forane,

sevoflurane. Desflurane may well have been available. They still may have been using halothane. I doubt they're using Ethrane.

Q So it's most likely that it was, in fact, Forane. Do you have any reason to disagree with Dr. Quansah's testimony?

A I don't disagree with what she said in her deposition. But all I'm saying to you is the clinical record does not indicate what or in what concentration she gave it.

Q Did you reach a conclusion from all of the information, including her depositions, as to the volatile agent that she administered at 9:15 and the amount?

A At the time that I -- at the time that I wrote my letter there was no indication.

Q Doctor, please listen to my question. Did you come to a conclusion after reviewing the record and her two depositions as to what volatile agent was given at 9:15 and the amount that was given? Yes or no?

A I can't answer that question because you have gone -- you have now assumed that I read from Quansah's second deposition before I wrote my letter, which is incorrect.

Q No, I'm not. I'm just asking you, not based on your letter. I'm asking you now after you've reviewed everything to go through the steps of what was given when, all right?

A After having read her depositions, I believe that she gave Forane and turned on the Forane on or about 9:15. .

Q And when you turn it on, is there any amount that is given or, you know, did you get any conclusion as to --

A No.

Q Okay. Forane would be a volatile anesthetic agent to give in this particular situation, correct?

A There would be some that would argue that it is problematic because it causes a tachycardia, which might be .accentuated in someone with --

Q My question is: Are you critical?

A -- a preexisting tachycardia.

I'm not particularly critical of the Forane choice.

MR. LANSDOWNE: Let's let him finish the question, Dierdre. We're going to get this back and forth on the record and it's going to be a mess.

Q Let me make this clear, Doctor. I'm interested in your opinion because you're the one that is going to testify, okay? I'm **not** interested in some would say this or some would say that. You're the expert here who's giving the opinion, so I want to know what your opinion is. And if I'm asking if you're critical or not, it's whether you are critical, okay?

A Yes, ma'am.

Q Okay. And obviously if you don't understand any of these, please stop me and ask me, okay --

A Certainly.

Q -- about my question.

So you're not critical of giving Forane as a volatile anesthetic at 9:15, correct?

A Correct.

Q That's based on everything that you have seen in this case?

A In regard to what?

Q What happened next as far as any anesthetic agent or --

A She gave a muscle relaxant.

Q At what time?

A The anesthesia record says at about 9:20.

Q **Do** you disagree with that? Was it 9:20?

A No.

Q And the anesthetic agent, what's the purpose or the --

MR. LANSDOWNE: Muscle.

Q Muscle relaxant, what's the purpose of that?

A Muscle relaxation.

Q And that's Zemuron?

A That's correct.'

Q And is the purpose of that so that the surgeon can do, in this particular case, the procedure on the leg without any problem?

A There is no need to give a muscle relaxant for the procedure in question.

Q Okay. How much Zemuron was given?

A The record says 30 milligrams.

Q Do you believe it was a deviation from the standard of care for her to give the muscle relaxant Zemuron?

A No.

Q That's a judgment she made as the anesthesiologist in this case to give the Zemuron?

A Correct.

Q Then what is the next thing by any kind of agent or --

A On or about the time that she turned on the Forane, she turned on nitrous oxide.

Q What's the purppse of the nitrous oxide?

A It is a second inhalation anesthetic that works synergistically with the other anesthetic drugs that are given.

Q Was that appropriate in this case to use the nitrous oxide?

A Certainly.

Q when you talk about it having a synergistic effect with the other anesthetic drugs, we're talking, would it be fair to say, that anything which was administered by her in the course of this anesthesia would work together as anesthetic drugs?

A With the exception of the muscle relaxant.

Q Okay. Then what's your understanding of what occurred next by anything that was given or stopped being given?

A Well, it is my understanding that the blood pressure was profoundly low and the Forane was first turned off. The record says it was turned off at 9:25.

Q Okay. Do you disagree that it was turned off at 9:25?

A If the blood pressure were, in fact, in the 60s at 9:12, continuing Forane to 9:25 would not be in the best interest of the patient.

Q Is it a deviation from the standard of care to continue the Forane past 9:12, assuming the blood pressure is in the 60s?

A I can't answer that with a yes or no. Is it a deviation from the standard of care to leave it -- to leave the concentration of the drug at anesthetic levels if there was an attempt to reduce the level of the anesthetic during the period of time prior to it being turned off, then that is not a deviation of the standard of care.

Q What do you consider to be anesthetic levels for the Forane?

A Somewhere between .75 and one and a half percent.

Q And what is your opinion, if you weren't going to turn it off, that it should have been reduced to?

A To some very, very minimal level.

Q Being what?

A Something .1, .2, .3.

Q Okay. Do you know what the level was, the

percentage level was of the Forane that was being used when it was first --

A It's not recorded

Q Did you get anything from the reading of the depositions that told you what the percentage of Forane that was being used by Dr Quansah was?

A No

Q You say the blood pressure became profoundly low; is that correct?

A That's correct

Q Tell me the point in time that we're talking about when you believe it became profoundly low.

A 9:12 a.m.

Q And give me what the blood pressure was

A 67/46.

Q Okay What caused, in your opinion, the blood pressure to go to 67/4 at 9:12 a m ?

A A relative overdose, not absolute but a relative overdose of anesthetic agents based on Mr Porter's status at the time

Q His status at what time?

A At 9:12.

Q Okay So you believe that 200 micrograms of fentanyl, 100 milligrams of propofol were given by 9:12 and Forane was given by 9:12, correct?

A That's my understanding.

Q And those together were what you considered to be an overdose of anesthetic agents for Mr. Porter?

MR. LANSDOWNE: Objection.

A I believe that that misquotes what I said. I believe the record will reflect that I said either a relative or absolute overdose based on his condition.

Q Well, either a relative or an absolute. What is your opinion it was, a relative or an absolute overdose at that time?

A It can be defined either way.

Q Okay. Tell me your definition of relative, then overdose.

A If a patient is hypovolemic, usual doses of anesthetic drugs cause an exaggerated response in blood pressure.

Q The exaggerated response being a drop?

A A drop.

Q Okay.

A And the response of the blood pressure was exaggerated in this circumstance so that, although the amount of drugs in an absolute number is not excessive -- are not excessive

relative to Mr. Porter's status at the time, were relatively too great.

The amount of drug that's required to anesthetized any given person is extremely variable. The amount that is necessary is classically said as enough and not too much but it's different for each individual.

Q Okay. So when we're talking about absolute, then, we're talking about the actual number amount, whereas relative means to you in relation to the patient's condition; is that right?

A That's correct, but it -- it is impossible to say whether it is relative or it's absolute inasmuch as I don't know the sequence of the fentanyl as it was originally given. I don't know the exact timing of the propofol because if 100 micrograms of fentanyl dropped the blood pressure from 110 to 95, a second 100 micrograms of fentanyl is an absolute overdose and a relative overdose. If 200 micrograms of fentanyl drops the blood pressure to 67/40-something at 9:12, it is absolutely an overdose to give 100 milligrams of propofol at 9:15 which is what the record states.

Q Okay. Doctor, Mr. Porter was what height and weight?

A Average is best -- 180 pounds and I don't know, 5' 8", 5' 9", something like that. I don't recall his exact height and weight.

Q Was he hypovolemic at the time he went to the OR?

A I believe that -- I'm sorry. He was 5' 10". I believe that he was relatively hypovolemic at that point in time.

Q On what do you base that?

A The response of the anesthetics that were given being exaggerated and very profound.

Q What was the cause of the hypervolemia?

A You mean hypo.

Q Hypo, I'm sorry. Hypovolemia.

A Either lack of appreciation of intravascular losses either through the dressings, the time of the original injury, or it is conceivable that the sepsis was operative, to some degree, causing a relaxation in blood vessels or at least a change in the resistance of the blood vessels so that the amount of intravascular blood was relatively inadequate.

Q Okay. Did you base your opinion in this case at

all on an assumption that he had a liver laceration that was in existence at the time that he went to the second surgery and that he was bleeding from the liver laceration?

A There is no doubt that the information that I had at the time suggested that a liver laceration might have played a role.

Q Is it your opinion, as we sit here today, that Mr. Porter had a liver laceration at the time that he went to the operating room on the 15th which was playing a role in what you considered to be a hypovolemic status?

A I don't frankly know whether or not the liver laceration was present before or after the anesthetic experience, but it is irrelevant to my statement that I believe the patient was hypovolemic.

Q And it was either -- he was hypovolemic either because of loss of blood through the dressings from the injury prior to this operative procedure and/or because of sepsis?

A That's correct.

Q Okay. And it is your opinion that the response of Mr. Porter to the anesthetic agents which we've talked about, which is the 200 micrograms

of the fentanyl, the 100 milligrams of the propofol and the -- which you believe occurred by 9:12 were the cause of his blood pressure dropping to 67/46?

A Would you repeat that question, please?

MR. TREU: Before we do that, can we go back a couple questions? Sorry. I want to hear his answer to her question as to what he felt, if the liver laceration was present at the time.

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(Record was read.)

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MR. TREU: Thank you.

MS. HENRY: And now I've forgotten my last question and answer.

THE WITNESS: There wasn't an answer. There was a question, so repeat the question.

MS. HENRY: What was my last question?

MR. TREU: She is going to read it.

MS. HENRY: I think I remember.

Q Doctor, you have told me based on your review of this record, including also the depositions of Dr. Quansah, that it is your opinion that she had to administer 200 micrograms of fentanyl by 9:12, correct? That's your opinion of when it would have been.done by?

A None of the drugs cause a change in blood pressure instantaneously. *So* the answer is, yes, they must have been given no later than 9:12 but presumably before that.

Q Okay. So it's your opinion that there were 200 micrograms of fentanyl as well as 100 milligrams of propofol given by 9:12; is that right?

