IN THE SUPERIOR COURT FOR THE
DISTRICT OF COLUMBIA

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JAMES and ANTONIOUS KINDER, :
Parents and Next Friends :
of JA'MESHA A. E. KINDER, :
a Minor :
:
v. :
:
CHILDREN'S HOSPITAL MEDICAL:
CENTER : NO. 95-3970

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Oral deposition of ROBERT R. CLANCY, M. D., taken pursuant to notice, at Children's Hospital of Philadelphia, Department of Neurology, 324 South 34th Street, Philadelphia, Pennsylvania, 19104, on Friday, November 15, 1996, beginning at approximately 2:15 p.m., before Margaret Dickinson, a Registered Professional Reporter and Notary Public, there being present.

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APPEARANCES:

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I N D E X

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ROBERT R. CLANCY, M. D.

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E X H I B I T S

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THE REPORTER: Do you agree to a New Jersey Notary to swear in the witness?

MR. BROWN: Out of state notary, I'll stipulate to that.

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(It is hereby stipulated by and between counsel for the respective parties that the witness may be sworn by an out-of-state Notary with full force and effect.)

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THE REPORTER: Stipulations?

MR. BROWN: Everything except as to the form of the question

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ROBERT R. CLANCY, M. D., after having been first duly sworn, was examined and testified as follows:

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BY MR. WILSON:

Q. My name is Mike Wilson. If there's any question that I ask you that you don't understand, please let me know and I'll rephrase the question.

State your full name for the record, please.

A. Robert Ryan Clancy.

MR. WILSON: Let me hand you what will be marked as Exhibit 1.

(Whereupon Exhibit 1 is marked for identification.)

BY MR. WILSON:

Q. Would you identify Exhibit 1 for the record, please?

A. Actually, this is part of my CV. The rest of it's out in the printer.

Q. Do you know a Dr. Jan Hahn?

A. Yes, I do.

Q. How is it that you know Dr. Hahn?

A. He is a child neurologist. He is at Standford, obviously, and I did my training there. We did not overlap, I believe, in time.

Q. Have you had any professional interaction with him?

A. Yes.

Q. What professional interaction have you had with

him?

A. I have discussed cases with him. He has published work that overlaps with things that I do. I think I've reviewed some of the manuscripts he has submitted to professional journals, that sort of thing.

Q. Have you formed any opinions concerning his competency as a pediatric neurologist?

MR. BROWN: He is not going to testify about Dr. Hahn's competency or lack of it. You can answer.

THE WITNESS: I can only -- the experience I've had with him has been fine.

BY MR. WILSON:

Q. Have you reviewed his deposition?

A. Yes, I have.

Q. Does a proportion of your clinical work involve infants and adolescents with cerebral palsy?

A. Yes.

Q. What proportion of your practice would involve such infants and adolescents?

A. Maybe ten percent.

Q. Are you familiar with the group of diseases that

could be called white matter diseases?
A. Yes.
Q. Have you ever published on white matter disease?
A. No, I don't think I have.
Q. Do you consider yourself to be familiar with the diagnosis and treatment of white matter disease?
A. Yes.
Q. In approximately how many infants with white matter disease have you made the primary diagnosis?
A. By primary, you mean the first to make the diagnosis?
Q. Yes.
A. Maybe in 15 years here, five or six cases.
Q. In those five or six patients, you were the physician that basically made the initial diagnosis of white matter disease; is that correct?
A. Well, what I'm saying is to make the definitive diagnosis, where the enzyme test comes back abnormal, yes.
Q. In those five or six patients, how did you make the diagnosis?
A. Biochemically, with metabolic testing.

Q. Exactly what types of metabolic testing?
Q. On these five or six infants, what kind of tests were done and what were you looking for?
A. We have a standardized battery of lysosomal enzymes and organic acids and amino acids that we review. I'd have to pull a book out to list the specific tests.
Q. When you write an order for such a battery of tests, how would you refer to the tests?
A. They have a -- sort of a package deal for lysosomal storage, for gangliosidosis, organic acidurias, amino acidurias. And they sort of have, again, like a package deal of we do this many tests within those categories.
Q. So, how could I refer to that standard battery of tests, what terminology?
A. For example, like lysosomal storage battery.
Q. Would that be the entire set of tests or would there be other tests too?
A. Well, that would be on the menu to pick from.
Q. So, what tests would you do to make the diagnosis of white matter disease?

