IN THE COURT OF COMMON PLEAS IN THE STATE OF OHIO

IN THE COUNTY OF CUYAHOGA

LARITA DUNHAM, BY AND THROUGH HER HUSBAND AND LEGAL GUARDIAN, DANIEL DUNHAM, ET AL.,

Plaintiffs,

vs.

METROHEALTH MEDICAL CENTER,

Defendant.

No. 385735

Deposition of BRUCE L. FLAMM, M.D., taken on behalf of Plaintiffs, at 10445 Victoria Avenue, Riverside, California, beginning at 5:05 p.m. and ending at 7:00 p.m. on Thursday, June 8, 2000, before JENNIFER D. BARKER, Certified Shorthand Reporter No. 12168.

APPEARANCES:

For Plaintiffs:

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INDEX

EXHIBITS

(None)

Riverside, California, Thursday, June 8, 2000

5:05 p.m. - 7:00 p.m.

BRUCE L. FLAMM, M.D.,

having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MS. MATTHEWS:

Q Doctor, my name is Laurel Matthews. I represent Larita Dunham, and as you know we are doing this by phone because I couldn't get there, and I also can't see what you have in your file. So if you would be so kind as to tell me what your file consists of.

A Okay. Let me briefly go through it. I have the medical records from the care of Larita Dunham from the January 1999 admission. I also have records from her prenatal care from this pregnancy, and then I have quite a few depositions. Do you want me to actually read off the deposition file?

Q Yeah. If you could read the last names of the deponents, that would be great.

A Joshi, J-o-s-h-i; Smith; Ashmead, 4-s-h-m-e-a-d; Honaker, H-o-n-a-k-e-r; Andreani, A-n-d-r-e-a-n-i; Spergel, S-p-e-r-g-e-1; Weight

W-e-i-g-h-t; Bachman, B-a-c-h-m-a-n, and also Ramanatham, R-a-m-a-n-a-t-h-a-m, and let me see if there are any others. There is also the deposition of, last name is Shubeck, S-h-u-b-e-c-k and Sibula, S-i-b-u-1-a.

And then I have some reports. I have the report of John Conmy, C-o-n-m-y; William Berger, B-e-r-g-e-r and Dr. Ramanatham, R-a-m-a-n-a-t-h-a-m, and I think that is the bulk of the material that I have here. Let me just look one more time. There are some other miscellaneous medical records that are also in the folders. I have records from Cleveland Clinic from August of 1997 and these are all just more medical records. I think that's basically what I have here.

Q Okay. If I'm understanding you correctly, you have not read the depositions of the family members Dorothy Moody or the husband Danny Dunham?

A I don't see them here in front of me, and I can't recall --

Q Did you read all the depositions that you listed for me?

A I read all of these, yes, I have.

Q Did you make any notes when you did that?

A No, I did not.

Q So there are no margin notes, things like that?

A There are no margin notes.

Q Did you make any notes on any of the expert reports?

A No, I did not.

Q Did you receive any written summaries of the case from the law firm?

A I don't believe so, no.

Q So I take it then you just have some basic transmittal letters?

A Yes.

Q Does one of them tell you what they'd like you to do?

A No.

Q Okay. What is your understanding as to why they asked you to review this case?

A I'm not exactly sure I understand the question.

Q I'm just wondering what it is you felt you were asked to review the case to determine?

A I don't know that I can answer that for this case differently than any other I've reviewed. Generally, I'm contacted by an attorney and they explain that they have a medical legal case and they'd like to know if I'd be willing to look at it and give my opinions. I don't think there's any difference in this case.

Q The reason that I ask is you say in your report

on page five that you see no evidence of a breach of standard of care by any of the health care providers, and I wonder if you were including the anesthesiologist or if you were commenting as an obstetrical expert?

A I don't recall. I wrote this back in December of '99, and I know that, generally, when I'm asked to review a case, one of the common things that attorneys ask ne to comment on is anything relating to a breach of standard of care. I don't remember anything specifically on me being asked to comment on any particular people.

Q Let me ask you now, are you prepared to comment on the standard of care for the anesthesia people?

A Well, I'm an obstetrician/gynecologist expert, so probably not.

Q Well, because the scope of my questioning of you will be a lot different if you're saying to me that you see no evidence of the breach of any standard of care by any of of the health care providers, which is what the sentence says. If you want to change that sentence by any of the obstetrical providers, it will shorten this deposition by about an hour.

MR. PESKIN: Let's do that, Laurel.

BY MS. MATTHEWS:

Q Do you understand what I'm asking you, Doctor,

because I have anesthesia questions I can ask you if you feel there was no breaching of care by the anesthesiologist, do you?

A I can confine my comments to the obstetrical care.

Q Well, that's a different answer. I mean, do you feel that the anesthesia conduct complies for the applicable standard of care for the anesthesia people, or is that something that you don't feel you're qualified to comment on?

A I would say I'm probably not qualified to comment on anesthesia standards of care.

Q All right. Fine.

MR. PESKIN: Let's make this even easier and clear, Laurel. The doctor is not being offered for any purpose other than to comment on the obstetrical purpose of this case, and he will not comment on the anesthesia care provided.

BY MS. MATTHEWS:

Q So is it fair that you would rewrite the last sentence on page five to say I see no evidence of the breach of my standard of care by any of the obstetrical providers?

A I think that would be fair to say, yes.

Q All right. What about the nurses? Are you

commenting on the standard of care -- do you have opinions on whether the nurses met the standard of care here?

A I think that's a reasonable thing to say, yes.

Q Okay. So then it's something you do have opinions on.

A Right.

Q And what is your opinion?

A Well, let me back up just for a minute, because I want to make something clear since this is a deposition that's going to become a public document. I'd be willing to confine my comments to discussing the care rendered by the obstetrical team and the nurses, but when I say I don't feel I'm qualified, I don't want to pigeonhole myself by saying for all future time that I'm not qualified to comment on anesthesiology, that I'm not qualified to comment on CRNAs. I'm saying that in this particular case, I'd be willing to confine my comments to the care rendered by the obstetricians, the obstetrical team, which would include the obstetrical nurses.

Q All right. Well, I'll start with that and if I have a question about anesthesia, we'll see how you answer it. How about that?

A Fair enough.

Q All right. Were you given any policies and procedures by Metrohealth?

A Let me look through my files here really quickly and see if I can see them. You know, I don't see any offhand, but I have sitting in front of me something on the order of several thousands of pages of documents. So I would have to answer, I don't know the answer to that.

Q Do you have any specific recollection of reading Metrohealth epidural anesthesia for the laboring patient protocol?

A I don't have any recollection at this moment, no.

Q Okay. Do you have anesthesia assistants at your hospital?

A We have CRNAs at our hospital.

Q Do you have anesthesia assistants?

A Not specifically, no.

Q Are you familiar with the scope of practice of the anesthesia assistant?

A I am from reading the records in this case and all the depositions.

Q Other than that, are you familiar with the scope of practice?

A No.

Q So you were not given, to the best of your knowledge, the epidural anesthesia for the laboring patient protocol?

A Well, I don't recall at this time. I may have been given it, but again there are thousands of pages of documents here, and I don't recall.

MS. MATTHEWS: Larry, did you give it to him?

MR. PESKIN: Well, I don't think I'm sworn in, but I can help you out by saying I didn't give him anything.

MS. MATTHEWS: In your transmittal letters in front of you, is there a transmittal letter that indicates that he's been sent the Metrohealth protocol?

MR. PESKIN: One second.

THE WITNESS: I think that's all the letters I have are those right there.

MR. PESKIN: I cannot represent to you that I've seen the universe of transmittal letters. I can only see what I can find right here and I don't see anything that refers to the Metrohealth policy that you're asking him about.

MS. MATTHEWS: All right. Thank you.

Q Doctor, would you agree that one of the responsibilities of labor-and-delivery nurses is to assess the level of anesthesia throughout labor?

A Well, I'd have to think about that because the question could mean so many things. When you say the "level of anesthesia," if you're talking about whether a level is T-4 or something on an epidural, absolutely not, a nurse would almost never do that. If by "level of anesthesia" you mean to determine if their patient is comfortable, then the answer would be yes.

Q So do you feel that the standard of care requires obstetrical nurses to check dermatone levels at regular intervals?

A No.

Q Do you feel it requires that they document at regular intervals whether a patient can move their legs?

A I don't think that's required by the standard of care, no.

Q Is that something that you would expect a nurse to document?

A Not necessarily, no.

Q You're a fellow of ACOD, correct?

A Correct.

Q And you've also been a conference chairman for multiple ACOD meetings?

A Correct.

Q Do you consider the technical bulletins to be accurate and reliable?

A Yes

Q Do you have any involvement in their publications?

A Well, I've now recently been elected the chairman of District 9, section 6 of ACOD, and I just came back from Washington, DC where I was commenting on one of the technical bulletins, so I have some input, yes.