A I believe that question has been asked and answered. And my statement was that if the anesthesia record is correct, the propofol was given after 9:12 but the drop in blood pressure would suggest it was given at the same time as the other drugs, which is usual and customary for induction of anesthesia.

Q Okay. *So* let's go back to my question. You have reached the conclusion that the drugs that we've talked about, the propofol, which is 100 milligrams, and 200 milligrams of fentanyl -- or micrograms of fentanyl were given by 5:12 -- or

9:12, and that's when the blood pressure dropped, correct?

A That's correct.

Q Okay. And the blood pressure dropped to 67/46 --

A That's correct?

Q -- correct?

And it is your opinion that because the blood pressure dropped to 67/46, the medications which we have just talked about were a relative overdose of anesthetic agents for Mr. Porter; is that correct?

A That's correct.

Q Okay. And until those medications are given and you have that response, you do not know that they are going to be a relative overdose, correct?

A That's correct.

Q You would have given -- you would have found those to be acceptable amounts of those medications to be given to Mr. Porter?

A Certainly.

Q Okay. And then we talked about the fact that the Forane was started at 9:15 and you were not critical of that?

A That's correct.
Q And the nitrous oxide was started at 9:20 and you are not critical?
A That's not correct.
Q Okay. You are critical of the nitrous oxide?
A That's not an accurate representation of the time.
MR. TREU: The time.
Q When do you believe the nitrous oxide was started?
A Dr. Quansah's record that it was started at 9:15.
Q Okay. That was my error.
Are you critical of her starting the Forane and nitrous oxide at 9:15?
A No.
Q Okay. Now, it is your opinion, therefore, that the Forane should have been either reduced to .1 to .3 percent at nine -- right after administration of it and prior to 9:25, and if that was not, it was a deviation from the standard of care?
A You asked me for a specific number and I gave you .1, .2 or .3.
Q Right.

A But I said to you it needed to be substantially reduced from whatever the preexisting level was. And I don't have indication of whether she was given three percent or five percent Forane at that time, or two percent or one percent or a half percent. But a low level would have been acceptable. And the number of .1 .2 .3 represents low levels, but I can't say that .4 would have been wrong and .3 would have been right.

Q Okay. Then it is your opinion that when she administered the Forane and the nitrous oxide, almost immediately after her administering those, she should have reduced the level of the Forane to somewhere in the realm of .1 to .3 percent?

A We have said that and she should have severely reduced it.

Q At what time?

A If the blood pressure were seven -- if the blood pressure is --

Q Why don't you look at this, okay. Let's try and be specific as to what you say she should have done at what time.

A If the blood pressure is 67 at 9:12, it is

inappropriate to start Forane and nitrous oxide at 9:15 the way the record reflects it.

Q Okay. So you are -- so what you're saying is you are critical of her starting Forane and nitrous oxide?

A I'm not, but only because I believe the record does not reflect the custom and the practice of anesthesia during which the drugs are given, and the anesthetics are turned on virtually simultaneously.

Q Let's assume that the Forane, the nitrous oxide and the other medication -- the other agents which we've talked about were started prior to the drop in the blood pressure of 67/46.

A That's what I've assumed.

Q Okay. Now assuming that, in fact, is true, at what time should the Forane have been reduced or stopped?

A 9:12.

Q What about the nitrous oxide?

A I would not have been critical of the nitrous oxide had been continued.

Q Okay. And the reason that you would have turned off or significantly reduced the Forane is what?

A It is a very potent myocardial depressant,

vasodilator, and it drops blood pressure.

Q So if she started at 9:15, it would not be the nitrous oxide and the Forane. She shouldn't have started it?

A That's correct.

Q And if it had been started, as you believe it was or assumed it was at 9:12 at the time the other medications were given, she should have reduced the Forane or turned it off?

A That's correct. But I know you'd like me to answer yes or no, but we keep saying that the drugs and the blood pressure occurred simultaneously, and I've tried to say it on multiple occasions that the drugs and blood pressure don't happen instantaneously.

For a blood pressure to appear at 9:12 is a reflection of activities that occurred in the preceding three to five minutes. So to repeatedly say that something happened at 9:12 coincident with the blood pressure of 67 is not accurate, and the activities preceded that blood pressure by several minutes.

Q Okay. But what you're saying is when the blood pressure manifested itself so that she could see it on a monitor or something as 67/46, at that

point in time she should have either turned off or reduced the Forane?

A Correct.

Q And to not have turned it off until 9:25, assuming it was kept at the same level, would be a deviation from the standard of care?

A Correct.

Q What, in your opinion, would have occurred had this -- strike that.

Are you assuming, because of what occurred in the pattern of the blood pressure, that the Forane was not reduced?

A No. I'm assuming that her record is not accurate. I'm assuming because she said in her deposition that -- I mean, actually, she said this in her written note, a parenthetical sort of a statement, the Forane had been turned off. I'm giving her the benefit of the doubt tu assume that when she saw the blood pressure of 67/46 she turned it off, but that the record does not reflect what she did.

C What is your opinion she should have done at 9:12 for the management of Mr. Porter's anesthetic other than reducing or turning off the Forane? What steps should she have taken at

that point in time in your opinion?

A I think it would have been acceptable to watch it for another two to three minutes, turn up the fluids, turn off or severely reduce the agents that you can turn off and see what happens over a short period of time.

Q What agents would you have turned off?

A The ones -- the only thing you can turn off is the Forane and the nitrous oxide. And I said that I was not critical of nitrous oxide continuing because of its minimal effect on blood pressure, but the Forane I was more critical of. It occurred in a sequence as the record reflects.

Q So you think that at 9:12 she should have turned off the Forane and increased the fluids?

A At the very minimum, that's correct.

Q And what amount of fluids should she have administered to Mr. Porter, and what fluids should she have administered?

A I think she was giving lactate Ringer's. And if she turned it up as fast as it would run, that's how much she should have given.

Q What would that be? What would be --

A It's an unknown. It's unknown how fast it would

run. It is an 18-gauge needle, I believe. An 18-gauge IV was in place. And if it is at a gravity flow, the rate that it runs depends on the height the bag of fluid is above the intravenous site.

Q So she should have done it wide open?

A She should have done it wide open and conceivably put pressure on the bag to increase fluid flow at that point in time. And I would not have been critical if she had given a bolus of some vasopressor at that point in time.

Q What vasopressor? Are you saying it would have required her to give a bolus of a vasopressor or you just wouldn't be critical?

A No. I think that if in the next blood pressure in a couple of minutes -- she alluded in her deposition to hitting the stat button on the blood pressure. And the way that works is that as opposed to cycling the blood pressure cuff every two or three minutes, you press the button and the machine gives you a rapid response in a sequence that occurs every 20 or 30 seconds.

If she had followed the blood pressure at a rapid rate over the next two or three minutes and there was no response to the blood pressure,

then I think the administration of a vasopressor would have been mandated at that point in time.

Q So if by 9:15 or so we still had a blood pressure of 67/46 or very close to that, she should have given --

A Something.

Q -- what?

A There is no correct answer.

Q What are the appropriate things that should have been given and what amounts?

A There is not a correct answer to that, Counsel. There are five or ten vasopressor drugs. The common ones that are used are ephedrine, Wyamine, and that is at a lower level of aggressiveness. Phenylephrine is one notch more aggressive. It works differently and it's more aggressive. Dopamine, dobutamine. There are 15 or 20 different drugs that support the blood pressure. And phenylephrine, the drug that she chose, I'm not particularly critical of.

And I frankly believe that, once again, the medical record does not reflect, does not reflect what she actually did because it's in conflict with what she said in her deposition.

Q If you use dopamine or dobutamine, how do you

administer that?

A Continuous infusion.

Q So you have to get it hung, titrate it?

A Correct. That's correct.

Q And that's not going to have as quick a response as something that you can give a bolus of right away, correct?

A I'm not suggesting that dopamine or dobutamine or any of the drugs is better or worse than her choice.

Q Okay.

A But to point out I'm --

Q Well, what you're saying is that at 9:15 if the blood pressure had not come up from 67/46, she should have given something?

A To artificially support the circulation.

Q And how quickly would you have wanted to get in the system and get a response to artificially support this system?

A I would like the drug that she gave to be given on or about 9:14 or 15 as the blood pressure is cycling, and would expect a response from it within two to three minutes. Probably within a minute.

Q Now, when she did give the medication here to

support the blood pressure, did she get a response?

A It's impossible for me to tell because the medical record says she gave the phenylephrine at 9:25 and in a single dose, which is also the time that the medical record says that the patient was lifted from the OR bed to a prone position. And she clearly states in her deposition that she titrated 200 micrograms of phenylephrine on or about the time preceding and during the turn.

So I can't -- I can't make any sense out of the fact that she -- her record says she gave 100 mics of phenylephrine at a point in time when her record also says the patient was lifted from the OR bed. Yet in her deposition she says, I said to the people in the room, We can't turn him until I give the phenylephrine.

So the timing, the sequence, is not consistent again. And I am left trying to interpret the medical record and the blood pressure, trying to give her the benefit of the doubt as to when she gave them. And I suspect that she gave the phenylephrine in response to the blood pressure of 67/46.

Q At what time are you saying that you believe she gave it?

A I believe she gave it shortly after she saw the blood pressure of 67/46. but that's not what she wrote down

Q There has no response to the phenylephrine which would have been appropriate in this case; is that correct?

A There was a response

Q But was it an acceptable response?

A I think it was a -- I think the blood pressure went from 67 back to 80 over the next three minutes in response to the phenylephrine

Q Should the procedure have continued?

A I think that we are at a point right there in time where we have to seriously consider whether or not the procedure should have continued

Q Okay In your expert report you say that the operation should have been terminated within the initial 15 to 30 minutes of the procedure; is that right?