A. Again, metabolic tests, just as I said.
Q. Would there be more than a lysosomal storage battery tests?
A. If you're looking for specifics, I'll just get the book out and read them to you. But I don't want to -- I can't list the names of the enzymes for you, as I sit here.
Q. Have you ever made a diagnosis of white matter disease that's not based upon these metabolic tests?
A. Yes.
Q. In how many patients have you done that?
A. Again, probably in 15 years, maybe ten children that have white matter disease, but did not have any findings on their metabolic testing.
Q. How was it that you made the diagnosis in those cases?
A. Basically, the child has to start with a neurologic abnormality. They are referred, obviously, for a reason of one sort or the other. There are physical findings that suggest white matter disease, for example. Excessive irritability is a white matter symptom, hypertonia, hyper-reflexia, signs of

spasticity are consistent with white matter diseases.

The second thing is that to have some idea of where the evaluation is going, in this day and age, most kids get imaged. If their imaging shows that they have abnormal white matter, then you can make a diagnosis of white matter disease based on the clinical findings and the scans.

The next step is whether you can identify the specific biochemical abnormality or not.

Q. In what percentage of the cases with white matter disease have you been able to identify a specific chemical abnormality?

A. Again, really a few. In 15 years, personally, and I can't speak for the other 13 neurologists here, but five or six cases with a specific enzyme diagnosis.

Q. Would you give me an estimate of the percentage of patients that you've diagnosed with white matter disease who were found to have a specific abnormality?

A. A third, maybe 40 percent.

Q. What treatment do you give to patients with white matter disease?

A. There's usually no specific treatment.

Q. What's the range of life expectancies of patients with white matter disease?

A. The range would be from a few months or a few years to a relatively normal life span.

Q. What would determine where a particular patient would fall within that span?

A. If they really had a genetic -- not genetic, a progressive biochemical disease, one of the classic white matter diseases, then those are usually progressive over time in the sense tht their clinical manifestations change. The realistic expectation is that they will die from that disease in their teenage years or early adulthood, something like that.

For the nonprogressive white matter diseases, they don't necessarily clinically deteriorate. And part of it is simply how severe they are clinically. If their handicap from it is profound, then they risk death from seizures, from aspiration, from infection, things like that.

If they are more mildly impaired, then they could have a fairly normal life span.

Q. Are there any tests that can be done on a child

with suspected white matter disease that can rule out the diagnosis?

A. Rule out what diagnosis?

Q. Of white matter disease, say this is not white matter disease.

A. No, I don't think so.

Q. You're not aware of any such tests?

A. Well, you know, tests rule things in more than they rule things out. If you do exosamitobase A (phonetic) test and it's normal, well, you know that's not what the condition is. It doesn't tell you all the other possible combinations, so it's hard to rule things out. It's easier to rule things in.

Q. Do you consider yourself to be familiar with the diagnosis and treatment of hyperinsulinism in infants and adolescents?

A. I am familiar with it. It's not my job to diagnose it or to treat it, but I have been involved with patients in whom that diagnosis had been made.

Q. Do you feel that you're sufficiently familiar with the diagnosis and treatment of hyperinsulinism to render opinions at trial concerning Ja'mesha Kinder on

the subject?

A. I had not intended to.

Q. I saw where you gave a grand rounds on the recognition of HIE from a hypoxic event. Number 102, Evaluation of Neonatal Hypoxic Ischemic Encephalopathy, Neurology Grand Grounds, West Jersey Hospital, Voorhees, New Jersey, April of 1994.

Did you give such a grand rounds?

A. Yes.

Q. Did you prepare any slides or make any notes with respect to that presentation?

A. I probably have slides.

Q. Would you still have those?

A. Yes.

Q. Was it a speech or slides or --

A. It would have been a slide presentation.

Q. Do you recall the basic nature of the presentation?

A. Yes, I give that talk a lot.

Q. What's the substance of the talk?

A. The substance of the talk is that if a child has brain damage from a sudden HIE incident, then you

examine the child for the characteristic signs of the damage. And this includes looking at the so-called multi-system malfunction, examination of the kidneys and the bone marrow and the liver and the GI tract and the myocardium and the presence of coma, for example.