Q Which technical bulletin?

A On vacuum-assisted birth or instrumented birth.

Q I was not given a list of your publications; however, I did see the majority of your presentations. Have you published on areas like epidural anesthesia or spinal anesthesia or anything relating to anesthesia in laboring patients?

A Well, some of my papers would have had to do with that, yes.

Q Can **you** give me an example?

A I can give you a couple probably.

Q Okay.

A For example, there was one in 1984, the title is Vaginal Birth After Previous Cesarean Section Allowing Oxytocin Augmentation and Epidural Anesthesia, and we specifically discussed epidural anesthesia in that paper, and several subsequent papers. I know we

have at least discussed epidural as part of the paper.

Q All right. Do you have an actual publication list?

A Yes.

Q Is that something you could provide to the attorney sitting next to you?

MR. PESKIN: I already have it, Laurel. I'll send it over tomorrow.

MS. MATTHEWS: All right. Terrific. Thanks.

Q Doctor, if there are written protocols for labor-and-delivery nurses, do you expect the nurses to follow them?

A I expect nurses to treat them like guidelines and use them *to* help guide their care.

Q So are you saying that it's not mandatory that labor-and-delivery protocols be followed?

A I'm saying protocol is a bad choice of words. Some people call them policies and procedures. The connotations of policy and procedure or protocol seem to have the meaning that something you would never deviate from. My understanding from the intention of all these documents are that they're guidelines for the best practices.

Q And, therefore, are you saying that it's not mandatory that the nurses follow written protocols?

MR. PESKIN: Objection.

THE WITNESS: Well, I can give you an example. In our own hospitals, we have policies and procedures books, and in many times I found myself doing things that seem to be contrary to things in the policy and procedure book. I don't think I was doing anything wrong. I certainly wasn't breaching the standard of care. They're just guidelines.

BY MS. MATTHEWS:

Q Well, you're talking about physicians' protocols and guidelines?

A Actually, our policy and procedure book has sections that would apply both to physicians and to nurses.

Q Are there policies and procedures regarding epidural and anesthesia patients at your hospital?

A I honestly don't know.

Q Well, let me ask my question again. Are you telling me that you do not believe nurses need to follow written hospital protocols?

MR. PESKIN: Objection.

THE WITNESS: I think that nurses need to practice standard-of-care nursing, and very often the policy and procedure book or protocol book sends out hundreds of pages of suggestions, and they're often very

good suggestions, but to suggest that a nurse has to do everything in her daily routine exactly according to what these huge volumes of material say, no, I don't agree with that.

BY MS. MATTHEWS:

Q What if there's a two-page epidural anesthesia protocol?

A Right. My point was not that anesthesia protocol would be hundreds of pages, but often there's two pages on epidural and seven pages on oxytocin, and taken as a whole, as I'm sure you're aware, many labor and delivery areas will have multiple-page binders with hundreds of pages of policies and procedures. Again, I feel that these are guidelines, and if somebody doesn't happen to do what one of these guidelines says, that's no indication that they've breached the standard of care.

Q I take it, then, your answer to my question is no?

A Correct.

Q Would you agree that applicable state laws regulating the practice of medicine make up the standard of care?

A Yes.

Q Would you agree that institutions' own

departmental policies set up a standard for the institution?

A Well, I'm not sure what a standard for the institution means. My understanding is in the United States, physicians and nurses have to practice by standard of care. I don't know that I can answer more than that.

Q Well, do you think that a department's policies make up part of the standard of care?

A I understand what the standard of care is and there are many factors that go into it.

Q Is that one of them?

A It could be.

Q I mean, that's why they make up policies and procedures, correct, they want to set standards?

MR. PESKIN: Objection.

THE WITNESS: My understanding is the purpose of policies and procedures are to serve as a set of guidelines to help nurses and physicians practice the best possible care.

BY MS. MATTHEWS:

Q Okay. What about orders? Are doctors' orders guidelines also, or do they have to follow written orders?

A Well, that would depend very much on what the

order is.

Q Well, let's try, turn off PCA pump once epidural is placed, is that an order that is to be followed?

A It's one that should be followed, but that order doesn't say turn off PCA pump within 30 seconds, after the epidural is placed, and it doesn't say turn it off within 60 minutes. It says turn it off, and I think that leaves room for interpretation on the part of the nurse.

Q Well, that's a different question. Do the orders need to be followed?

MR. PESKIN: Objection.

THE WITNESS: Well, I think you gave me a hypothetical example, and I was giving you an answer to that particular example. Yes, the orders need to be followed. It would be, in the example you gave me, that the PCA would have to be turned off, but it would also imply that the nurse has some judgment as to when she should turn it off.

BY MS. MATTHEWS:

Q How about if there is also a written order, do not give any narcotics until the device is discontinued?

MR. PESKIN: Objection. Which device?

BY MS. MATTHEWS:

Q If there's also that order and a written order that says do not give any other narcotics or agonist antogonists until the device is discontinued, is that an order that should be followed?

A I'm sorry. Could you say that again?

Q If there's a written order that says do not give any other narcotics, agonist antagonists until the device is discontinued, that's a pretty clear order, correct?

A Well, my feeling, having worked with nurses for 25 years now, is that there's usually a little more room for latitude and interpretation in orders, there are certainly events where that is not true, but probably in the majority of cases, there is room for interpretation. It's not like in the army when someone says, "Do this now," and you must do exactly what they say right then.

Q Are you telling me that "do not" can mean something other than do not?

MR. PESKIN: Objection.

THE WITNESS: I think, again, I'd have to have an example. I --

BY MS. MATTHEWS:

Q I just gave you one.

A Right. I didn't finish my answer to you. In the particular example that you gave me, I'm trying to

think of real issues that have come up in my career that would help me to answer the question. And there are times when a patient is in pain and the feeling is that the PCA pump is not functioning properly, that the patient isn't getting adequate pain relief. In a situation like that, a reasonable nurse may feel that it's reasonable to give other medication.

Q Even if there's a written order that says don't do it?

A Well, I'm trying to picture a nurse functioning at a hospital at 3 o'clock in the morning in a hypothetical example, and a patient is writhing in pain. Now she has orders that are part of her order set that say it's reasonable to give such-and-such medication when the patient is in active labor, and she has another order such as the example you gave me. I think a reasonable nurse might make a judgment call in that case. She may look at the two different orders and say I, as a nursing professional, feel it's reasonable to do something here.

Q And that's okay with you?

A On a case-by-case basis. We'd have to review each case individually to determine --

Q I'm understanding what you're telling me. Circumstances whereby a nurse could use her own judgment

and in a sense, ignore a "do not" order?

A Well, I'm saying if a nurse has two different orders, and this is often very frequently true, there may be three sets of orders that apply to the same thing. In a case like that, I feel a good nurse would use good nursing judgment.

Q As opposed to calling the doctor to find out which is the right order?

A Well, sure. There are cases where that would be the best thing to do, yes.

Q Do you agree that all obstetricians should understand the general principles and techniques of obstetric anesthesia and the necessary qualifications for those individuals who administer obstetric anesthesia?

MR. PESKIN: Objection.

THE WITNESS: Well, that's a mouthful. I would agree with some of that. I think obstetricians should understand the basic principles of obstetric anesthesia. Beyond that, I'm not sure I would agree with the rest of what you said.

BY MS. MATTHEWS:

Q Meaning you wouldn't agree that they need to know the methods and qualifications for individuals to administer obstetric anesthesia?

A Meaning, I think you said obstetricians should understand the techniques, and if I answered yes to that, that would imply that obstetricians should understand how to do spinals, they should understand how to do epidurals, they should understand how to do general anesthesia. That was like five questions put into one. That's the way I interpreted that.

Q Do you disagree, then, that obstetricians need to understand the techniques for obstetric anesthesia?

A Obstetricians need to have a general understanding of what is going on with OB anesthesia, but if an obstetrician doesn't perform any of these techniques, I don't think they need to know how to do them, no.

Q I was not saying they needed to know how to do them. My words were simply that they need to understand the technique.

A I don't think there's any possible way you could differentiate between understanding the techniques and being able to do them. You're saying they should be able to understand the techniques but not necessarily do them. They need to know how to put a epidural in, but I don't understand where you're going with that.

Q Basically, you disagree that obstetricians need to understand the techniques for obstetric anesthesia?

A I believe obstetricians need to have a general understanding of the entire field of OB anesthesia. I wouldn't go beyond saying they need to have a general understanding. There are some obstetricians that do OB anesthesia.

Q Do you agree or disagree that obstetricians need to know the necessary qualifications for those individuals who administer obstetric anesthesia.

MR. PESKIN: Objection.

THE WITNESS: I don't think so, no.

BY MS. MATTHEWS:

Q Do you believe that Dr. Ashmead needed to be aware of Ohio law and Metro's own policy of who could administer an epidural?