A That s correct

Q Okay So according to what we see in the record. at what time specifically would you say that should have been terminated?

A Would you like to base that answer on the record or what I presume really happened?

Q Well, what time did the surgery start?

A The surgery started at, according to the record, about 9:35.

Q Okay. And do you believe that the actual surgery by Dr. Ghanma started at 9:35?

A About that. I believe that the patient was turned prone at 9:25. And I believe there was some positioning and spraying with prep solution and drapes were applied and that he probably began surgical stimulus around 9:35.

Q So when you say it should have been terminated within the initial 15 to 20 minutes of the procedure, are you talking about from the time that Dr. Ghanma started the actual surgical procedure?

A No.

Q Okay.

A I'm talking about within 15 to 30 minutes of 9:12.

Q Okay. So at what time should this procedure in your opinion have been stopped?

A When we -- when there has been a total of 300 micrograms of phenylephrine, the fluids have

been increased, 'surgical stimulation has begun, anesthetics have been turned off and we can't get a blood pressure any better than 88, I believe it's time to say whoa.

Q So tell me the time that you would have said this should have stopped?

A I would have began talking to the surgeon by the time that we were talking about turning him at 9:25.

Q Okay. And what would you have been telling the surgeon?

A There is something going on that is not as is advertised. I have turned off my anesthetic agents. I'm giving this patient nothing but oxygen. I have given one or two, or some segment of a very potent vasopressor and I can't get the blood pressure over 80 to 85. There's something going on here that I don't know what's going on. I believe we need to seriously consider aborting this thing.

Q Okay. And so the surgery would not have even been started by Dr. Ghanma, the actual surgical incision?

A There wasn't an incision.

Q The start of debridement would not have started?

A But clearly at a point in time when he is hurting the patient, the first thing is that a dose of phenylephrine was given with minimal response.

The second indicator that there's a problem is a second dose of phenylephrine is given twice the size of the first dose and nothing very phenomenal happens.

The third thing that happens is that we've begun surgery without benefit of anesthesia and nothing happens.

Q So stop right there. Are you saying that Mr. Porter is being operated on at this point in time as if he had not been given anything? You know, what are you saying about -- you said "without the benefit of anesthesia."

A The nitrous oxide had been turned off, the Forane had been turned off, the propofol has beer? metabolized. We have now only fentanyl on board and paralysis. The patient is being ventilated with 100 percent oxygen, no anesthetic gases are being given. The propofol is gone. We have only the dose of fentanyl and surgical stimulus without anything but a dose -- the fentanyl musters a blood pressure only to

85.

Q Okay.

A And that is within the 15 to 30-minute window that I was speaking of after that 9:15 beginning time -- 9:12.

Q So is there any narcotic effects on Mr. Porter at this point in time? Is he feeling pain? Are you trying to say he's feeling pain somehow?

A I don't know.

Q Okay. Are you going to be giving any opinions in this case that somehow during this surgical procedure Mr. Porter was feeling pain, consciously feeling pain?

A There is nothing that Mr. Porter has in his body at 9:35 that renders him unconscious.

Q My question is: Are you going to be giving an opinion in this case that, at the time that Dr. Ghanma started his surgical procedure; Mr. Porter was consciously feeling pain? Yes or no?

A I hadn't thought about that.

Q Well, as represented by your lawyer at a pretrial, I'm asking you.

MR. LANSDOWNE: Well, wait a minute. Let's not ask questions about what I'm

representing. What I said at the pretrial is the narcotic agents had been removed and that the patient was, in fact, experiencing pain.

MS. HENRY: Okay.

MR. LANSDOWNE: So in a legal --

MS. HENRY: Let me give him this question.

Q Are you going to give an opinion, to a reasonable degree of medical certainty, at the time of trial that Dr. Ghanma started his surgical procedure, and during the time that he was working on Mr. Porter, that Mr. Porter was consciously feeling pain?

A I don't have any way in the world of knowing what Mr. Porter felt. Consciousness under anesthesia is not unheard of even when major anesthetics are'given. And all I can say is he did not have any major anesthetics going.

Q Is there any way -- is there any sort of test or any way to measure whether or not a patient under any kind of anesthetic agent is feeling pain?

A The response is heart rate and blood pressure.

Q Is there anything in this record? So I'm clear, and I want to know your opinion before we get to

trial, are you going to testify to the jury, to a reasonable degree of medical probability based on your review of this record, that it is your opinion that Mr. Porter was feeling conscious pain at the time of the surgical procedure by Dr. Ghanma? Yes or no?

A That is --

MR. LANSDOWNE: Objection.

A That is an unanswerable question. I can say, with a reasonable degree of medical certainty, that there were no anesthetic agents operative except for the .fentanyl.

Q Okay. Which is a narcotic?

A Which is a narcotic.

Q Used for pain?

A Used for pain.

Q It would, therefore, be speculation as to whether or not Mr. Porter was feeling conscious pain during the surgical procedure by Dr. Ghanma, correct?

A It is an unanswerable question.

MR. LANSDOWNE: Objection, conscious pain.

Q It would be speculation as to whether or not Mr. Porter was feeling pain during this surgical

procedure, correct?

A I don't know how to answer the question except --

Q You can't say, to a reasonable degree of medical certainty or probability, that he was experiencing pain, correct?

A Oh, I think there is no doubt in my mind that there was pain present. Whether or not he was conscious of it or not is unknown to anyone.

Q Okay. All right. So it's your opinion, therefore, in this case, that at 9:25, prior to Dr. Ghanma even starting this procedure, Dr. Quansah should have been talking to him about what had been going on, and at that time she should have already turned off the Forane, the nitrous oxide, and have given wide open fluids and already have given epinephrine or something of that effect, correct?

A No, I did not say the nitrous oxide should have been turned off.

Q Okay. At 9:25 she should have been saying to Dr. Ghanma before he started the procedure, You know, I'm having problems here, and she should have already turned off the Forane?

A Correct.

Q And should have already administered, at 9:14 or 15, something which you would have expected a response from in one minute?
A Blood pressure.
Q For the blood pressure?
A Yes, that's correct.
Q And should have advised Dr. Ghanma that he shouldn't have proceeded with the procedure?
A I didn't say that. I said there should have been a discussion of it. She should have said, "I'm not giving any anesthetic agents and I can't keep the blood pressure together."
Q Okay. In your opinion as an anesthesiologist, should Dr. Quansah have said to Dr. Ghanma, "I'm not" -- "I can't keep the blood pressure together and I don't think we should proceed with this case"?
A I agree with the first half of it. The second half of it becomes a surgical decision.
Q And what is the -- what would be the basis of a surgical decision be in that situation for an anesthesiologist to say --
A It occurs all the time. I mean, the inability to give an anesthetic, a traditional anesthetic to people who are unstable happens in the trauma

room all the time. And what is done then is there is something given to maintain amnesia.

Q And what would be given -- assume that Dr. Ghanma said, "Let's proceed with this. What would be given and in what amounts and when?

A One would --

MR. LANSDOWNE: Wait a minute. You're asking him to assume that Dr. Ghanma said something different than he said he would have done other oath in his deposition.

MS. HENRY: I understand that. I understand that.

Q Let me --

MR. LANSDOWNE: Okay. All right.

MS. HENRY: I said "assume".

MR. LANSDOWNE: Okay. You're right.

MS. HENRY: Assume.

MR. TREU: Is this a good time to take a break?

MS. HENRY: No, but you can leave.

MR. TREU: All right. Go

ahead.

BY MS. **HENRY:**

Q Assume that she had said to Dr. Ghanma, which you said, and a decision was made that, "This procedure should proceed," you say that the way to do that would be to give some agent and continue with the procedure, correct?

A Correct.

Q And what in our hypothetical here would have been given and in what amount?

A One would have given scopolamine for its amnestic effect, additional doses of midazolam for its amnesia, or one would have tried to continue to give 50 percent or 60 percent nitrous oxide to the balance of the anesthetic to maintain amnesia with minimal depression of the cardiovascular system.

Q What about the scopolamine, what amount would be given?

A .4 milligrams, .6, .8 milligrams.

Q At what time would that -- should that have -- if you're going to proceed would you give that?

A I'd give it right then. If you have -- if I have been forced to terminate all of my major anesthetics, I would give those drugs on or

about that same time.

Q And does that have any kind of a cardiovascular effect, scopolamine?

A It may raise the heart -- it may tend to raise the heart rate, but in somebody with a blood pressure or heart rate of 130, I doubt it would do anything.

Q Mida?

A Midazolam. Versed, V-e-r-s-e-d, is the trade name. It's easier.

Q Does that have any cardiovascular effects?

A It can have a cardiovascular effect. It can drop the blood pressure. And so one would be required to give it judiciously and hope the amount given was enough to create amnesia.

Q And the amount you recommend to be given?

A Somewhere between two, three, four milligrams titrated over many minutes, if one was to use that approach.

Q How many minutes?

A Five, six.

Q And 50 percent to 60 percent nitrous oxide?

A That would have been my choice for amnesia. It would have been to continue nitrous oxide.

Q What would be done to try and keep the blood

pressure stable?

A Just what she did to treat it, as any other roaring emergency trauma that comes in where you run fluids as fast as you can and start more IVs, and run more fluids and try to keep -- and then you're required -- in that circumstance, you are required to give paralysis. And it's treated like any patient who comes in with a motor vehicle accident or a gun shot wound who comes into the operating room for surgery with no blood -- low or no blood pressure and depressed.

Q And you give -- required to give paralysis?

A That's correct.

Q From what we've been talking about would give the paralysis?

A Vecuronium.

Q Another name for that?

A Rocuronium is the real name.

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(Recess taken.)