Seizures are a sign after HIE, hypotonia and hyporreflexia, low reflexes and low tone, and how that child would be evaluated. It's not an imaging lecture, so I don't know that I have any specific criteria spelled out about CT or MR changes. I think that's probably the flavor of the talk.

Q. Is it your position that the applicable standard of care nationwide requires such an evaluation of infants after an acute suspected hypoxic episode?

A. I don't think there's been any standards offered by anybody about that. These are my personal opinions about how I evaluate those children.

Q. Is that what you recommend to hospitals that you speak to, that they do such an evaluation?

A. I don't recommend it, I simply say this is how I go about evaluating the children. What they do is their business, quite frankly.

Q. Do you have any knowledge as to whether the type of examination that you recommend is done nationally or is it just a practice that you have?

A. I hadn't done any surveys to know what other people do, so it's hard for me to answer that. My sense is that probably what I do is at least similar to what other child neurologists do looking at sick babies.

Q. Do you have any objection to providing me with a copy of your slides through Mr. Brown?

A. I don't have any objection to it.

Q. I would appreciate if you would do that.

I see also that you've given a talk, number 96, Differential Diagnosis and Role of EEG in Acute Perinatal Asphyxia, NIH Consensus Workshop on Acute Perinatal Asphyxia, Bethesda, Maryland, February, 1994.

A. Yes.

Q. Did you present a paper?

A. No, I presented a lecture and then a manuscript followed that was published in the NIH document. That's public information.

Q. Would you have a copy of that document?
A. No, we got no reprints on that.
Q. What was the nature of the publication?
A. I think actually the publication is listed. That's in the section for lectures. And if you'll hand it to me, I think I can show you where that is.
Q. Okay.
A. This is page 17, number 28 gives the reference for where the information is published.
Q. Thank you.
Epilepsia, is that a publication?
A. A journal.
Q. Contribution of EEG to the Understanding of Neonatal Seizures. Would you just basically summarize your view of the role of EEG in evaluating instances of suspected acute asphyxia?
A. That's really not what that's about, that's about seizures.
Q. No. I went back to 96, Differential Diagnosis and Role of EEG in Acute Perinatal Asphyxia.
A. Okay. The role is to measure the function of the brain. So, for example, when you take an imaging

study, do a CAT scan, it's like a snapshot. It's a picture, it says this is how the brain looks. That's nice to know, it's important to know.

The other side of that coin, though, is not just how does the brain look, how is it working, how is it functioning. Specifically, the EEG measures the cortex and how it functions, the strength of the electrical signal, the symmetry between the two sides. So, it's intended to compliment a clinical examination. It's intended to compliment the imaging examination, the CAT scan and MRI.

It is, in general, a yardstick for how severe things are. So, for example, there are some extreme EEG abnormalities. Like the EEG is missing, it's flat, it's isometric. If that was the finding after asphyxia of any type, that would say, well, gee, that's a profound disruption of brain functioning. That must be awful bad and you would be able to predict reliably a poor prognosis.

On the other hand, if the EEG was done when the child is at their sickest and the findings were that the EEG was only mildly abnormal, the

information would be, well, this hasn't been that bad or that disruptive. So, it's sort of like a -- again, a general yardstick for how something has affected the functioning of that system.

Q. Is it common in your experience that if there's an hypoxic insult to a child and then an EEG is done and that's abnormal, that from that point on the EEGs will tend to improve over time?

MR. BROWN: Well, note an objection to the form of the question unless you explain in what way it's abnormal. I think that's a little vague.

THE WITNESS: Actually, I understand the question.

MR. BROWN: I object to the form of the question.

THE WITNESS: There's different types of abnormalities, so we won't worry about which type it is. The general idea is that right in the context of the illness that produced the hypoxia or whatever, the EEG should be at its most abnormal at that point.

As time passes and the child recouperates from the worst of that illness, the EEG generally goes

back to normal or closer to normal. So that you look at the EEG closest to the time of the insult to see how much impact the insult had on the child.

BY MR. WILSON:

Q. And are you familiar with the use of auditory and visual evoked potentials in the evaluation of a suspected hypoxic event?

A. Yes.

Q. Do you, in fact, from time to time order or recommend evoked potentials as a way of evaluating suspected hypoxic injury?

A. No.

Q. Why is it that you wouldn't do that?

A. Actually, because, again, the value of the EEG is that it's a brain signal that's spontaneously generated from the cortex, which is the most important part of the brain. And on the other hand, evoked potentials are not really looking at the cortex.