MR. PESKIN: Objection.

THE WITNESS: I don't really think so. Again, I'm trying to think of when you're asking me these questions of what the standard of care of America for an obstetrician is, and I'm trying to think of myself and my colleagues all around the country. I don't think it's our obligation to investigate those types of issues.

BY MS. MATTHEWS:

Q That's a no then?

A That's a no.

Q Would you agree that the nurses on labor and delivery need to be aware of and follow labor-and-delivery policies that relate to epidural anesthesia?

A With the caveat as I said before, that the word policy has connotations that I feel are misleading. I think they have to follow guidelines, yes.

Q If a physician or nurse fails to adhere to state law or to a hospital's own policies, would that be beneath the standard of care?

MR. PESKIN: Objection.

THE WITNESS: That's two different questions.

BY MS. MATTHEWS:

Q If a physician or nurse fails to adhere to state law, would that be beneath the standard of care?

A If the state law was thou shall not murder the postman, then yes. It would be depend on what the state law was.

Q State law is regulating the practice of nedicine?

A I think that's generally true. If a physician or nurse does not follow the state laws relating to the practice of medicine, that would be below the standard of care, yes.

Q And if a nurse does not adhere to hospital policies or the department's own policies, would that be

beneath the standard of care?

A No, not necessarily.

Q So would you agree that if the obstetricians at Metro delegated the administration of anesthesia to someone who wasn't qualified to give it, that would be below the standard of care?

A I imagine it would depend on what you mean by a person not qualified to give it. If a person that walked in off the street or from janitorial services, clearly that would be below the standard of care. If they were delegating that job or task to somebody who was trained to do it, that would be the standard of care.

Q Well, the question said if it was someone who was not qualified to do it.

A Yes. If the person was not qualified to do it, that would be a breach of standard of care.

Q Have you reviewed the Metrohealth job description for anesthesia assistants?

A I don't believe so.

Q All right. I'm going to read you something since I can't show it to you. Okay? The job description for anesthesia assistant, okay?

A Yes.

Q "Number 3 positions patients for spinal

epidural or nerve block anesthesia," okay?

A Yeah.

Q Does that say administers epidural to you?

MR. PESKIN: Objection. He doesn't have this policy in front of him?

BY MS. MATTHEWS:

Q Well, what does that mean to you?

MR. PESKIN: Objection.

THE WITNESS: I'm sorry. What does it mean to me?

BY MS. MATTHEWS:

Q Yes. What does that mean to you?

A It would mean to put the patient in a position or assist in putting the patient in position for that procedure.

Q All right. Were you aware that Metro epidural anesthesia for the laboring patients protocol provides that epidural anesthesia is to be administered by an anesthesiologist or a CRNA?

MR. PESKIN: Objection.

THE WITNESS: I don't know that I have that procedure or policy, but again, I would voice the same concern I've tried to explain several times. I don't base my determination of standard of care on policy and procedure books. I, many times in my own career, have

done things and found in hindsight that the policy and procedure book said maybe that wasn't what I should be doing. Often, then, we revise the policy and procedure book because it is meant to be a guideline.

BY MS. MATTHEWS:

Q All right. So if the AA's job description did not include placing epidurals and if Metro's own policy did not state that anesthesia assistants could place the epidural, it would still be okay with you if -- you think it would still be the standard of care for anesthesia assistants to place epidurals?

A If that person was properly trained, yes.

Q Are you aware that the forms at Metro Hospital contained a space for nurses to document a neurologic assessment?

A I'm sorry. Which form was that?

Q The nursing form, the nurses flow sheets?

A For labor and delivery?

Q Yes.

A I can take a look at those if you want.

Q Yes, please.

A Are you talking about the obstetrical flow sheet or another form?

Q Obstetrical flow sheet.

A Okay. I'm looking now at obstetrical flow

sheet from 1-20-99. Is that the example that you're talking about?

Q Yes, and it's a four-part form.

A Right.

Q Now, do you see where it says across the top "cardiorespiratory," "fetus assessment," "vaginal exam," and then "neuro," correct?

A Hold on a second. I'm not sure I'm on the same place as you. Okay. I just opened it up, it's like a four-page, fold-out obstetrical flow sheet, and I do see what you're talking about, yes.

Q Do you see that that's blank?

A Yes.

Q Why is there a column entitled neuro with a subcategory that says "lower extremity right and left" on the flow sheet?

A Well, on this particular sheet, it looks like there's dozens of columns. Some of them might be appropriate for a particular patient. For example, pupil size is not commented on, and I wouldn't expect it to be. In 25 years of delivering babies, I've never had one of my OB nurses document pupil size on any of my patients.

Q Except maybe after they arrested.

MR. PESKIN: Objection. Is that a question?

MS. MATTHEWS: No.

Q I'm asking you why lower extremities is on there, if you know?

A I'm just looking at the form now to see exactly all the things that are on here. I think it's probably pretty much the same answer I just gave. There are many things on here that, if appropriate, if the nurse felt were appropriate to code or chart, for example, scalp PH, that might be with some patients charted and others not. So on down the line, "dressing," I assume that means like perhaps a wound dressing. If a patient doesn't have a wound dressing, there would be no reason to chart that. It's probably a judgment call.

Q But if there was a policy that says the nurse is supposed to assess the level of anesthesia throughout labor for patients with an epidural, that would be the column where the nurse would document their assessment, correct?

MR. PESKIN: Objection.

THE WITNESS: No not at all. Our hospitals use similar forms like this that have flow sheets. Very often if the nurse finds something relevant, she will write it in her progress note. Very often if you find nothing, she won't chart anything at all.

BY MS. MATTHEWS:

Q Did the nurses for Larita document anything at all about her neurologic status throughout labor?

A I don't know. I would have to review all of the nursing notes.

Q Is that something you haven't done?

MR. PESKIN: Objection.

THE WITNESS: I have done that. I've looked through the entire chart. I'v looked through thousands of pages of records, and that does not mean that I've memorized them or I can answer specific questions.

BY MS. MATTHEWS:

Q So you're telling me now that you don't know?

A That's correct. I would have to look at all the nursing notes to see what they documented on that subject.

Q That wasn't something you did in your review of this case that you thought was important; is that correct?

MR. PESKIN: Objection.

THE WITNESS: No, it's not correct, and I don't even think I meant to imply anything of the sort.

BY MS. MATTHEWS:

Q All right. Would you expect the nurses who cared for Mrs. Dunham to do neurologic assessment after the epidural?

MR. PESKIN: Can you define what you mean by "neurologic assessment"?

MS. MATTHEWS: Any kind.

THE WITNESS: Well, again, I'm trying to get back to the issue of standard of care, what reasonable nurses would do in a similar situation, and across America my understanding is nurses aren't doing routine neurologic checks, no.

BY MS. MATTHEWS:

Q So that's not something you think is the standard of care for nurses?

A Well, I think if it's something out of the ordinary, that's very different. If a patient has a problem, then yes, that would be part of nursing care to assess the problem, but do I think that nurses have to go moment by moment and check on their patient's bowel functions, their bladder functions or neurologic function and moment to moment chart all these things, no. Nurses are trained professionals and they should evaluate what they feel is relevant.

Q Well, that's well and good and I don't want to be rude, but don't you think that neurologic assessment in patients with epidurals are relevant?

A Well, again, that would have to do with what we are talking about. In other words, if a provider places

an epidural, neurologic assessments are important. That provider will often do neurologic assessments, they'll try to determine levels, they may use sensational or pin prick, but I thought you were asking me about the labor-and-delivery nurse.

Q I was. Doctor, do you expect labor-and-delivery nurses to know how to monitor dermatone levels?

A I don't know that most L&D nurses do that, no.

Q Do you expect them to know how to monitor whether a patient is able to move their legs?

A Yes, I would expect the nurse to be able to tell that.

Q Are these things that you expect labor-and-delivery nurses to check in the course of a patient's epidural anesthesia?

A If they felt it was relevant.

Q When wouldn't it be relevant?

A Well, I practice OB at this time, and I take calls at least once a week, so I can answer that very directly on the way medicine is practiced today. Very often a patient will have an epidural, if the baby looks okay on the monitor, if the mother is doing well, then I don't think there's any reason to evaluate whether or not the patient is moving her left leg well or not, that would be a pretty irrelevant thing. I think most nurses

would probably agree with that.

Q How do you know -- determine the person is doing well if you don't know if they can move their legs?

A When I say doing well, I mean in a typical labor progressing well, the cervix is dilating and effacing.

Q Do you think it is the anesthesiologist's job to monitor the level, meaning dermatone level, spinal level of an anesthesia?

A I would believe that it would fall more into the purview of the anesthesiologist than a labor-and-delivery nurse.

Q If I'm understanding what you've said already, are you saying it would fall entirely in their realm?