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BY MS. HENRY:

Q Doctor, you said in your report here that had the operation been terminated within the initial

15 to 30 minutes of the procedure, which we are talking about, according to your testimony, 15 to 30 minutes of 9:12 now, correct?

A Uh-huh.

Q That Mr. --

A Yes.

Q That Mr. Porter would have -- the acute survival by Mr. Porter would have been highly probable if not certain, correct?

A Yes.

Q When you talk about acute survival, what do you mean?

A I mean that he would have likely lived to undergo appropriate diagnostic and therapeutic intervention which would have been mandated as part of his medical care.

Q So he would have come out of the operating room alive, is that what you're saying?

A Yes. Yes.

Q And assume that -- what if the surgeon felt that if they terminated the procedure and the surgeon felt that he still needed to do additional work, what, in your opinion, would need to have been done before going back in for surgery for Mr. Porter?

A I think he needed to most likely have central line placement, summation of intravascular volume. Probably to begin with there would probably end up being a cardiac echo if the information derived from the pulmonary artery catheter were not conclusive. There would have been restoration of the relative hypovolemia that we talked about, or the absolute hypovolemia that we talked about, and he would have been made a better surgical candidate for the -- for what needed to be done, and I don't -- I don't disagree that infection needed to be eliminated by debridement or drainage or whatever method.

Q The restoration of hypovolemia would have consisted of what? What would have been given to him, blood or fluid?

A Probably not blood, but likely substantially more crystallized. And depending on what part of the country you're in, there may have been colloids.

It is unlikely -- it is unlikely that blood would have been given unless -- unless the fallen hematocrit that was manifest on day two continued, and unless the additional fluids I

had mentioned. Ringer and normal saline, the crystalloids and colloids had ended up diluting down his red cell mass, and if it had ultimately gone into the 20s, there are some that would have transfused red blood cells at that point in time and others might not

Q What do you believe was the cause of the fallen hematocrit?

A I think it was a combination of blood loss at the time of the trauma coupled with ongoing bleeding through the dressings, combined with the administration of fluids which tended to dilute down the red blood cells that were left

Q So then you are saying that there was no -- then you are saying, therefore, there was no bleeding from a lower laceration contributing to the fall --

A I said that I didn't know one way or another. And I'll let the big boys argue about that as to whether it was or wasn't, but I feel absolutely certain that what I told you was accurate and the rest of it is above my level

Q Okay. Even with all your expertise in critical care?

A I'm not a pathologist

Q Okay. Based on your experience in critical care that you said that you've had, as well as your experience with these many years as an anesthesiologist, had that procedure had to have been stopped before Dr. Ghanma even did anything for Mr. Porter, how much delay could have occurred before he needed to have this debridement done?

A Well, I think that the debridement would probably need to be done within the next ten to 12 hours but that is a wild, wild guess because there are ways of -- there are ways of packing extremities in ice. I mean, people have rotten legs that are infected, arteriosclerotic heart disease, the diabetics who have gangrenous legs who are rotten and are -- the movement of bacteria and bacterial byproducts from an infected extremity into the central circulation needs to be -- needs to be minimized and ultimately needs to be fixed. But did it have to be been in 30 minutes? No. Could it have waited three or four days? No.

Q So it's your opinion, based on your critical care background as well as your experience in anesthesiology, that in Mr. Porter's situation

you could have waited ten to 12 hours to take him back to the OR, assuming that Dr. Ghanma had done nothing?

MR. LANSDOWNE: Wait a minute. He said it was a wild guess not -- you know, if you want to find out if that's his opinion, you can ask another question. But presuming that's what was his opinion when he said "a wild guess," I think, is inappropriate.

Q Do you have an opinion, to a reasonable degree of medical certainty, based on your training and experience, as to whether or not this surgery could have been stopped prior to any intervention by Dr. Ghanma for a period of time to do those things which you said medically would have been done as intervention without compromising Mr. Porter's survival?

A I'm sorry. That was a long one there. My understanding of the question is: Do I think we could have stopped the surgery and that we could have then provided medical intervention and, as they say, fine-tuned and doctored on him for a while without having adversely affected his outcome.

Q Without affecting his survival in the case?

A That's what I meant by outcome.
Q Yeah.
A And I said absolutely.
Q And for what period of time could surgery have been delayed before intervention to -- so that it wouldn't affect his outcome?
A That's yet another area where communication between the person in the intensive care unit who's doctoring on him and the surgeon need to come in to play.

If you would allow me to -- for instance, if we have gone 12 to 14 hours on trying to improve his physiological condition and are getting nowhere because of what's felt to be ongoing sepsis and that there's no way to fix it, then -- and my surgical colleague says, "We're going to have to bite the bullet and go," I would defer to the surgical colleague.

If we are making progress and improving things, his blood pressure is stabilizing and we're making progress, I would try to, I believe, optimize that before we went back to the operating room. But if my surgical colleague says, "We're losing, let's go," then I would do the best of my ability to keep the

patient alive and allow the debridement.

Q Okay. It's your opinion that he was hypovolemic and that really was a source of all the problems with the anesthesia in this case. Is that simplistically what your opinion is?

A Except that I said relative or absolutely hypovolemic, that the amount of blood that was in his vascular system was not sufficient either because of the size of the tank or the size of the vascular space, or because of the absolute amount of blood that was there. And I'm --

Q I thought you said earlier that he was hypovolemic either because of blood -- loss of blood or because of his sepsis?

A That's exactly what I said.

Q Okay.

A And sepsis makes the tank bigger, and blood loss makes the tank the same size but makes the blood that's in it less.

Q Okay. Did Dr. Ghanma know at the time of this surgery that Mr. Porter was hypovolemic?

A I don't believe so.

Q Did Dr. Quansah know at the time she started the anesthesia that Mr. Porter was hypovolemic?

A Before she started it?

Q Uh-huh.
A I don't think so.
Q Okay. It is your opinion that what happened at 9:12 after the administration of the medication, the anesthetic agents and his response to it, is an indication that he was hypovolemic?
A That's correct..
Q Was there anything in this record that could have told either Dr. Ghanma or Dr. Quansah that Mr. Porter was hypovolemic prior to the surgery?
A There are soft signs, but there's nothing that I would say that's absolute that says this one physical finding says hypovolemic period.
Q What are the soft signs that you saw in the record of hypovolemia?
A Just the fact that the blood pressure was coming down and the heart rate was going up.
Q Did the white blood count and the fever --
A They make me think he has an infection.
Q Okay. Which is the sepsis we're talking about, which is an indication of what may have been what caused the hypovolemia?
A It could play a role. I think it's multifactorial. I do not believe any one specific thing can be attributed to the cause of

what was going on.

As I've said over and over, I only know that the response to these anesthetics declared that there was something going on and it's most likely the response of hypovolemia.

Q You say here in your report that -- if you want to look at it, Doctor, so we're looking at the right part, that there was -- he was required to have this ongoing operation without a legitimate medical diagnosis. What do you mean by "without a legitimate medical diagnosis"?

A That the people -- that the anesthesiologist, specifically since she was taking it on herself to be totally and absolutely responsible for the hypotension, she didn't know why he was hypotensive and why he didn't respond to her intervention.

Q So when you talk about the legitimate medical diagnosis, you are saying in reference to his hypotension?

A She didn't know why -- that's correct.

Q Okay. And what communication do you understand occurred between the anesthesiologist and the operative surgeon based on your review of the deposition?

A Well, Dr. Quansah says in her deposition that she said, "I need to treat his blood pressure before we turn him over," with the disclaimer that she does not know whether Dr. Ghanma was present or even heard that.

She also, in deposition though, stated very specifically that taking care of the blood pressure was her responsibility and she didn't need to talk to anybody about that.

Q I'm just asking you what the communication was that you understood took place, okay?

So what do you understand Dr. Ghanma's testimony is as to any communication?

A My understanding was he was told that she was quote, having trouble with the blood pressure at 10:00.

Q What's your understanding of why Dr. Ghanma was doing this procedure?

A Because there was dead and necrotic tissue in the thigh that served as a nidus for infection, and that prior to the ultimate repair of the tissue defect, infection needed to be under control.

Q Do you have any opinion as to whether or not this laceration of Mr. Porter's thigh at the

time he went to the operating room on the 15th was highly contaminated?

A I don't have any evidence that it was highly contaminated. I think there was a strong suspicion that it was.

Q Does --

A But the --

Q Go ahead.

A But the culture results, as I said before, I don't believe were back in anybody's possession. But when you have a major wound that you can't close and it's been infected, it's not unlike the multiple wounds that occurred during Vietnam when people stepped on bungie sticks and land mines, and those are infections until proven otherwise.

Q Okay. So you don't wait for the culture results to come back?

A No.

Q You look at how the laceration occurred, what the circumstances surrounding it were and then you exercise your judgment as to whether or not you believe there is a high potential for contamination, correct?

A Correct.

Q Did the fact this deep thigh laceration occurred while Mr. Porter was in Lake Erie, and he was in Lake Erie for a period of time before he was ultimately taken to the hospital, have any significance to you as to the potential for contamination?

A Can we go off the record?

MR. LANSDOWNE: Better not.

A I am not knowledgeable about the organisms that grow in Lake Erie, but I've been led to believe that Lake Erie has the potential for contamination.

Q Okay. You said that rather nicely.

Do you agree that the laceration sustained by Mr. Porter was of limb-threatening severity?

A That's not within my area of expertise.

Q Do you have an opinion as to whether or not Mr. Porter experienced a sudden bacterial sepsis during the debridement on 7-15-95 that resulted in what occurred in the operating room as far as the reaction?

A I have not read the deposition that talks about sudden bacterial sepsis syndrome but -- and so I cannot comment specifically as to whether or not there was a sudden bacterial episode during the

debridement, but can only suggest that his instability occurred and was occurring well before any debridement occurred.