In terms of what I want to know about, I'd rather know about the cortex than about a hearing channel. The value of evoked potentials is that it's very objective. You get a number on the screen and the

number is either high or low or whatever. People like Jan Hahn and I myself have a lot of experience looking at EEGs, so that I feel comfortable interpreting them.

Other places that may not have the experience would rather go to something objective and get a number and know if it's high or low. The EEG is more telling to me than that in terms of what I'm interested in.

Q. Would it be a common pattern, where there's an incident of hypoxic injury to the brain, for the first set of evoked potentials to be abnormal and then have the evoked potential response improve over time?

A. I don't really have much experience with that because, again, personally I don't use them to evaluate children with hypoxia. We use them here to really look for antibiotic toxicty and things like that.

Q. You've done quite a bit of writing on seizures?

A. Yes.

Q. Would the evaluation of post event seizures be one of the factors that you would consider in evaluating the nature and extent of an hypoxic injury?

A. I'm sorry, I kind of lost you.

Q. Basically, what I was asking is would you look at the presence or absence of seizures and the nature of the seizures in evaluating whether there was an hypoxic injury from a suspected event?
A. It's certainly one of the factors you look for.
Q. Considering seizures, what about the seizures would you be looking at? For example, types of seizures, duration of the seizures, things like that?
A. Actually, the main thing is just whether there are seizures or not. That's really the big -- the first decision point. And the main one is simply are there seizures or not. I don't know really that it makes that much difference in terms of understanding the cause or the prognosis if it's seizure type A versus seizure type B versus seizure type C.

They are all seizures and none of them are welcome in that setting. The duration of the seizures, I take it you mean how many days the child has seizures as opposed to how long an individual seizure is?
Q. It was a very general question. For example, would it make a difference to you whether it was a 30-second seizure during the code or 20 minutes of

tonic/clonic seizures or two hours of intractable seizures, for example?

A. Those would be important differences to know about. Usually, the situation in infants is that the individual seizure is relatively brief and they may have a bunch of relatively brief seizures as opposed to one single nonstop two-hour seizure.

That can happen, but it's not very common in infants. They seem to have trouble maintaining indefinite seizures.

Q. How would you define a tonic/clonic seizure?

A. It literally has two forms. The first refers to the word tonic, and tonic means that there's been an abrupt change in the tone. So, the first phase of the seizure is for the muscle to become rigid. That's the tone change.

The word clonic means to shake or jerk and that's the second phase of the seizure. So that after the period of muscle stiffening, there is this rhythmic repeated jerking in the clonic phase. So, tonic/clonic seizure is a very specific form of a seizure.

Q. If a patient had no history of seizures and then

had a suspected hypoxic event and then started having seizures, would that be some evidence that the brain had sustained some injury as a result of the event?

MR. BROWN: Object to the form of the question. You're assuming facts not in evidence.

THE WITNESS: I mean the presence of the seizure certainly says that functionally that brain is different, the brain is not functioning as it had before. It does not guarantee that that is associated with damage. I mean children can have seizures from low calcium levels and there's no damage at all, it's just not functioning properly.

So, at any rate, the presence of the seizure certainly is a change in the functional status of that brain.

BY MR. WILSON:

Q. If a child had had no evidence of seizures and then had a suspected hypoxic event and then started having seizures, would that provide you with some evidence that the brain had suffered an insult during that episode?

MR. BROWN: Same objection as to

foundation.

THE WITNESS: Well, by insult, since you haven't defined it, I'll interpret it to mean a functional insult again. Again, the seizures are not wanted. They are not expected. They are not natural. So that the insult would be this child's brain isn't functioning properly, it's having a seizure.

But that's a different issue than has the threshold been crossed into the land of brain damage. People have seizures every day without having damage. In this setting, though, of hypoxia, the question is is this a hypoxic triggered seizure or is this a sign that's damage going on and the brain is seizing from damage. That's what I think the issue is.

BY MR. WILSON:

Q. Would it be fair to say that you would regard a suspected hypoxic event as being more potentially serious if there's a situation where there's no seizures prior to the event and then there's seizures after the event?

A. All else being equal, I would think that, yes, if an event was associated with seizures, it would be

more potentially worrisome than an event without seizures, knowing no other factors.

Q. Have you been asked in the past to review other cases where there's a suspected hypoxic ischemic event and the issue is whether the child has had brain damage?