A I guess what I'm saying is it would depend if there was any type of problem developing. If the patient seems to be comfortable, is not having any problems, then I don't know that anybody needs to be doing any type of meticulous monitoring of dermatones. I know we don't do that in our hospitals.

Q Well, how do you know if a patient is developing a problem if you don't do any type of a test?

A What type of problem?

Q Well, you're the one that said not developing

any problems, like developing a high spinal.

A How would you know if a person was developing a high spinal? There are several warning signs. Typically, the patient will say that she is having trouble breathing, that's one of the first warning signs. If a patient with an epidural were saying that she was having trouble breathing, now that would be a more relevant time for a nurse to check dermatones or to call someone who could help with that.

Q Any other times?

A If a patient is feeling a heavy sensation in their chest, that could be a warning sign of a high spinal. If they're feeling pressure in their chest, that could be a sign of a high spinal. If they're having trouble moving their upper extremities, that can be another sign. So these are the types of things that a reasonable nurse, if she sees these particular things, night at that time want to further evaluate the patient or call somebody to do so.

Q So in other words, if I'm understanding you correctly, if the patient tells the nurse they're having some kind of a problem that might be consistent with a high spinal, you then feel the nurse should do a neurologic assessment; is that correct?

MR. PESKIN: Objection.

THE WITNESS: I think if the patient tells the nurse something that could be indicative of the high spinal, than the nurse should take some type of action, yes. Not necessarily herself evaluate the dermatone.

BY MS. MATTHEWS:

Q What is Larita's baseline blood pressure, Larita Dunham?

A I'd have to look through all the blood pressures.

Q Okay.

A First of all, we need to kind of set some frame of reference here with respect to time, because patients' blood pressure, as you know, often fluctuate from time to time. So approximately what time are we talking about?

Q Well, how would you define baseline? Would that be when the patient was admitted?

A How would you define it? You're asking me a question?

Q Well, I just asked you what her baseline blood pressure is. That's a medical question, isn't it? I'm a lawyer.

A I understand you're also a doctor.

Q Right. Well, I'm here as a lawyer, and I'm asking you to tell me what baseline blood pressure is?

A That's a general term. My understanding is if a person has hypertension or hypotension that developed rapidly, then we would look at their blood pressure at an interval of time before that and that would be the baseline blood pressure.

Q Do you have an opinion as to what Larita's baseline blood pressure is for her labor?

A I'm looking at her blood pressures starting at approximately 9 o'clock in the morning on 1-20-99 and looking over the next few hours, and generally her systolic blood pressures are somewhere just over a 100, 105, 102, somewhere just over a hundred, and her diastolic blood pressures are mostly in the 60s.

Q So is that how you would define her baseline blood pressure?

A In the context of that day, yes. Somewhere a little over a hundred by a little over 60 would probably be her baseline blood pressure.

Q I take it, then, you disagree that Larita's baseline blood pressure for her labor and delivery would be her admitting blood pressure?

A No, I would use a baseline as being several different blood pressures taken on different times. I think that's much more accurate.

Q All right. And what about her baselines for

the epidural procedure. What was Larita's baseline blood pressure before she underwent the epidural anesthesia?

MR. PESKIN: Objection.

THE WITNESS: I think we are talking about the same thing here. In other words, one individual blood pressure doesn't change a baseline. If she happened to have a blood pressure and it was the last one taken right before the epidural was placed, that wouldn't change her baseline. The baseline, in my understanding, is looking at a series of blood pressures over time and kind of getting an idea what her systolic and diastolic blood pressure are generally ranging.

BY MS. MATTHEWS:

Q Okay. So let's look at the series of blood pressures before the epidural is placed, okay?

A Yes.

Q Let's start at -- okay. The epidural was put in at what time?

A I believe the test dose was at approximately 3:55 or 15:55.

Q All right. So let's start looking, then, at about 13:00, okay? At 13:00, would you agree her systolic is 108, correct?

A Hold on one second. I'm trying to find that on

my page here. Yes, correct.

Q And 13:10 it's 121?

A Correct.

Q And 13:40 it's 114?

A Correct.

Q And [redacted] it's 128?

A Correct.

Q And then we go to the anesthesia flow sheet and we see **130** and **140** as blood pressures prior to the epidural?

A I don't have that information in front of me at this time. I'm looking at the labor-and-delivery obstetrical flow sheet.

Q Do you have the anesthesia records?

A I trust you that if you say it's true, it's true. It will save some time.

Q It's true. So would you agree that is a baseline blood pressure considerably higher than the blood pressure you were saying before?

MR. PESKIN: Obection.

THE WITNESS: Often when a patient is having an epidural, they're having an epidural because they're in pain and that might change their blood pressure. Also, the patient may be moved to a different position for the epidural and that might change their blood pressure, but

that does not negate a series of many blood pressures over several hours.

BY MS. MATTHEWS:

Q All right. So then you think for the purposes of anesthesia, the baseline blood pressure is the lowest blood pressure that Larita Dunham had the whole time she was there?

MR. PESKIN: Objection.

THE WITNESS: If I said that, then I was not speaking clearly, because I certainly don't think that's anything like what I just said.

BY MS. MATTHEWS:

Q Well, you picked 105 and 102, the two lowest systolic pressures that she had, correct?

A I said somewhere -- the systolic was somewhere in the range over a hundred. I see 105, 102, 109, 107, 110, 111. So I'm looking at blood pressure after blood pressure that, as I said, was somewhere a little over 100. That's still pretty accurate.

Q You read five blood pressures that were less than a 110, correct?

A Yes.

Q And then if you look at the rest of the page, you'll see 1, 2, 3, 4, 5, 6, 7, 8 on that page alone chat are more than 110 or 115?

A Yes. I'm not disagreeing with you at all. I think we are still in agreement here. In other words, my feeling is that her baseline was somewhere a little over a hundred, and if you want to say maybe, that's more like 115 than 105, I wouldn't argue. It's somewhere in that range, somewhere at 105, 110, 115 systolic, that's where her baseline is.

Q Define for me maternal hypotension?

A There are many definitions for that.

Q Well, what's the correct one?

A I don't know that there is a correct one.

Q Do you know what the anesthesia defenition of maternal hypotension is?

MR. PESKIN: Objection.

THE WITNESS: Well, I believe that several criteria exist. Some people talk about severe hypotension, moderate hypotension, mild hypotension. Basically, the term just means low blood pressure.

BY MS. MATTHEWS:

Q Do you disagree that maternal hypotension is systolic blood pressure less than a hundred?

A That's one definition.

Q Do you agree with that?

A It might be considered to be mild hypotension. We have patients every day in labor that have 95 or 96.

Q Is that hypotension?

A No, they're fine. They're normal.

Q So then you disagree that maternal hypotension is a systolic blood pressure less than a hundred?

MR. PESKIN: Objection.

THE WITNESS: I certainly would say that there may be a journal article or a book somewhere that uses that as their definition, but I would also say that there are probably a hundred other definitions out there, and if you're asking me do I think that's a pathologic finding, no. I see that every day in patients. Some woman just tend to run low blood pressure.

BY MS. MATTHEWS:

Q Then you disagree with Dr. Joshi, correct?

MR. PESKIN: Objection.

THE WITNESS: I don't think I said that. I said I think that some people would credit less than a hundred systolic to be hypotension. Some journals may say that. Dr. Joshi may say that. That's a reasonable thing to say, but I would not say categorically my opinion is under a hundred is hypotension.

BY MS. MATTHEWS:

Q Would you agree that you should not leave a hypotensive patient alone?

A Again, that would depend on the degree. By the definition we were just talking about, 100 systolic, every day when I'm in labor and delivery, it would be quite likely to have a patient with a systolic blood pressure under 100. We leave these patients alone all the time. That's not an indication of bad care or breach of standard of care.

Q Would you agree that you should not leave a hypotensive patient alone, a patient that you consider to be hypotensive?

A Well, depending on the degree of hypotension. In other words, if a patient has pathologic hypotension that I feel is concerning, for example, if a woman has a blood pressure of 60 over palpable, that's a woman that I would not feel comfortable leaving alone. That's very different than somebody who might make some text book definition of hypotension.

Q What about somebody whose blood pressure was 90 systolic?

A It would depend on the particular patient and her situation.

Q Do you believe that obstetricians need to be aware of the most serious and immediate complications of epidural anesthesia?

A I believe most are aware of it. I'm not sure

they need to be aware of it.

Q Do you think they need to be aware of the signs and symptoms of a high spinal anesthesia?

A You're talking about obstetricians now?

Q Yes.

A Again, I would say I believe most obstetricians are aware of that. I'm not sure that they need to be aware of it.

Q If a patient complains of a headache immediately following the insertion of what's supposed to be an epidural anesthetic, does that raise in your mind the possibility of an inadvertent spinal?

MR. PESKIN: Objection.