Q Does bacterial sepsis occur -- strike that.

So what you're saying is a sudden bacterial sepsis during the debridement means during the actual procedure being performed by the doctor?

A Correct.

Q You said earlier that there were various texts that you could refer to that talk about the management of the -- strike that.

You said earlier that there are various texts that talk about the discussion of what sepsis is. Do you have one that you find to be authoritative?

A Not on that particular topic, no.

Q Okay. Do you have any anesthesia texts which you consider to be authoritative?

A I don't -- I don't, frankly, consider any textbook to be truly authoritative. And I've got to tell you that I sat on a panel in Miami with two of the premiere intensivists in the United States, one by the name of Mark Wile and one by the name of Shoemaker, one an intensivist

and one a surgeon, who sat on the stage for a solid hour for a definition of sepsis. And I was a junior faculty at the time so I tried to hide as much as possible so as not to be swept into the vortex, but they have each written prolific amounts defining, in their opinion, the definition of sepsis and the sepsis syndrome.

Q What I guess I was asking you was whether you consider any texts to be authoritative in the area of anesthesia. And you said --

A Anesthesia texts tend not to discuss sepsis syndrome in much detail.

Q So I'm asking separate from that. I'm on to another question. Do you consider any texts to be authoritative in the area of anesthesia?

A I can tell you the textbooks that have national recognition. I have trouble with the definition of authoritative.

Q Well, what do you mean by "national recognition"?

A Texts that are generally used in most training programs as reference texts.

Q Do you have texts which, as chairman of the department of anesthesia with the university down there in Arkansas, you have chosen as the

appropriate reference texts for --

A No.

Q -- for your residents?

A No.

Q What reference texts are your residents referred to in the program having to do with anesthesia?

A There are -- there is a whole multitude of anesthesia textbooks. For general textbooks, the ones that are edited by Barash or by Ron Miller or by Gravinstein or by -- there's a new version of a British text which has had some popularity. It's the Practice of Anesthesia by -- originally it was by Churchill-Davidson. It's a hyphenated name, and that is popular in some circumstances.

Q Well, what I'm asking you is in your being the head of the department of anesthesia, and I'm sure that you have some input into what the residents that are in the program at your university are referred to, what texts are they referred to?

A All of those texts are in the anesthesia library.

Q You just say, "Go to the library and look it up in the text"?

A No.

Q If you had to give one of them which of those that they should go to for a general anesthesia question, which one would you refer them to?

A A general anesthesia question? I would refer them equally to any of them. Having written a chapter for Barash, I have a bias.

Q So you refer them to Barash.

A And having been invited to write a chapter for the new Churchill-Davidson, there is some bias, but it would be remiss to suggest those were any better or any worse than anything else.

Q Would it have been appropriate in this case to do a spinal for the second surgery?

A There are -- probably not.

Q Okay. Why not?

A There's a whole multitude of reasons. The first of them is the patient refused it so you'd have been in conflict with patient's desires.

Q Taking that aside.

A Taking that aside, the blood pressure problems that one had with the general anesthetic would have been probably compounded because a general anesthetic is a titration of pain against poison.

The anesthetic agents are all poisons and the brain still senses pain, and it is a constant ongoing titration of one against another.

A spinal anesthetic, on the other hand, totally eliminates the transmission of pain from the operative area to the brain. At the same time, it causes absolute increase in the size of the vascular space that we talked about before with some of the drugs.

Q So it would have made it -- even the problems would have been even greater?

A There's no argument about that. Plus there's a large number of people that would suggest that the presence of sepsis or the presence of bacteremia ox the presence of whatever you want to call the fever and probable bacteria would preclude making a hole in the dura for fear of giving a central nervous system infection.

Q In your letter you refer to repeated doses of potent vasoactive drugs. And the potent vasoactive drugs that you're talking about that he got repeated doses of were what?

A Phenylephrine and then ultimately epinephrine.

Q And when you say "potent," I mean, how do you

determine what is potent versus, you know, not potent? I mean, you use these terms.

A I use the term in that the -- if you recall, I talked about ephedrine or Wyamine. Those are drugs where, even if I make a three-fold error in my calculation of the appropriate dosage, I do not have an overwhelming blood pressure response. They're drugs that have a high margin of safety. If you don't give enough, you don't get a response, but if you give too much, you don't raise the blood pressure to potentially lethal levels.

Phenylephrine is not one of those more benign drugs but is a drug that is extremely potent, which in the dose that it was used, and that is to say that you seldom don't get a response and the response, not infrequently, is a phenomenal hypertensive response.

Q If a patient has sepsis or is septic, does that affect their response to the phenylephrine? Do they have less response, more response?

A They would probably have less response.

Q Why?

A Well, because phenylephrine does nothing for the myocardial contractility. And part of what --

once again, if you -- back into the sepsis argument again. If you have a full-grown sepsis syndrome, the heart doesn't squeeze as well as it's supposed to so all of the responses, whether it's hypovolemic, absolute hypovolemic or relative hypovolemic with sepsis, the response to phenylephrine will be modified and minimized to some degree.

Q Is it your opinion the amounts of phenylephrine given by Dr. Quansah when she did give it was inappropriate?

A No. I think that -- I'm not critical that the amount that she gave was inappropriate. I'm critical of the fact that she gave what is a reasonably profound dose and saw no response and didn't do anyth'ing. I'm critical of her failure to appreciate the lack of response both to the phenylephrine and to the epinephrine.

Q If she did get the phenylephrine and the epinephrine and the -- and got the response that she did, in your opinion what should she have done after that?

A Just what she should have done before, which was say "Let's stop".

Q Okay.

A Shouldn't have been there. But once she got there, if you've got to use the dose of epinephrine, that's the same as you use in a cardiac arrest. You miss the boat to think that everything's fixed.

Q So at 9:12 or nine -- 9:12 she should have really started talking about stopping this?

MR. LANSDOWNE: Are we going back over where we were about an hour ago?

MS. HENRY: No. But I want to --

Q As far back as 9:12, it's your opinion she should have started talking about stopping this procedure?

A I believe my letter says that I would give her the grace of ten to 15 minutes, but that clearly within 15 to 30 minutes that things -- the die had been cast. The failure to respond was well documented and there should have been discussion about termination within 15 to 30 minutes after that period of time.

I don't think that -- I don't think that saying, "Gee, I've got a drop in blood pressure with my induction, I've had to turn down my anesthetic agents, let's quit right now" is

justified. But if it had been me, if I'd seen these responses that had gone on that period of time, I would hope I would have been talking to the surgeon. "We've got problems going on."

Q And you've already told me that if there was a decision to continue, we've discussed what you think should have been given at that time?

A Correct.

Q Starting with the scopolamine and that sort of thing.

And your opinions really in this case are as to survival. That had it been stopped, he would have come out of the OR alive?

A That's correct.

Q And you have no opinions as to what his survival would have been had this been terminated prior to the debridement and he had come out of the operating room as far as long-term, correct?

A My opinions there would be based on what the ultimate diagnosis of his problem was. And I'm not in a position to comment on that because, as I said, that's -- I'm not a pathologist.

Q That's someone else's bailiwick?

A Yes, ma'am.

Q Okay. Have we covered everything that you

believe was a deviation from the standard of care by Dr. Quansah?

MR. LANSDOWNE: Objection. Go ahead.

A I think we've covered the majority, yes.

Q Anything else?

A Not that's on the tip of my tongue.

Q Okay. Do you plan to review anything else before your testimony at trial?

A I would defer to what counsel suggests that I need to review that may be helpful.

Q Okay. You have reviewed the expert reports, I think you said. I think -- opinion letters you called them. Which opinion letters did you review?

A I don't -- do we have a list of what I -- I mean --

MR. LANSDOWNE: I can tell you I showed him all of them.

MS. HENRY: Okay.

MR. LANSDOWNE: I just, you know, had a packet and he saw all of them. I don't know what times he saw each one though.

MS. HENRY: Okay.

Q Based on everything that you reviewed, Doctor,

do you have any opinion as to whether or not there was an inadvertent extubation or obstruction of the tracheal tube that leads, in any way, to what occurred in this case?

A Do I have an opinion?

Q Yeah.

A Yes, I have an opinion.

Q What's your opinion?

A It didn't.

Q Okay. You did review, I'm sure, the report then, of Dr. Hirshman from Johns Hopkins University?

A Yes, I did.

Q Okay. Do you know Dr. Hirshman?

A By reputation only.

Q And what is that?

A She's a good anesthesiologist.

Q Do you know where she currently practices?

A No. I know what letter her -- what her letter had was --

Q Johns Hopkins.

A I know that's a multitude of opportunities where one practices within that system.

Q Do you know whether she did any critical care anesthesia, trauma anesthesia?

A I don't know what she did other than she is -- her reputation is, I believe, involved in critical care.

Q Okay. And obviously, because she reaches a different conclusion than you do in this case, you do not agree with her opinions?

A I think -- I agree with many of her opinions but there were issues that Dr. Hirshman did not address that I've addressed that I think allow me to come to a different conclusion.

Q And what specifically are the issue that she didn't address that you believe allowed you to come to a different conclusion?

A I'm -- she didn't address the issue of the termination of the anesthetics.

Q Being the Forane?

A The Forane, the nitrous oxide. I mean, I think Dr. Hirshman's letter predominately addresses -- I mean, I don't know that it's appropriate that I try to interpret what she was trying to say, but it appears to me that she suggests that there was no problem with the tracheal tube and I agree with her on that.

Q Other than the termination of the anesthetics, being the nitrous oxide and the Forane, what

other issues do you say that Dr. Hirshman did not address that you believe allow you to come to a different conclusion than her?

A Dr. Hirshman presents it as though the case was mandated and that it couldn't have been delayed.