A. Yes.

Q. About how many times would you say that you've been asked to look at cases like that, legal cases?

A. Oh, a couple a year. I mean it's probably the most common reason that I would be asked to see a baby medical-legally.

Q. Approximately how many years have you been available as an expert in medical-legal cases?

A. For this sort of thing, maybe 12 years.

Q. So, over the 12 years, would you give me an estimate as to how many infants or adolescents you've evaluated or looked at the chart to determine whether or not you believe they have sustained brain damage as a result of a suspected hypoxic ischemic event?

A. 24.

Q. And of the 24, do you have any estimate of the

breakdown between when you were asked to consult for the plaintiff and when you were asked to consult for the defendant?

A. It's not -- I don't have any policies. It's probably 50/50, for all I know.

Q. Have you given depositions on behalf of infants in which you've opined that they have sustained brain damage as a result of events?

A. Yes.

Q. About how many such depositions do you believe that you've given?

A. At least ten times, I'm sure.

Q. Would you have any copies of those depositions?

A. No, I wouldn't keep any of that.

Q. Can you recall any lawyers whom you've worked with who represent the plaintiff in cases where you've given depositions?

A. I can tell you the one I'm working with. There's a local case, it's the only one I can think of right now. The man's name John Baldante. The case is about a child named Anthony Desimone.

From what I remember, it was a pretty

straightforward perinatal asphyxia. I'm sure there was a deposition or a report at least in that.

Q. Have you evaluated any other cases where the issue was an in-hospital arrest?

A. Yes, this was a case that just settled -- let me think if I can recall the name. The child's name Maya Chavanne. It was a case from Michigan, I believe. And the issue was that it was a child born with a syndrome that goes by the strange name of Kabuki Mask syndrome. And part of that syndrome is that they have congenital heart disease.

This child had surgery to repair the congenital heart disease and at some time in the post-op period had a cardiac arrest and was revived and so forth. And the suit alleged that the child developed mental problems and so forth and so on as the result of the arrest. And the opposing opinion was that her developmental problems were the known effects of Kabuki Mask syndrome.

Q. Did you testify on behalf of the child?

A. No, on behalf of the hospital.

Q. Did you testify in that case that the child had

no injury as a result of the arrest?

A. I think that was the basic gist of it, yes.

Q. John Baldante, is he the attorney for the patient?

A. For the child, yes.

Q. He would be in Michigan?

A. No, I'm sorry. John Baldante is here in Philly. Anthony Desimone is a birth asphyxia case. The other one is this Maya Chavanne. The lawyer's name that I worked with defending the hospital was Jan Roller. I just don't have any paperwork on it.

Q. Where is she located?

A. I'm pretty sure it's Michigan.

Q. Do you recall who the plaintiff's attorney was?

A. No, sir, I don't.

Q. Any other cases that you can recall where there's been an in-hospital arrest and you've rendered testimony on one side or the other?

A. I don't think so. I mean I've certainly looked at cases and couldn't satisfy the person who asked me to look at it. I didn't agree with his point of view, so those wouldn't go to deposition, of course. I can't

remember any depositions about it.

Q. Have you ever been a party yourself to a malpractice case?

A. Yes.

Q. Approximately how many times?

A. Three times.

Q. Were you the plaintiff or the defendant in the three times?

A. I was the defendant, I guess. These were brought against me.

Q. Are any of those active now?

A. Two are them of active.

Q. What are the allegations in those two?

A. The first is a girl who I referred to the cardiologist here. And, basically, she had an IV started and the allegation is that the IV injured a nerve in her arm. So, that's an active case. My involvement is I had referred her to the cardiologist.

My job here is largely dealing with newborns and particularly the cardiac babies. The second case that's active has to do with a child who had heart surgery as a newborn infant, had a terrible

time -- medically had a terrible time, was damaged severely in the process and ultimately died from the heart disease.

I'm not sure what my role -- I saw the child after the surgery, after the damage was done, and I'm in that suit too.

Q. What were the allegations in the case that was resolved?

A. This was a child that I had treated for Tourette's syndrome for years, then later developed a new seizure disorder. I got a CAT scan. The kid had a tumor. It turned out to be malignant and within about six months, had died of a malignant tumor.

The family alleged the child had the tumor all along and that's what caused the Tourette's syndrome. And that was dropped shortly after it started.