THE WITNESS: It would be one possibility, yes.

BY MS. MATTHEWS:

Q So if a patient -- if one of your patients complained to you of a headache immediately after a procedure that was supposed to be placement of an epidural, is there any kind of evaluation you would undertake?

A It would depend on how severe the headache was. In our hospitals somewhere between 30 and 60 percent of our patients get epidurals, so we are talking about huge numbers of women. A lot of these women have headaches in labor. Obviously, it's a stressful time, both

physically and mentally. So it would depend, again, on the strength or intensity of the headache.

Q Five minutes or less after the placement of an epidural, a patient complains to you of a severe headache.

A Yes.

Q Is there some sort of an evaluation you would undertake under that circumstance?

MR. PESKIN: Are you talking about an epidural he's placed or somebody else?

MS. MATTHEWS: Somebody else, anybody.

THE WITNESS: I think I would talk to the patient and try to figure out more details. I'm trying now to put myself in the position with this hypothetical patient. She has had an epidural and now about five minutes after the epidural she says she has got a very bad headache.

I first would be worried about the thing we are the most worried about with headaches in a labor patient. That would be toxemia preeclampsia. I would want to make sure she was neither one of those.

I would want to check her blood pressure to make sure she wasn't hypertensive. I would want to check her reflexes. If her blood pressure was up, headache could be the first warning sign of

preeclampsia. If I felt she did not have preeclampsia, and if I was concerned that it might be relating to the epidural, then I would probably call someone from the anesthesia service and get their opinion.

BY MS. MATTHEWS:

Q I take it then a headache can be a very serious sign in a labor patient, correct?

A It can be, yes.

Q So if one of your patients complains of a sudden, severe headache, is that something you would expect the nurse to notify you about?

A I think it would depend on the individual patient.

Q You lost me.

A Well, for example, if a patient was in the hospital with mildly-elevated blood pressures and the pressure started going up and then in the face of elevated pressures the patient said, "My goodness, I'm having the worst headache of my life," yes, indeed, that nurse, 1 would hope that she would notify me. If a patient with no signs of preeclampsia or toxemia said "I'm having a headache," that would be a very different situation so it varies.

Q What types of patient who, five minutes after they have an epidural placed, says, "I have a terrible

headache,!!is that something you would expect a nurse to notify you about?

MR. PESKIN: Objection.

THE WITNESS: Possibly.

BY MS. MATTHEWS:

Q Possibly or yes?

MR. PESKIN: Objection.

THE WITNESS: Again, it would have to do with what is going on in the room. The nursing assessment at the time I think we'd have to have a much more definitive hypothetical to answer all the potential facts that the nurse may be faced with. Headache is perhaps the most common complaint made to a nurse in the hospital. Nurses deal with headaches every day of their life. If a nurse is comfortable that a patient is not having a major problem, no, I don't think she has to pick up and call the doctor every time a patient says that they have a headache.

BY MS. MATTHEWS:

Q So that's not something that you necessarily feel you need to be notified of?

A No. I think it's safe to say that in my many years of practice, the vast majority of times that a patient turns to the nurse and says "Nurse Jones, my head hurts," the vast majority of the time the nurse

does not get on the phone and page a doctor.

Q Isn't that a different circumstance than five minutes after the placement of a epidural the patient has an sudden and severe headache? That does not sound like your normal headache, does it, Doctor?

MR. PESKIN: Objection.

THE WITNESS: I don't know. I think that we could use another analogy. What if it's five minutes after the Pitocin is turned on or off or five minutes after PCA is turned on. It seems to me we are taking a certain event and then saying we are starting a clock after that event. I've already conceded that a severe headache can be a warning sign, and I stick by that testimony, but I think that there is room for nursing judgment. It's the nurse's judgment call to decide when it's proper to call a physician.

BY MS. MATTHEWS:

Q So then you expect the nurse to be able to decide whether a sudden and severe headache after an epidural isn't spinal?

A No, not at all. I expect the nurse to use her good nursing judgment to determine if there's a problem significant enough that a physician should be notified.

Q I'm confused. If the patient complains that they have a sudden and severe headache, that may be a

sign that they have a high spinal, you don't expect the nurse to tell the doctor. You don't expect the nurse to know if it's a spinal. How is anybody supposed to know that's what it is?

A The point I'm trying to make is there are a million different degrees of headaches and pain tolerance. One woman might say, "My head's hurting a little bit." Another one might say, "This is terrible." I think that's a part of good nursing judgment is to evaluate the intensity of the headache, and if they determine that they, as a nurse, are concerned that something may be wrong, then yes, they should call the physician. If their interpretation is, "Well, I've been working with this patient for several hours. She doesn't seem to have a very high pain threshhold, my interpretation is this doesn't seem to be very severe," then no, I don't think that nurse would be duty bound to call a physician.

Q So if a nurse has bad judgment and doesn't tell the doctor, oops. I mean, you've lost me, Doctor. I want to know whose responsibility it is to determine a patient has a high spinal? Whose responsibility is that?

MR. PESKIN: Objection.

THE WITNESS: With your comment about bad

judgment and oops, my understanding is I would hope that everybody is exercising their best judgment. If somebody uses bad judgment, certainly that could cause a bad outcome, but I don't follow your logic here. It seems to me that you're saying that there's no room for a nurse to exercise her own judgment, and that anytime someone has a headache, she is duty bound to call a physician. My interpretation is that's not true. I feel that there is room for nursing judgment. Nurses are highly-trained professionals.

BY MS. MATTHEWS:

Q I'm not saying that there's not room for nursing judgment. I'm giving you a very specific circumstance and you want to talk in generalities. Do you disagree that Larita Dunham developed a high spinal in this case?

MR. PESKIN: Objection.

THE WITNESS: I'm not sure I know the answer to that.

BY MS. MATTHEWS:

Q What do you think caused Larita Dunham's arrest?

A Well, let me get back to the beginning of the deposition where you asked if I was going to be testifying on anesthesia-related subjects, and I think

you said you could make this deposition an hour shorter. Now we seem to be entering into that territory, and I'd like to know, would you like me to get into anesthesia issues now, or would we like to stay out of them?

Q Well, I'm here -- if you have some opinions, I want to know them. I want to know if you have an opinion as to why Larita Dunham arrested?

A I don't know that I can answer that question.

Q So you don't have an opinion?

A Yes, I probably do have opinions. I don't know that I have answers, but I have opinions.

Q Well, what is your opinion as to why Larita Dunham arrested?

A Several possibilities. One would be a high spinal, one would be an amniotic fluid embolus, another would be some other catastrophic cardiovascular event that doesn't fit into either of those two categories.

Q Which **do** you think is the most likely?

A I think probably more likely would be a high spinal.

Q There's no evidence to suggests there was an amniotic fluid embolus, is there?

A Well, actually amniotic fluid embolus is one of the most difficult diagnoses to make. With amniotic fluid embolus, usually there is not good evidence, but

when a patient suddenly has a catastrophic change in her hemodynamic status in the midst of labor, it's always high in the differential diagnosis.

Q However, is it also those patients who have very poor oxygenation?

A Generally, yes.

Q That's not the case here. This patient had a POT in the 400s when she was intubated, correct?

A Well, anything that affects the cardiovascular status can affect the oxygenation. I don't know that a high spinal would do it any differently than an amniotic fluid embolism.

Q Let me rephrase my question. Isn't it a fact that Larita Dunham post-resuscitation oxygen saturation and absolute oxygen concentrations are inconsistent with the diagnosis of amniotic fluid embolism?

A No. I don't believe that's true at all.

Q So you think they are consistent with amniotic fluid embolism?

A Absolutely. It's a spectrum. You can have an embolism that's almost immediately fatal. Obviously, we wouldn't be talking about oxygenation levels because the patient would die, but that's not at all the way all amniotic fluid embolisms occur. There probably are many that can just be a minor showering and it can be

anything in between.

Q But isn't it a fact that when an amniotic fluid embolus is severe to cause a respiratory arrest you can expect to see low oxygenation concentration prior to resuscitation if you are able to resuscitate the patient?

A No, I don't think that's a fact, and I would be surprised to see the bulk of the literature supporting that statement.

Q Why do you think it's most likely this was a high spinal?

A Just looking at the records and everything that I've seen in the records and depositions, it seems to me that that would be the most likely diagnosis but certainly not the definitive diagnosis.

Q So you would agree, then, that if this was a high spinal, at some point prior to Larita Dunham's arrest, had she been under continuous monitoring, something should have been discovered, correct?

MR. PESKIN: Objection.

THE WITNESS: I'm sorry you lost me on that one.

BY MS. MATTHEWS:

Q I'd like you to assume that Larita Dunham developed a high spinal.

A Yes.

Q Would you agree with that if she been continuously monitored, something would have been detected prior to her arrest?

A Well, first of all, I don't know what you mean by "continuously monitored."