Q And you disagree with that?

A I disagree with that. And I can't remember what Dr. Hirshman says in regard to the communication issues.

Q Anything else other than those three?

A Well, am I going to be held to the final -- I think you're --

MR. LANSDOWNE: Yeah.

THE WITNESS: I think I need to read the letter again.

MR. LANSDOWNE: I'd have to say I believe we talked about his opinions for three-and-a-half hours. Now you're going to ask him what things he had said that she didn't address, so I object in the overall questions, but you know --

MS. HENRY: In fairness, he said there are issues that Dr. Hirshman did not address that he --

MR. LANSDOWNE: I understand.

MS. HENRY: -- that he addresses which he believes permitted him to reach a different conclusion than she did and I'm asking what those are.

C We've talked about termination of the anesthetics, that she believed that this procedure couldn't be delayed; it was mandated. You have different opinions, and you do not know if she addressed the communication issues, correct?

A And I don't know, you know, as we spent an hour talking about the timing of the drugs and what the record says and what the record doesn't say, and she is silent to all those. And those are trouble -- those are troublesome to me because --

Q And the timing of the drugs, you're talking about what appears on the anesthesia record?

A Yes. And the fact that I have to make assumptions to try to defend the actions because if, in fact, the drugs were given in a fashion that the record says, then they, in fact, are a deviation of the standard of care based on what the other portion of the record says.

Q Are you, as the anesthesiologist, confronted

with drops in blood pressure and that sort of thing, more concerned with addressing those than getting your record exactly on the button so-to-speak?

A Why certainly.

MS. HENRY: Okay. Thanks.

MR. TREU: Does that mean you're done?

THE WITNESS: We're going to have to take a break because I have to go to the bathroom.

MR. TREU: Okay. Sure.

- - - - -

(Recess taken.)

- - - - -

EXAMINATION

BY MR. TREU:

Q Doctor, my name is Kris Treu. I represent: the hospital in this case, which includes, I guess, everyone other than Dr. Quansah and Dr. Ghanma in the case.

MR. LANSDOWNE: Oh.

MR. TREU: Do you want to say something, Dennis?

MR. LANSDOWNE: No, I didn't

know you were taking on that big umbrella of liability for all the other physicians that practice there.

- - - - - -

(Discussion held off the record.)

- - - - -

Q Do you intend to offer any opinions in this case as to whether the hospital or any of its employees failed to meet any acceptable standard of care?

A No.

Q Thank you.

MS. HENRY: That's it. See.

Q I did want to ask you -- strike that.

From your review of the record, was there enough blood loss from the initial injury to the leg, and from drainage and bleeding from the leg prior to the operation on July 15th, to explain the hematocrit levels that are in this chart of this patient?

A I think I said yes --

Q Okay.

A -- earlier.

Q All right. Do you have any kind of a file on this matter on this case?

A I've got the deposition -- the list of what I have.

MS. HENRY: It's right here (indicating).

A There.

Q Yeah. I saw the list. I'm just --

A That's what I have.

Q Okay.

A Well, no. I don't have that actually because the blood pressure summary that I alluded to is -- I don't have a copy of that of my own.. That was shared with me last night. I believe it was sent to me. But I've lost deposition number two of Dr. Quansah and I don't have all of the opinion letters. I have -- the only opinion letter I really saw was the one of Dr. Hirshman but I saw them -- I had access to read them and reviewed them last night as well.

Q Did you bring your file materials with you?

A No. All I brought with me was the original, the original deposition of Dr. Quansah.

Q That's Dr. Quansah's deposition?

MS. HENRY: Uh-huh.

A Uh-huh.

Q Any markings in that deposition would be yours?

A Yes.

Q Did you make any -- strike that.

Aside from the notes in Dr. Quansah's deposition, did you make any handwritten notes?

A Yes, I have some handwritten notes.

MR. TREU: Do you want to mark them.

- - - - -

(Defendants' Exhibit Number 5 was marked.)

- - - - -

Q Doctor, I'm going to hand you what's been marked Defendants' Exhibit 5. Just indicate for the record what that is, please?

A It's my notes taken while reading the combination of the anesthesia record and Dr. Quansah's first and second depositions.

Q Okay. Can you give us some kind of a time frame relative to when you prepared your report?

A The report was prepared two years ago.

Q All right.

A Or merely two years ago. This was prepared -- actually, since I didn't -- either didn't have or lost deposition number two, these notes were taken between 5:15 and 6:45 this morning.

Q That's more specific.

A They were fresh off of the --

MS HENRY: That's the difference between doctors and lawyers We're not up at 5:15

Q Can I take a look at them, please

Fair to assume that references in here to page numbers are from Dr. Quansah's deposition?

A Correct.

Q All right

A And there is -- so that you can understand my scribbling

Q Sure.

A Although I believe that this -- after such -- I believe that this represents the first deposition that was taken (indicating)

Q Just so the record's clear, you're indicating on the top of the second page of exhibit --

A I'm indicating we have number one and then number two. And so we're indicating quotes from both first and second depositions as page references, and sometimes the line reference that comes from the various -- from the two depositions.

Q Okay.

MR MRAWIS: May I see that

if you're done, please.

MR. TREU: Sure.

MR. TRAVIS: Thank you.

Q The report you authored dated April 28, 1997, is that the one and only report you've prepared in this case?

A That's correct.

Q Were there any drafts?

A I assume there were drafts.

Q Did you discuss your drafts with Mr. Lansdowne before you concluded with your April 28, '97 report?

A I'm sure I discussed it to some degree. The only reason I say that is because there was a handwritten note attached to my draft which indicated something about my lack of ability to determine drug doses.

Q You're going to have to clarify that for me.

A That document was prepared before the second Quansah deposition.

Q Okay.

A And the second Quansah deposition is a deposition that got into what drugs I gave and what drugs I didn't give, and to some degree the timing. And so there was a note that I had

attached to it. I believe it was a handwritten -- some note that I wrote to him (indicating) that said, "This is what I have. This is what I'm saying because I don't know what the drugs are.' And because I didn't -- without the second deposition, you really can't even assume what's going on with the drugs during the and the scores

Q And you just never prepared any kind of a supplemental report after reading Dr. Quandary's second deposition?

A No, because the second deposition just reinforced in my own mind what I said in my original statement.

Q Earlier in your deposition you described yourself as somewhat outspoken when we were talking about how people come to you with cases tell me what you mean by that

A I tend to tell the truth and I tend to say what's on my mind.

Q Do you know the name of the plaintiff in the other case where you'd given a deposition for the Spangenberg firm?

A I didn't say I had a good memory No- but Pete Weinberger --

Q Peter would know, huh?

A Peter would know, yes

MR. MREU: All right Thanks, Doctor. I don't have anything further.

EXAMINATION

BY MR. MRAWIS:

Q Doctor, my name is John Trawis and I represent Dr. Ghanma.

Are you board certified?

A Yes.

Q In what specialties or subspecialties?

A I'm board certified in anesthesia and -- in anesthesia, you're really not -- there is not a title that says board certified in critical care. There are two areas of subspecialty that I currently carry I believe the title is certification of advanced competence in critical care and/or pain. And there's a big fight about whether or not pediatrics is going to happen or not I said I sat for the first exam in critical care that was given nationally.

Q When was that?

A I don't know. In the '80s.

And you passed on the first try?

A Yes

Q What board administered that?
A That was given by the American Board of Anesthesiology.
Q And the other certification is just a general anesthesia certification?
A Certification by the American Board of Anesthesiology.
Q It's unclear to me if you have one certification or more than one.
A I am board certified in anesthesiology and hold a certificate in special competence issued by the American Board of Anesthesiology in critical care.
Q When was your original board certification in anesthesiology?
A 1970.
Q And I assume you passed on the first try then as well?
A That's correct.
Q You are not an orthopaedic surgeon?
A No.
Q You have no training -- no education, training or experience as an orthopaedic surgeon?
A No.
Q What I said is correct?

A That's correct

Q You have not commented upon Dr. Ghanma in your report in this matter, correct?

A That's correct

Q Do you agree that the standard of care of an orthopaedic surgeon is outside your area of expertise?

A In operative matters, certainly

Q Is it correct that you have no opinion regarding the standard of care as it relates to this case and Dr. Ghanma?

A In operative matters, no.

Q Okay Do you have any opinion regarding whether Dr. Ghanma met the standard of care as to any nonoperative matters?

A No.

Q You are not a pathologist?

A No.

Q What I said is correct?

A Correct.

Q You have no education, training or experience as a pathologist, correct?

A Above the basic level that all physicians have, no.

Q What I said is correct, that you have no

education, training or experience?

A No, there is -- pathology is the basis of all medical education.

Q That's the extent of your expertise in pathology?

A That's correct.

Q You've not seen pathology slides in this case?

A I have not.

Q You do not have any opinion regarding the cause of death in this case?

A I do not.

Q Earlier in responding to questions from Ms. Henry you mentioned that there are some critical care issues that you have opinions about. What critical care issues are you referring to?

A No. Perhaps that didn't come out the way it should have. I have -- my only criticism of your client is based on his deposition which says -- to the extent that anesthesiologists don't tell me about blood pressure unless it's a problem. I believe that's what he said.

When he was told that the pressure was down to ten, Dr. Quansah then told him it was all right. He testified under oath that he

believed that there was some urgency and that he expeditiously finished the case, or very quickly finished the case.

And my only concern is that the operative time after that statement is almost identical to the operative time before that statement. And that's my only comment.

Q Okay. And just to reaffirm what your earlier testimony is, you cannot state there was a deviation from the appropriate standard of care even given that criticism, correct?

A That's correct.

Q Ms. Henry asked you some questions about whether the patient was feeling pain during the procedure, and you stated there was no doubt in your mind that the pain was present. Do you recall that testimony?