Q. Are there any materials that you've published that would set out the factors that you would look at when there's an arrest and you're trying to evaluate whether there's brain injury from the arrest?

A. I can look through that quickly. In terms of

things that are written down textbook wise?

Q. Yes.

A. I think the closest to answer your question would be a review chapter. This is page 15. It's reference 12 and this is like a review article. It's in a book that's vaguely medical-legal. It's sort of like different issues in child neurology that often get entangled medically-legally.

The title of the book is Mechanism Management and The Risk of Practice, although the original title was The Risk of Malpractice. And I wrote a chapter about neonatal seizures and what can cause it and what doesn't cause it and that sort of thing. That's about it.

The thing you had already seen on the Contribution of the EEG to Understanding Neonatal Seizures, I think that touches on it. But it doesn't spell out an algorithm for approaching that.

Q. Is there any source or sources of information that you would regard as reliable authorities in this area that I would go to and read up on it?

A. Well, I guess I'm supposed to cringe and shudder

when you say authoritative.

Q. I'm not going to get into a big thing about the word authoritative.

A. Actually, you're probably aware of John Freeman's NIH book about the prenatal. Those have some reasonable ideas in them.

Q. I'm more focusing on an injury occurring after prenatally.

A. Oh, after. Actually, your situation, though, with this -- with Ja'Mesha more resembles still the neonatal thing than anything else in the sense that her biology will be determined by her age basically. When push comes to shove, she's basically more like a newborn baby than anything else.

However the child becomes hypoxic ischemic, whether it be through the process of birth or SIDS or a collapsed lung or whatever, the medicine there is going to be the same. I think some of the ideas that are used to look at newborn infants with birth asphyxia or after cardiac surgery makes sense to think about her.

There's not a whole lot of literature

specifically on -- I don't know that there is, on aspiration, cardiac bradycardia, that kind of thing. If there is, I haven't come across it.

Q. You're board certified in pediatrics?

A. Yes.

Q. Pediatric neurology?

A. Yes.

Q. Is there a board certification in pediatric neurology?

A. Yes.

Q. Anything else?

A. EEG.

Q. That's a separate board?

A. Yes.

Q. Have you reviewed the EEGs in case?

A. No.

Q. Do you feel that the reports in this case are adequate for your opinions or do you feel that you need to look at the actual EEGs to render an opinion that you're comfortable with?

A. I actually know the people who read the EEGs and they gave a pretty adequate description of what they

saw. I thought it was a reasonable -- it didn't surprise me to hear there were some mild abnormalities.

I think Lucy Civitello read one of the followup EEGs when the child was doing a little better and it returned to normal.

Q. With your own patients, do you normally read CT scans and MRIs of the brain yourself?

A. Not really. I look at them with a radiologist, so I can tell them what's going on and they can tell me what they see.

Q. Would you defer to a neuroradiologist on the evaluation of CTs and MRIs of the brain?

A. I generally do, that's why I go to them for their opinion and their expertise.

Q. When were you first contacted in this case?

A. About a year ago, December of '95.

Q. You have a letter there?

A. Yes.

Q. Can I may see it, please?

A. Sure.

MR. WILSON: May I have this marked as Exhibit 2?

(Whereupon Exhibit 2 is marked for identification.)

MR. WILSON: Exhibit 2 would be the letter that you received from Mr. Brown's office of December 8, 1995.

MR. BROWN: It's not from my office.

THE WITNESS: Children's legal department.

BY MR. WILSON:

Q. Thank you. Before I get into this, have you ever had any professional relationships with Children's Hospital of D. C. or doctors at Children's Hospital of D. C.?

A. Only insofar that I know two of the people quite well. Roger Packer, who is the head of their child neurology department, used to be a member of this neurology department. And Lucy Civitello, who I think just read one of the EEGs, had done her training at this Children's Hospital of Philadelphia.

So, I know these people. I don't have any active collaboration or interaction other than simply knowing them, that's it.