Q Someone in the room with her continuously.

A Well, the question seems to be kind of analogous to something like a plane crash. If you knew the plane was going to crash and you had all sorts of people on the plane doing special things, I mean, doctors and nurses work in the trenches. We don't look in hindsight and say oh, okay. You know, we work contemporaneously and we work only with what we have at the time.

Q Well, I'm not asking you any of that. I just asked if someone were there. I didn't say they needed to be there. I just asked you if someone were in the room with Larita Dunham continuously and she developed a high spinal that caused her to arrest, would you agree with me that had she been under continuous observation something abnormal would have been detected prior to her arrest?

A No, and this is why. I said I'm not at all convinced that this was a high spinal, I just thought it

was one of the more likely things because there were things in the record that didn't seem to fit with the high spinal. In other words, if she had been complaining of difficulty breathing, heaviness in her chest, not be able to catch her breath, if those were her initial complaints, yes, that would fit more with a high spinal. I don't recall seeing those things.

Q Well, no one was in the room with her for the ten minutes before she had arrested, maybe that's when she was complaining.

MR. PESKIN: Objection.

BY MS. MATTHEWS:

Q Well, these things are becoming broad generalizations for you, Doctor. I would like you to try to answer the specific questions that I'm asking.

A Let me answer it very specifically with a hypothetical. In a typical American hospital, a woman's been given an epidural and her nurse goes out of the room, as they typically do. If that patient suddenly began having difficulty in breathing, heaviness in her zhest, unable to catch her breath, I would think she would pick up the call button and start slamming it down immediately. So no, I don't think that there's any iindsight where we can say that if a nurse had been in :he room. I think generally that's what call buttons

are for. For that matter, the patient could holler out. Usually labor and delivery stations are set up such that the nurses are never more than a few moments away.

Q You're not suggesting to me that Larita Dunham is at fault for the fact that no one witnessed her arrest, are you?

A I don't even think I was beginning to suggest something like that.

Q It seemed to me that you said that if Larita Dunham was having trouble, she should have hit a call button?

MR. PESKIN: Objection.

THE WITNESS: I don't know if I said "should have." My point was you were asking me a specific question of where a nurse should be, and I'm telling how obstetrics is practiced in the United States of America. Generally nurses are not in the room every moment. Generally if a patient --

MR. PESKIN: Wait. You have to let him finish. If you don't like his answers, that's really too bad. You have to let him finish. Just wait because we are on a speaker phone and it's really difficult for the court reporter to hear.

MS. MATTHEWS: I'm sorry. I thought he had finished.

MR. PESKIN: Well, he hadn't.

THE WITNESS: What I was trying to convey is that the way obstetrics is practiced in America is that the nurse generally is not in the room continuously in patients that have had an epidural. In some hospitals in America, 90 percent of patients have epidurals during labor, and certainly 90 percent of the nurses do not stay in the room all the time. Generally what happens is there's a call button, if a patient has a problem, she might press it. I did not mean to imply anything about blaming anybody.

BY MS. MATTHEWS:

Q All right. The only question I was trying to get at here was I asked you whether you believed that if Larita Dunham had been under continuous observation, she would have had some abnormality prior to her arrest, and you started with an answer telling me that the nurses didn't need to be there continuously. I basically was looking to ask you whether you believe high spinals will show signs and symptoms prior to arrest or whether that can or that could be their first sign and symptom?

MR. PESKIN: That's been asked and answered, all right.

MS. MATTHEWS: I don't think so. I've gotten pages of answers but I didn't hear that answer.

THE WITNESS: Okay. I think I understand your question now, and I think I talked about that before. You asked me what might be the common signs of a high spinal and I remember telling that you difficulty in breathing would be one of those signs and perhaps pressure on the chest or shortness of breath. Is that the type of question I'm answering?

BY MS. MATTHEWS:

Q Right. Correct. So you would expect a patient who is developing a high spinal to have signs and symptoms prior to an arrest, correct?

A I would suspect so, yes.

Q All right. So then you would also suspect that if someone were in the room -- and this is not the question should they be in the room -- just that if someone were in the room, they would detect or hear from the patient something to suggest it was a high spinal before the patient arrested?

A In a hypothetical case?

Q Yes.

A Yes, that's probably true.

Q Would you expect, as an obstetrician, to be notified if your patient developed hypotension?

MR. PESKIN: Objection. Asked and answered.

THE WITNESS: It would depend on again our

definition of hypotension and whether it was clinicly-significant hypotension.

BY MS. MATTHEWS:

Q At what blood pressure would you expect to be notified as an obstetrician?

A That would vary from patient to patient.

Q What about this patient?

A Well, in Larita Dunham, we had just discussed what her blood pressures were doing and we used the term "baseline blood pressure." We were only talking about systolic, but generally as obstetricians we also look at the diastolic, in fact, more frequently so, but her systolic blood pressures through most of the time she was there were in the range of around 100 to 120. Her diastolics were somewhere in the range of 60 and 80. If there was a dramatic change from those blood pressures, either up or down, I would expect to be notified.

Q And can you give me a down number, I mean what you mean by dramatic?

A I don't know that I can give you a number. I don't know that I could quantitate it. Generally, it's a nursing judgment.

Q Well, give me your judgment as to what would be a dramatic change in systolic pressure?

A Well, first of all, it would have to do with

whether it was associated with anything else in the labor. It would have to do if the blood pressure was one blood pressure and if it was sustained. In other words, very often a nurse will get a high blood pressure or a low blood pressure, the proper thing to do is to recheck it, not to call the physician. I believe most nurses are trained that way. If she has a sustained high or low blood pressure, at that time call the physician.

Q Well, what about 78?

A 78?

Q Systolic over 60 diastolic, is that a blood pressure you'd want to be notified about in this patient?

A 78 over 48?

Q 78 over 40.

A 78 over 40, it's something I would want the nurse to be attending to. I want the nurse to be doing nursing interventions. Again, this has to do with the setting, if we are talking about this patient, we are talking about a patient whose just had an epidural, which is probably the explanation of the low blood pressure. I would expect the nurse to be thinking about that. Maybe thinking about giving her some hydration, attending to the blood pressure, not necessarily calling

the physician, but it would be a reasonable thing for her to do.

Q Would you expect to be notified if one of your labor-and-delivery patients had required 35 milligrams of ephedrine to get her blood pressure back up?

A I would expect someone to be notified, either anesthesia service or myself, yes.

Q Well, as a general metter, would you expect to be notified in addition to anesthesia, or is it okay that only anesthesia know?

A It would depend on the individual patient.

Q Let's talk about this patient. This is a V-back, correct?

A That's correct.

Q A V-back patient such as Larita Dunham requires -- hypotension while on Pitocin requiring 35 milligrams of ephedrine and she has a blood pressure of 78 over 40, would you expect -- would you like to be notified?

A Generally, yes, but this case is very different.

Q Why?

A In this case we are dealing with a fetal demise. The obstetrician's main concern when there is hypotension associated with an epidural is how is the

baby is tolerating the low blood pressure. Very often it's associated with the deceleration of the fetal heart rate. So in the typical cases when the physician is monitoring the fetal heart rate, yes, I would want be to notified if the patient required several doses of ephedrine. But in this particular case, I think it's more of an issue having to do with anesthesiology.

Q What about -- aren't you concerned about the risk of uterine rupture in this kind of setting?

A That is one other thing in the differential diagnosis, yeah.

Q Doesn't the obstetrician need to be aware of the hypotension to make an assessment to determine whether this is uterine rupture?

A Well, for example, a woman comes in like Larita Dunham and 20 minutes after she is in the hospital, suddenly her blood pressure falls and she requires several doses of ephedrine. Absolutely, I'd want to be notified about that.

Q What about a patient on Pitocin for augmentation of her labor who had her epidural in for 15 ninutes or less and suddenly becomes profoundly nypotensive, requiring 35 milligrams of ephedrine. Do you think, as an obstetrician, that's something you should be aware of?

MR. PESKIN: Objection.

THE WITNESS: Do I think it's something that I should be aware of, or do I think it's a nursing standard to call the physician?

BY MS. MATTHEWS:

Q Well, answer those separately.

A Well, I'd like to be aware of it. To answer the second question, though, it gets back to appropriate nursing care. If the nurse feels that there is an obvious explanation for the hypotension, if that is being dealt with at the time and there is no fetal heart rate issue to be dealt with, then no, I don't think it's a breach of a nursing standard of care not to notify an obstetrician.

Q So I take it you feel comfortable with letting the nurse decide whether the hypotension is due to uterine rupture?

MR. PESKIN: Objection.

THE WITNESS: No, I don't think that's what I said. I'm implying that the nurse has already called appropriately-trained professionals. These are the professionals who are giving the ephedrine. My understanding is that the nurse is not the one giving the multiple doses of ephedrine. So she's already called someone to take care of the problem.