A That's correct.

Q You are distinguishing between pain and conscious pain, correct?

A There is a difference, that is correct.

Q You cannot state, to reasonable medical certainty, that Mr. Porter experienced conscious pain in this case, can you?

A I cannot.

Q You are not a radiologist?
A No, I am not.
Q You have no edu'cation, training or experience as a radiologist?
A With the same disclaimer that you made about pathology.
Q You have general medical training but no specific training relative to radiology, correct?
A Unless being married to a radiologist qualifies.
Q Does it?
MS. HENRY: Is she stuck in Arkansas too?
THE WITNESS: Yes.
A No. I suspect in a formal sense it only allows me quicker access to results.
Q You've not seen the X-rays in this case?
A No, I've not.
Q You have no opinions regarding the X-rays in this case?
A No.
Q What I said is correct?
A It's correct.
Q Doctor, please forgive me for asking this question but have you ever been sued in

malpractice?

A Yes.

Q On how many occasions?

A Twice.

Q What was the outcome in each?

A In the first there was -- I was sued as the chief of a group and I was sued vicariously because I was the chief. And the judgment was found against the hospital and there was no judgment against my group.

In the second group -- in the second one I was sued in the same fashion. Unfortunately my name was incorrectly listed and so I was dropped and did not have to participate. However, the member of my group that was also sued was found -- the verdict was in his behalf. Is that the right way to say it?

MR. TREU: Close.

MS. HENRY: I would think it would be fortunate that you were dismissed, because you said unfortunately I was dismissed.

THE WITNESS: Unfortunately for the plaintiff.

MR. TREU: He has his plaintiff's hat on today.

MS. HENRY: I forgot about that.

Q I take it there's never been a settlement of a malpractice claim made against you short of suit?

A No.

Q What I said is correct?

A That is correct.

Q Have you now stated all the opinions that you hold with respect to this matter, Doctor?

A To the best of my --

MR. LANSDOWNE: Objection. Go ahead.

A To the best of my knowledge.

Q And have you also stated all the bases for these opinions?

MR. LANSDOWNE: Objection. Go ahead.

A Whenever asked I have rendered my opinions to the point of nausea.

Q I want to be fair to you, but basically by reading your deposition transcript, we will understand the thrust of your opinions in this matter, correct?

MR. LANSDOWNE: Objection. He

can't tell what you are going to understand from reading this deposition. I object. Go ahead.

A I don't know what you would understand by reading my deposition.

Q Do you believe that you have been given an opportunity to fairly state for the record your opinions and the bases for those opinions in this matter?

MR. LANSDOWNE: Objection.

A I believe my opinions are either articulated, or are in my notes, or in all of the amount of dialogue that's occurred.

MR. TRAVIS: That's all I have. Thank you very much.

MS. HENRY: Okay.

MR. LANSDOWNE: Done? Done?

MR. TREU: Thanks, Doctor.

THE WITNESS: Uh-huh.

MR. LANSDOWNE: He will read it.

- - - - -

(Depostion concluded at 12:45 p.m.)

- - - - -

(Signature not waived.)

- - - - -

THE STATE OF OHIO,) SS: CERTIFICATE
COUNTY OF CUYAHOGA.)

I, Marcie S. Smith, RPR and Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within-named witness, E.F. Klein, Jr., M.D., was first duly sworn to testify the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony then given by him was by me reduced to stenotypy in the presence of said witness, afterwards transcribed on a computer/printer, and that the foregoing is a true and correct transcript of the testimony so given by him, as aforesaid.

I do further certify that this deposition was taken at the time and place in the foregoing caption specified.

I do further certify that I am not a relative, counsel or attorney of either party, or otherwise interested in the event of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, on this 5th day of April 1999.

Marcie S. Smith, RPR and Notary Public
within and for the State of Ohio.
My Commission expires April 20, 1999.

CURRICULUM VITAE

E. F. Klein, Jr., M.D.

I. Personal Data

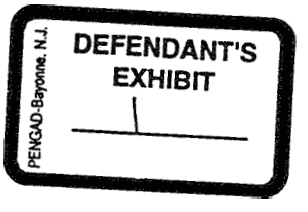
Date of Birth:	*December 31, 1940*
Place of Birth:	*Sedalia, Missouri*
Marital Status:	*Married*
Spouse's Name:	*Sarah G. Klein, M.D.*
Children:	*Elizabeth Suzanne Klein* *Michael Pafrick Klein* *Edward Wesley Klein*

II. Education

	Degree	Dates
University of Missouri *Columbia. Missouri*	A. a.	*1958-1962*
University of Missouri *Columbia, Missouri*	M.D.	*1962-1965*

III. Hospital Training

Location	Type	Dates
U.S Naval Hospital *Bethesda, Maryland*	*Internship*	*7/65-6/66*
U.S. Naval Hospital *San Diego, California*	*Residenf-Anesthesia*	*7/66-6/68*
U.S Naval Hospital *San Diego, California*	*Fellow Critical Care*	*7/68-6/69*



IV. Past Professional Appointments

	Dates
Staff Physician Head, Inhalation Therapy Department U.S. Naval Hospital Guam	1969-1971
Assistant Professor Department of Anesthesiology University of Florida College of Medicine Gainesville, Florida	1977-1974
Medical Director of Surgical Intensive Care Unit University of Florida College of Medicine Gainesville, Florida	1971-1979
Director of Respiratory Therapy University of Florida College of Medicine Gainesville, Florida	1971-1972
Associate Director of Respiratory Care University of Florida College of Medicine Gainesville, Florida	1972-1974
Assistant Professor Department of Surgery University of Florida College of Medicine Gainesville, Florida	1973-1974
Associate Professor Departments of Surgery and Anesthesiology University of Florida College of Medicine Gainesville, Florida	1974-1975
Director, Division of Respiratory Care Medical Director of Respiratory Therapy University of Florida College of Medicine Gainesville, Florida	1975-1979
Medical Director of Respiratory Therapy Santa Fe Community college Gainesville, Florida	1975-1979

Professor — 1979-1982
Departments of Surgery and Anesthesiology
Director of Respiratory Therapy and
Anesthesia Intensive Care
University of North Carolina at Chapel Hill
School of Medicine
Chapel Hill, North Carolina

Professor and Chief of Anesthesia — 10/82-5/90
Department of Surgery/Anesthesiology - RMH
University of South Carolina School of Medicine
Columbia, South Carolina

Professional Director of Anesthesia Services — 7/82-5/90
Richland Memorial Hospital
Columbia, South Carolina

V. Present Professional Appointments

Professor and Chairman — 6/90-Present
Department of Anesthesiology
University of Arkansas for Medical Sciences
Little Rock, Arkansas

VI. Committees and Administrative Responsibilities

UAMS

Council of Departmental Chairmen	1990-Present
Elected Chair	1993-94
AdHoc Committee-fringe Benefits	1992-Present
MCPG Executive	1990-Present
Hospital Medical Board	1990-Present
Dean's VA Commiftee	1990-Present
OR Management Committee	1990-Present
Hospital Executive Committee	1997-Present
Clinical Practice Advisory Committee	1997-Present
Chairman, ICU Committee	1991-92
Chairman, Neurosurgery Search Committee	1997-92
Malpractice Claims Review Committee	3/92-Present
MCPG Billing Efficiency Committee	1992-Present
Physician's Health Committee	1992-Present
Surgical Affairs Committee	1994-Present
Bed Tower Task Force	1994-Present

ACH

Surgical Affairs Committee	1990-91
Medical Staff Executive Committee	1990-91
Acting Chief, Pediatric Anesthesia	5/90-12/90

VII. Professional Activities and Honors

American Society of Anesthesiologists
Association of University Anesthetists
American Thoracic Society
Society of Critical Care Medicine
International Anesthesia Research Society
Diplomate, Amencan Board of Anesthesiology: 1970
Subspecialty Certification - Critical Care Medicine 7986
Associate (senior) Examiner ABA (Oral Boards)
Fellow in Critical Care Medicine - 7991

VIII. Hospital Appointments

Arkansas Children's Hospital
John L. McClellan Memorial VA Medical Center
University of Arkansas for Medical Soences

IX. State Licenses

Missouri	
Guam	
Florida	Current
Georgia	
North Carolina	
South Carolina	Current
Arkansas	Current

BIBLIOGRAPHY

E.F. Klein, Jr., M.D.

I. Publications - Refereed and Invited

1. Downs JB. Rackstein AD, Klein EF Jr., Hawkins I: Complications of radial artery connulation. ASA Abstracts of Scientific Papers, pp. 79-80, 1972 (Abstract)

2. Klein EF Jr: Complications of endotracheal intubation. ASA Refresher course Lecture, Out Lines. 203(B):1-4, 1972.

3. Downs JB, Rackstein AD, Klein EF Jr., and Hawkins IF Jr: Hazards of radial-artery catherization. Anesthesiology 38:283-286, 1973.

4. Downs JB, Klein EF Jr., and Modell JH: The effect of incremental PEEP on PaO_2 in patients with respiratory failure. Anesih Analg 52:210-214, 1973.

5. Klein EF Jr: Principles of mechanical ventilation. In "Introduction to Life Support." Ravin MB and Modell JH (eds). Boston: Little Brown and Co, pp 37-52, 7973.

6. Riley J, Klein EF Jr., and Ravin MB. Cardiopulmonaryresuscitation. In: "Introduction to Life Support" Ravin MB and Modell JH (eds). Boston: Little Brown and Co. pp. 8-23, 7973.

7 Downs JB, Klein EF Jr., Desautels D, Modell JH and Kirby RR: Intermittent mandatory ventilation: A new approach to weaning patients from mechanical ventilators. Chest 64:331-335, 1973.