Q. Did you receive a call prior to receiving this

letter?
A. Probably from -- there's a woman, I think, in the legal department at GW or wherever.
Q. Linda Matthews, paralegal?
A. Yes, I think I spoke with her.
Q. How well do you know Dr. Roger Packer?
A. He worked here for about five years -- seven years, maybe, before he left to go to D. C. Children's.
Q. Do you talk with him from time to time?
A. Not anymore, we're not personal friends.
Q. Were you in the past?
A. We were colleagues, we were never socially friendly.
Q. And when's the last time that you talked with Dr. Packer?
A. Maybe two years ago.
Q. Have you ever gone down to Children's to give lectures or grand rounds?
A. No.
Q. Has Dr. Packer ever been invited up here to give lectures or grand rounds that you're familiar with?
A. Not since he's been there, at least not that I

know. His area is neuro-oncology. That is about the furthest thing in the world from what I'm interested in, so I wouldn't have gone.

Q. What about Lucy Civitello, are you friends with her?

A. Again, friendly, but not friends.

Q. When's the last time that you talked with her?

A. More than two years ago.

Q. In the last year or two, have you given depositions on behalf of other Children's hospitals around the country?

A. Well, this Maya Chavanne, I don't know if that's a Children's Hospital or not. I think it was called Gillette Hospital.

Q. Let me rephrase the question.

In the last year or two, have you given testimony on behalf of other hospitals around the country?

A. Yes.

Q. What other hospitals have you testified on their behalf in the last year or two?

A. Again, I think this thing in Michigan -- I hope

I'm not confabulating this. I think it was called Gillette Children's Hospital. I could be dead wrong about that, but somehow that comes to mind. I believe I have also given depositions on behalf of Duke University Hospital, but that would have been years ago. The others don't stand out.

In a lot of medical-legal things, the hospitals are involved, but they're community hospitals and I don't really know who they are. They are not big mega centers or anything like that. I don't have any other names for you.

Q. Now, prior to receiving this letter, you most likely had some discussion with the staff of the Children's Hospital, would that be correct?

A. I think with that paralegal person. Ms. Matthews, was it?

Q. Did you understand that you were not supposed to examine whether or not any nurses or doctors at the hospital breached applicable standards of care with respect to the response to the monitors?

A. There was never any request of me to examine the conduct of the doctors or nurses, but rather to form an

opinion about whether the arrest materially contributed to her status.

Q. But did you have an understanding that you were not supposed to look at whether or not there was a delay in responding to the monitors?

A. I'm not sure I understand the question. Can you ask it again?

Q. Yes. Was it your understanding that you weren't even supposed to consider the issue of whether there was a delay to the alarms?

MR. BROWN: He is not going to be offered as an expert on that issue.

THE WITNESS: There was never any discussion of it one way or the other.

BY MR. WILSON:

Q. Still, my question is: Was it your understanding that you were not supposed to even consider the issue of whether there was a delay in responding to the alarms in Ja'mesha Kinder's case?

A. It just wasn't discussed. There was no instruction to consider it or not consider it, it was never really discussed at all.

Q. In this initial discussion with the hospital staff, were you told that there was a period of time between when the monitor alarms went off and when they were responded to?

MR. BROWN: I object. You're asking him about information relayed to him by the legal office. That's attorney-client privilege.

MR. WILSON: Not when the client calls up the expert. Any communications between the hospital and the expert are perfectly valid.

MR. BROWN: I'll let him answer it, but I object.

THE WITNESS: The conversation was something like do you have the time to review a case. I don't remember having any discussion about any of the specifics on it, though.

BY MR. WILSON:

Q. During the first phone call, were you told anything about how much time elapsed between when the monitors went off and when the nurses responded to the monitors?

A. Again, I don't think we had any discussion on

any details. Just are you available to review a case, where do we send it.

Q. What was your understanding of the case at the conclusion of the discussion with the staff of Children's Hospital?

A. What was my understanding about what of the case?

Q. About this case. Tell me what your understanding was by the time the conversation had finished.

A. Really, just as I said, that they wanted me to review it to form an opinion about the impact, if any, of the arrest on her current status and what was going on before the arrest, with all of her irritability and the arching and all those things.

Q. What were you told about Ja'mesha during that initial phone call? That's what I'm interested in.

MR. BROWN: Objection to the entire line of questioning.

THE WITNESS: Just what I said.

BY MR. WILSON:

Q. For example, were you told why Ja'Mesha was

admitted to the Children's Hospital?

A. Again, the conversation was do you have the time to review medical records, fine, where do we send it. That was literally the conversation. There was no specific instructions to consider or not consider anything. That was really it.