BY MS. MATTHEWS:

Q Well, is uterine rupture something you would expect the anesthesiologist to think about in this patient?

MR. PESKIN: Objection.

THE WITNESS: Some anesthesiologists would, yes.

BY MS. MATTHEWS:

Q What about all of them?

A Well, I certainly can't speak for all of them in America.

Q Do you expect that when an anesthesiologist is confronted with a hypotensive labor patient that they would know this was a V-back patient, this could be uterine rupture?

MR. PESKIN: Objection. Do you want him to speculate on what other people might know?

MS. MATTHEWS: I asked him if he would expect them to know.

THE WITNESS: What I would expect for all physicians and nurses and certainly for anesthesiologists falling in that category is that they exercise reasonable judgment, and this would mean, for example, in a case of hypotension you think of differentials in your mind, and then you think of what

is the most likely thing going on. If you have a very likely explanation for what's going on, for example, a patient has just been given an epidural, which is extremely frequently associated with an episode of hypotension, then I don't think it would be incumbent upon the anesthesiologist to think about zebras and unusual things that might be able to explain something for which he or she already has a very obvious explanation for.

BY MS. MATTHEWS:

Q Do you believe that the hypotension -- pattern of hypotension exhibited by Larita Dunham is typical for hypotension-caused sympathetic blockade from an epidural?

A I think the hypotension she was having was consistent with something going on with her anesthesia, yes.

Q Oh, I see. You think the pattern of hypotension was consistent with something related to her anesthesia, is that what you said?

A That's my understanding, yes and again, I explained before I don't have a pathognomonic answer for what happened to this patient. I talked about some of the different alternatives. I've already conceded to what I feel would be the most likely thing that

happened, and I feel those blood pressures are consistent with that.

Q Larita Dunham was Dr. Ashmead's patient. He's listed as her first doctor, that's her attending physician, her obstetrician, okay?

A Are you asking me okay, or do I know that to be a fact?

Q Yes. Do you know that to be a fact?

A Well, what I can tell you is I have a whole list of obstetricians involved with this case, a second-year, third-year, fourth-year resident. I have a whole bunch of doctors involved. So I'm not sure exactly what your question is.

Q Do you know who Larita's main doctor was, the person whose service she was admitted to?

A I think I have a pretty good understanding of who all the doctors involved with this case are, yes.

Q Would you disagree with me that Dr. Ashmead was her attending physician?

A That's probably correct, yes.

Q Now, as her attending physician --

A Let me back up just for a minute, because I don't want this to have the impression in any way that I'm not familiar with this case. It sounds like a simple question, "Well, you don't even know who the

attending physician is?" Actually, I've looked at these records extensively and the reason I'm hesitating on that question is not because I haven't read the material, it's because I understand that there was a doctor covering. My understanding is that there was a Dr. Diane Shubeck who was also an OB attending physician who was covering for Dr. Ashmead starting at approximately 5:00 p.m. So when I didn't answer your question directly, it's not because I don't have any information, it's because I have a lot of information and I'm trying to answer you precisely.

Q All right. Well, then let's say that Dr. Ashmead and -- I don't want you to think I'm trying to trick you here. Let's say that Dr. Ashmead and Dr. Shubeck are both her attending physicians, all right? They are her obstetrical attending physicians.

A Yes.

Q Do you think the obstetricians and the anesthesiologists should both be aware when there is a circumstance of refractory hypotension requiring 35 milligrams of ephedrine, or do you think it is reasonable for only the anesthesiologist to be aware of that situation?

A Now, is this a hypothetical or are we talking about Larita?

Q We are talking about Larita.

A In this particular case I think it is reasonable for the anesthesia service to be handling that blood pressure for the reasons I explained previously.

Q So you don't feel there was any need for the obstetricians to even be aware of the fact that their patient was hypotensive requiring 35 milligramses of ephedrine and that's because she had a fetal demise?

A Correct.

Q In your opinion were the obstetricians, in this case, aware that Larita was having protracted hypotension?

MR. PESKIN: Objection.

THE WITNESS: At some point.

BY MS. MATTHEWS:

Q At what point do you think they became aware of it?

A I don't know. I can give you the exact time if you'd like me to go through all the depositions. It might be easier to ask the individual obstetricians. I'm sure they've all been asked that question.

Q I'm just asking you whether you have a sense as to whether they knew Larita was having a problem with hypotension before they learned that she had arrested?

MR. PESKIN: Objection.

THE WITNESS: I don't know without looking through the records. I don't know exactly what time the obstetricians were informed about the blood pressure.

BY MS. MATTHEWS:

Q So you don't know whether they knew before she arrested about the problem she was having with hypotension?

A I don't know exactly when the obstetricians were informed about her hypotension, that's correct.

Q Do you have opinions as to what sort of a blood pressure response you'd expect to see after a test dose?

MR. PESKIN: Objection.

THE WITNESS: Now are you asking me when a patient has an epidural placed and they're given a test dose?

BY MS. MATTHEWS:

Q Correct.

A So now we are going to venture into the realm of anesthesia questions?

Q No. I'm asking if you would offer any opinions.

A No. Let me explain why I gave you that particular answer. I was trying to explain that for the purposes of this case, I will be happy not to offer

opinions relating to anesthesia care, but I believe the way the question was phrased to me was something to the effect to, "Would you agree, Doctor, that you're not qualified to make any opinions about anesthesia care?" My concern was I did not want this to someday be used to imply for all of the cases I ever look at in the rest of my life that I'm not qualified to have any opinions about anesthesia care, but I am conceding in this particular case that I don't plan to render any opinions that have to do with anesthesia care.

Q All right. Do you use ephedrine in your practice?

A Let me clarify that. We use it in our hospital all the time. I personally don't often give it.

Q Do you ever give it?

A I have given it, yes. I mean, I haven't injected it, but I've ordered it, yes.

Q Under what circumstances?

A Hypotension.

Q How long does it last?

A I'm not familiar with the statistics on the half life of ephedrine. I've read the depositions in this case, I've heard different people's opinions. I would have to look it up.

Q What dose do you order when you do?

A Five milligrams is a typical dose.

Q Would you agree that when a nurse doesn't follow a physician's orders, that's a breach in the standard of care expected of them?

MR. PESKIN: Objection. We went through this.

THE WITNESS: Did you want me to give you the answers I gave you before. I think I have answered that question.

BY MS. MATTHEWS:

Q No. I'm talking about a written order. Do you expect a nurse to follow a written order?

MR. PESKIN: Objection. That's asked and answered.

BY MS. MATTHEWS:

Q Doctor, do you understand my question? If you write a written order that says, "Give the patient 35 milligrams of ephedrine," for instance -- no, let's make it 5 milligrams of ephedrine. If you write an order that says, "Give this patient 5 milligrams of ephedrine now," is that an order that you expect a nurse to follow?

A Generally, yes.

Q And that's because -- why is it you expect the nurse to follow that order?

A I'm not sure exactly how to answer that

question. Generally, if I write an order that's reasonable and a reasonable nurse interprets that order, generally she will follow it out. I don't see where you're going with your question.

Q When you write orders, as long as they're reasonable, you expect them to be followed, correct?

A Generally, yes.

Q Would you agree with me that it wasn't -- let me start over.

Do you have any opinions on the resuscitation in this case?

A I don't believe I'm going to be commenting on the resuscitation, no.

Q Do you have an opinion as to how long it should take to establish an airway in a patient who has wrested in a hospital?

MR. PESKIN: He just said he's not expressing opinions on resuscitation.

MS. MATTHEWS: I just want to make sure that's part of resuscitation.

THE WITNESS: Yes. I would put that in that category.

BY MS. MATTHEWS:

Q Do you have anesthesiologists in your hospital around the clock?

A Yes, we do.

Q What kind of hospital do you work at?

A A very good one.

Q No. I mean a community hospital, a teaching hospital, what?

A I work at a Kaiser Permanente Hospital. It is teaching and we do have an independent residency program.

Q How many beds is that hospital?

A I believe it is about 120 beds.

Q Do you have monitored beds in labor and delivery?

A Are you talking about fetal monitoring?

Q No. I'm talking about patient monitoring, like telemetry beds.

A No. The fetal monitors are connected to the nursing station. I don't believe that the maternal monitors are connected by telemetry to the nursing station, no.

Q Where do your eclamptic patients go?

A Well, fortunately we rarely have eclamptic -- did you literally mean eclamptic or preeclamptic.

Q No, I mean eclamptic. If a patient came in with eclampsia, where would they be treated, at labor and delivery?

A Yes. Initially at labor and delivery until the baby was delivered and then they would go to ICU.

Q Are there any particular beds that they go into or just regular labor-and-delivery rooms?

A Regular labor-and-delivery rooms.

Q I'd like to look at my notes. I'm not sure I have anything else, all right?