8. Calderwood HW, Klein EF Jr., Modell JH, Teague PO, Downs JB: Distribution of nebulized aerosols in spontaneously breathing puppies. Annual Meeting, American Society of Anesthesiolcgists, pp. 205-206, 1973 (Abstract).

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10. Klein EF Jr., and Graves SAL: "Hot pot" tracheitis-a case report. Chest 65:225-226, 1974.

11. Calderwood HW, Kiem EF Jr., Modell JH, Teague PO, Downs JB: Distribution of nebulized aerosols in spontaneously breathing puppies. Anesthesiology 41:368-374, 1974.

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15. Cullen P, Modell JH, Kirby RR, Klein EF Jr.. Long W: Treatment of patients with flail chest by IMV and PEEP. Abstract Cnt Care Med 3:45, 1975.

16. Klein EF Jr.: The respiratory distress syndrome in adults. Tice's practice of Medicine. Vol. V, Chapter 5, Hagerstown, Maryland: Harper and Row, 1975.

17. Cullen P, Modell JH, Kirby RR, Klein EF Jr., Long W: Treatment of flail chest. Use of intermittent mandatory ventilation and positive end-expiratory pressure. Arch Surg 110:1099-1103, 1975.

18. Paul WL, Munson ES, Klein EF Jr., Embro WJ: Cerebral spinal fluid pressure during PEEP in spontaneous breathing dogs. Abstracts of Scientific Papers. 1976 Annual Meeting, American Society of Anesthesiologists, pp. 231-232.

19. Page BA, Klein EF Jr.: Tracheal stent as an aid in weaning from mechanical ventilation in tracheomalacia. Anesthesiology 47:300-301, 1977.

20. Klein EF Jr.: Book review. Applied physiology of respiratory care. Arch Surg 113:532. 1978.

21. Desautels DA, Sanderson RR. Klein EF Jr.: A unified approach to pulmonary ventilation terminology. Respir Care 23:42, 1978.

22 Klein EF Jr.: Intubation for intensive care: Tracheostomy vs. Translaryngeal. 1978 Annual Refresher Course Lectures, American Society of Anesthesiologists, 118:1-7.

23 Haldeman LW, Poulton TJ, Klein EF Jr. Effects of severe thoracic subcutaneous emphysema on cardiopulmonary function during positive pressure ventilation. (Abstract) American Review of Respiratory Disease, April 1980 Supplement. (Presented - American Thoracic Society Meeting, May 4980, Washington, DC).

24. Klein EF Jr.: Pitfalls in the interpretation of pulmonary artery (and other intravascular) pressures. American Society of Anesthesiologists Regional Refresher Course Program, 210:1-5, 1980.

25. Riley J, Klein EF Jr., Ravin MB: Cardiopulmonary resuscitation. Principles and Practice of Anesthesia. Little Brown and Co., 1980.

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II. LECTURES

Invited Lectures - Approximately 5 - 10 Visiting Professorships/Lectures per year.

April 28, 3997

Dennis Lansdowne
Spangenberg, Shibley, & Liber
Attorneys At Law
2400 National City Center
1900 East Ninth Street
Cleveland, OH 44114-3400

Dear Mr. Lansdowne,

After thoughtful review of the Brad Porter case, it is clear that the anesthesiologist for the second operative procedure exhibited a lack of comprehension of the magnitude of physical derangements which were manifest almost immediarely after the beginning of this second anesthetic.

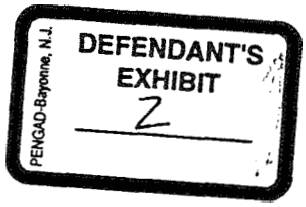
Although the initial fall in blood pressure might have been explained by the brief effects of the initial intravenous anesthetic agent;, Mr. Porter remained in a gravely precarious condition for approximately one hour. The anesthesiologist terminated administration of virtually all anesthetic agents early in the case, gave several doses of extremely potent vasopressure drugs in an attempt to blindly temporize the continued hypotensive trend, and started a second intravenous line. It is, however, inappropriate that an individual with the presumed good physical status mch as Mr. Porter should have been required to endure an ongoing operation with benefit of only minimal {if *any)* anesthetic drugs, with repeated doses of potent vasoactive drugs, without a legitimate medical diagnosis, and all the while without meaningful communication between rhe anesthesiologist and the operative surgeon.

Had appropriate medical communication between the operative surgeon and the anesthesiologist occurred within the initial 15 - 30 minutes of the procedure and had the operation been terminated accordingly, *acute* survival by Mr. Porter would have been highly probably if not certain.

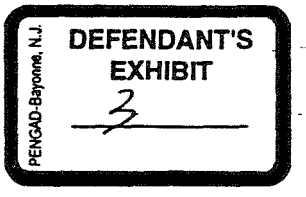
These thoughts summarize my concerns regarding this case. If additional information should be required, please do r ot hesitate to communicate directly.

Sincerely,

E.F. Klein, Jr., M.D.
Professor and Chairman
Department of Anesthesiology
University of Arkansas for Medical Sciences



- Med record – emphasis on amends
- Quansah dep x2
- Ghanma dep
- Shapiro dep
- San Diego path dep
- BP summary
- "Pictures"
- Opinion letters



Brad Porter
BP Record
7/13/95 - 7/15/95

7/13/95 Ambulance Record

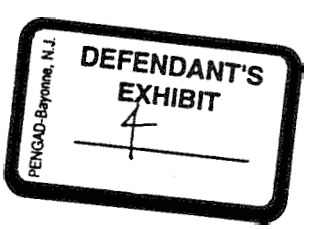
8:31 pm.	140/90
8:40 p.m.	145/P

ER Record

8:40 p.m.	3-42/98
10:20 p.m.	130/90
11:30 p.m.	148/70
11:35 p.m.	148/70

7/14/95 Anesthesia Record (First Procedure)

12:20 a.m.	103/50
12:25 a.m.	118/50
12:30 a.m.	120/48
12:35 a.m.	118/48
12:40 a.m.	117/42
12:45 a.m.	104/42
12:50 a.m.	100/40
12:55 a.m.	105/40
1:00 a.m.	104/40
1:05 a.m.	100/40
1:10 a.m.	100/40
1:15 a.m.	100/40
1:20 a.m.	102/40
1:25 a.m.	100/40
1:30 a.m.	102/40



1:35 a.m. 98/50

1:40 a.m. 96/50

Recovery Room

1:35 a.m. 98/51

1:40 a.m. 105/44

1:50 a.m. 112/52

2:00 a.m. 106/50

2:10 a.m. 106/56

2:15 a.m. 100/94

Nursins Division

3:00 a.m. 118/60

3:30 a.m. 125/60

8:00 a.m. 130/80

1:00 p.m. 130/60

4:00 p.m. 144/66

8:00 p.m. 138/74

7/15/95 **12:00 Mid** 110/62

5:30 a.m. (Nurse called Dr. Ghanma-told him that temperature was **up** and he had dropped his blood pressure slightly) (Dr. Ghanma depo **p**.61)

8:00 a.m. 110/60 (Pre-op)

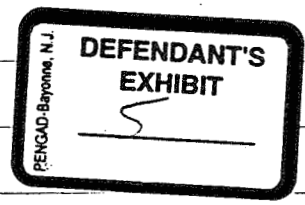
Anesthesia Record (Second Procedure)		**Photographs**	
Pre induction 95/40 (Dr. Quansah's Progress Note)			
9:00 a.m.	Induction		
9:05 a.m.	95/40		
9:10 a.m.	92/35	9:09 a.m.	95/40
9:15 a.m.	90/35	9:12 a.m.	67/46
9:20 a.m.	80/35	9:17 a.m.	90/36
9:25 a.m.	80/35 (Phenylephrine given)	9:23 a.m.	80/40
9:30 a.m.	88/38	9:27 a.m.	80/40
9:35 a.m.	85/35	9:34 a.m.	86/39
9:40 a.m.	86/35 (Phenylephrine given)	9:37 a.m.	90/39
9:45 a.m.	95/45	9:41 a.m.	81/43
9:50 a.m.	95/40	9:4? a.m.	93/40
9:55 a.m.	100/40	9:52 a.m.	97/37
10:00 a.m.	65/55 (Phenylephrine given)	9:58 a.m.	94/41
Sudden ↓ in ETCO, from 36 to 10-15. Anesthesia off. Epinephrine given.			
10:05 a.m.	95/35	10:01 a.m.	62/56
10:10 a.m.	180/35	10:06 a.m.	91/35
10:15 a.m.	98/35	10:13 a.m.	182/108
10:20 a.m.	(Epinephrine given)*	10:18 a.m.	91/37
10:25 a.m.	(Epinephrine given)*	10:21 a.m.	55/37
10:28 a.m.	**Code called.**	**10:28 a.m.**	**Code Called**
12:04 p.m.	Expired		

*According to anesthesia graphic, these notes were entered after the patient was pronounced.

#1

pg 76 line 13 — 1st dep - doesn't discuss pressure to anyone because "that is my job.. don't need to discuss w anybody

MP #2 pg 25 — Acknowledges doesn't usually give neo after induction



#2 pg 41 — Screened re BP & turn ... r/o/c neo - turns of gases (pg 49)

pg 78 — Acknowledges pt was responding but didn't discuss because "pt was receiving NOW"

pg 73 — Despite problems which are now acknowledged .. never considered stopping care " Stopping care doesn't [illegible]

1st dep

pg 108 Even after death didn't understand problem "pt was ok until (he) coded"

pg 88 1000 Dan crash didn't ppt termination discussion because when epi temporarily ↑ BP "I told him it was corrected."

Summary 1st dep hearing on pt "ok", may be septic, but OK

2nd dep pt not ok but didn't discuss because procedure couldn't be terminated (Resps mandated continuing)