A Yes.

Q Doctor, in your report on page 4 at the last paragraph, you say, "A few minutes later at approximately 5:08 p.m. Ms. Dunham was noted to be unresponsive and hypotensive," correct?

A Yes, I see that.

Q And you say, "The nurse responded quickly and properly evaluating the patient and calling for immediate assistance. By approximately 5:13 p.m., the code team was present in the room," correct?

A That's my understanding, yes.

Q So that's how many minutes?

A Well, these times, you know, may not be exact to the minute. I was giving approximate answers, and, in fact, it says "at approximately 5:08," but now you're asking me to get it minute to minute.

Q No. I'm asking you how many minutes you think there were between the time Larita Dunham was noted to

be unresponsive and the time the code team responded.

MR. PESKIN: Objection.

THE WITNESS: Well, I was going by notes in the record, that I believe I saw a note that said "code team present."

BY MS. MATTHEWS:

Q I'm sorry. Code team what?

A Present.

Q Right. You got this off the resuscitation sheet, correct?

A Right. That means they were there at that time, that doesn't mean they just got there. They might have gotten there a minute before, three minutes before, and the nurse may have just wrote out the time 15:13 or rather "17:13, code team present." She did not write code team coming through the door at this time. ***So*** I was just using this as an approximation, and that's why I wrote approximately to show that by 17:13 I know the code team was present. I don't know for sure if they had just stepped into the room.

Q Well, that's why the nurse documented "code treatment present'! to note what time they arrived, isn't it?

MR. PESKIN: Objection.

THE WITNESS: I don't know. You'd have to ask

the nurse.

BY MS. MATTHEWS:

Q Isn't the purpose of a code sheet to document the time the event occurred?

A That's one of the purposes, yes.

Q So unless somebody had some better knowledge, one has to rely on the times on the code sheet on the times that thing occurred, correct?

MR. PESKIN: Objection.

THE WITNESS: Not necessarily to the minute. As, you, being a physician, well know in the midst of a code, charting is a secondary, timing is secondary, helping the patient is primary. So all the nurses, all the doctors, their primary goal is to help the patient. Yes, it is important to chart for possible later Litigation, but that is not the primary goal. So in other words, if a nurse was busy doing something else and the code team had been there for two minutes or three minutes and then at 17:13 she wrote "code team present," certainly that could explain in my mind that they had been there for a couple of minutes. That wouldn't be a breach of standard of care.

BY MS. MATTHEWS:

Q I didn't suggest that it was, but you read the depositions, You know that someone was assigned to

chart the times and events, correct?

A I read that in the deposition, yes.

Q And the purpose of charting the times was so that when one reviewed what occurred you would know what time things happened, correct?

A That's one of the purposes, yes.

Q All right. And it says that the code began or the time that events began, the time of the arrest was at 17:08, correct?

A That's my understanding, yes.

Q And then it says "Code team present at 17:13, correct, and that's what you said in your letter, correct?

MR. PESKIN: Objection.

THE WITNESS: I'm sorry. I said approximately, at approximately 5:08 p.m. Ms. Dunham was noted to be unresponsive. I specifically said "approximately" and then I said "by approximately 5:13" and that is 17:13 "approximately," and I used the word approximately once again, "the code team was present in the room." That's what I said.

BY MS. MATTHEWS:

Q Can I ask you how many minutes there is between 17:08 and 17:13?

MR. PESKIN: Objection. We all know it's five,

Laurel.

BY MS. MATTHEWS:

Q Okay. Five minutes, right?

A If you're asking me how many minutes are between 08 and 13, that is the correct answer, yes.

Q Assuming these times are correct -- this is a hypothetical. Assuming the times are correct that there was an arrest at 17:08 and the code team was present is the 17:13.

MR. PESKIN: And not before?

MS. MATTHEWS: I don't care. Let's start over. I just want the question and answer to go together.

Q Assuming the patient arrested at 17:08, okay?

A Yes.

Q And that the code team was present at 17:13.

A For the first time or that they were present in the room?

Q They were present in the room at 17:13. I'd like you to explain to me what your understanding is that occurred between 17:08 and approximately 17:13, based on the depositions you've read and the code sheet, based on everything you've reviewed, what do you believe was happening between the five minutes of the arrest and 17:13?

A Well, when a code is called, many things

happen. I think this is pretty universal around the country. It's probably true in this case as well. A call goes out by some mechanism trying to reach the people on the code team. Often people will be wearing code beepers, sometimes overhead pages are done and people will come from wherever they are as quickly as they can to arrive at the scene of the code. Of course, it takes time to come from wherever you are. You may be in the operating room, you may be down in the cafeteria, but generally, it takes a few minutes for the code team to physically get from where you are to the site of the code.

Q Okay. So the code team was trying to arrive, correct?

MR. PESKIN: Objection.

THE WITNESS: The code team did arrive.

BY MS. MATTHEWS:

Q During that interval, the code team was coming to the code?

A That's my understanding.

Q What was happening with Larita Dunham between 17:08 and 17:13?

MR. PESKIN: Objection.

THE WITNESS: I'd have to look at the records in the depositions.

BY MS. MATTHEWS:

Q Well, you did.

A Right. But I haven't memorized them. There's a big difference between looking at 3,000 pages of documents and memorizing 3,000 pages of documents.

MR. PESKIN: Laurel, he's not going to be offering opinions as to any of this.

MS. MATTHEWS: I'm just asking him if he knows what happened in that five minutes in terms of the care rendered to Larita Dunham.

Q Do you know what Ms. Honaker did after she called the code team?

A Yes. Can you hold on for one moment?

Q Uh-huh. I take it you're looking at something.

A Yes. At this time I'm reading through Nurse Honaker's deposition. You were asking me what she was doing during that time, and I'm looking at her deposition so I can see what she said she was doing at that time since I wasn't there.

Q Okay. That's fine.

A I don't see the point -- I may be missing this, of course, but I don't see the point in Nurse Honaker's deposition where she was specifically asked what she was doing in those five minutes. I see a lot of questions about what was she was doing before those five minutes,

and I see questions relating to after that time, and I may be missing this, but I don't see that she was asked that question.

Q What should Nurse Honaker have been doing during those five minutes after she called the code team?

MR. PESKIN: Objection. Now you're not asking him what is in the record. You're really wanting him to get into his opinion as to what should happen during a code when he said he's not going to testify to that.

MS. MATTHEWS: I just want him to answer the question, and this isn't about the code.

Q This is about what you believe Nurse Honaker should do after she discovers a patient is not breathing after she calls the code team.

A Generally, in a situation like this the nurse will attempt to stabilize the patient to the best of her ability.

Q How dose a nurse do that?

A There are various things she can do depending on what she has been trained to do. If she feels comfortable doing CPR, she can do that prior to the arrival of the code team. If she feels that the code team is coming down the hall, she may feel that may be more detrimental to the patient.

Q Are the labor-and-delivery nurses in your hospital CPR certified?

A Some of them are. To the best of my knowledge, none of them are ACLS certified.

Q Do you think that all labor-and-delivery nurses should know how do do CPR?

A It probably wouldn't be a bad idea.

Q Do you think that the standard of care requires it?

A No.

Q Do you know what -- if it is a hospital policy that requires nurses to be CPR certified?

A At what hospital?

Q At yours.

A I do not know the answer to that.

Q Do you know if there is a policy at Metro that requires it?

A I don't know.

Q If a nurse was CPR certified, would she be expected to institute CPR while she was waiting for the code team to arrive?

A I'd expect them to stabilize the patient. I am aware of studies recently that have shown that the vast majority of in-hospital codes have very poor long-term outcomes, regardless of whether CPR is initiated by the

nurses prior to the code team arriving or not.

Q That's a different question, isn't it?

A I'm sorry?

Q That's a different question.

A I think that really relates very much to that interval. It's certainly an important question is when a nurse calls a code, what is she to be doing, and I think it's getting to be common knowledge that it probably doesn't make any difference. In other words, the nurse could start pounding on the patient's chest, the nurse could start doing mouth-to-mouth, but in the few moments that the code team is coming down the hall, I don't think it makes any difference.

Q So that's not something you expect the nurse to do?

MR. PESKIN: Objection.

THE WITNESS: No.

MS. MATTHEWS: I don't have any more questions.

THE WITNESS: Thank you.

MR. PESKIN: Will read.

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I, BRUCE L. FLAMM, M.D., do hereby declare under penalty of perjury that I have read the foregoing transcript; that I have made any corrections as appear noted, in ink, initialed by me, or attached hereto; that my testimony as contained herein, as corrected, is true and correct.

EXECUTED this _____ day of _____, 20___, at _____, _____
(City) (State)

_____
BRUCE L. FLAMM, M.D.

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were placed under oath; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: JUN 16 2000

Jennifer D. Barker

JENNIFER D. BARKER
CSR No. 12168