Q. Were you told that Ja'Mesha Kinder had any problems during the arrest during that initial conversation?

A. I don't remember even discussing it.

Q. Were you told what the outcome was for Ja'mesha Kinder?

A. I don't remember discussing it, I don't think it was brought up.

Q. Was it your understanding when you received these records that there were any issues in this case that you were not supposed to give an opinion on?

A. No, it was never told to me what not to do. It was, as a child neurologist, look at causation-related issues and the arrest. And that was what I was asked to do and that's how I reviewed the records.

Q. Did you ever consider at any point in time

whether any of the nurses were negligent in failing to respond to the monitors in a timely fashion?

A. I didn't concern myself with that. I was never asked to do that.

Q. Did you ever review the disciplinary form for the nurses that were disciplined for failing to respond to the alarm in a timely fashion?

A. I haven't seen any written information about that.

Q. Do you have any knowledge concerning the desirable response time when monitors go off in a unit such as Ja'mesha was on on January 19, 1995?

MR. BROWN: He's not going to be giving any opinions on standards of care or desirable responses.

MR. WILSON: Okay.

THE WITNESS: I don't have any opinion about it. I never looked at it from that point of view.

BY MR. WILSON:

Q. My question is: Do you have any knowledge of what the desirable response time would be?

MR. BROWN: You're not entitled to question him about knowledge in general unless he is going to be proffered as an expert witness on that issue.

MR. WILSON: It goes to his opinion on causation.

MR. BROWN: No, it doesn't.

MR. WILSON: Yes, it does because --

MR. BROWN: Ask him if it does, rather than you deciding.

MR. WILSON: I'm going to proceed in my own fashion.

BY MR. WILSON:

Q. The question is: Do you have any knowledge as to the desirable response time when a monitor goes off in a unit such as Ja'mesha was on on January 19, 1995?

MR. BROWN: Object to that. That does not go to his opinion on causation. I don't accept your characterization that it does. You may answer.

THE WITNESS: Again, I don't have any knowledge of what the criteria or what the standards are. It's just not what I deal with.

BY MR. WILSON:

Q. Do you ever interact with nurses in patients who have alarms, monitors?

A. Do I interact with nurses?

Q. Yes.

A. Sure.

Q. Do you have patients who are on monitors from time to time?

A. I don't have patients -- I'm consultant to them, so they are the caregivers to the patient and I consult to them as a neurologist.

Q. Do you have any understanding, here at Children's Hospital of Philadelphia, when an alarm goes off on a patient who is on the floor, as to what the response time should be for the nurse to respond to that alarm?

MR. BROWN: I'm not going to let him answer that. He is not going to be offered as an expert in that area. I don't think you're entitled to elicit opinion testimony on him that he is not going to be giving at trial.

MR. WILSON: This goes to his opinions on

causation because he's here to testify about the causation on this issue. It will go to the scope and weight of his knowledge.

MR. BROWN: I don't think so. I don't share that at all. You're not entitled to ask him opinions on issues that he is not going to testify to and give opinion testimony.

MR. WILSON: Are you instructing him not to answer? Then we'll worry about it later.

MR. BROWN: I'll let him answer if he can.

THE WITNESS: It's not that I don't want to answer it, I don't know what the criteria are. I've never read any documents on it. No one is under my supervision that deals with monitors.

BY MR. WILSON:

Q. If the nurses at Children's Hospital were disciplined for failing to respond to the monitors in a timely fashion, would that indicate to you that they fell below applicable standards of care in the treatment of this patient?

MR. BROWN: I'm not going to let you ask him standard of care about nurses responding to monitor

alarms. I will instruct him not to answer that. I will advise him, not instruct him. It's not my witness.

THE WITNESS: I accept his recommendation. I just don't know any of the factual information to answer that.

BY MR. WILSON:

Q. Well, do you have any reluctance to discuss whether the standard of care was breached in this case?

A. I was never asked to look at this from the standard of care point of view. I'm not knowledgeable on what is considered to be proper nursing protocol and I don't really feel like I'm the right person to give an opinion on that.

Q. So, are you reluctant to discuss this aspect of the case?

A. I suppose, yes.

Q. Would it be fair to say that you would prefer not to discuss whether or not the nurses in this case were negligent?

MR. BROWN: That's not fair. He has told you that he hasn't been asked to look at that, has not

looked at it, has no opinion.

MR. WILSON: I went into that, if there was any areas that he was asked not to look into and he said, no, there weren't.

BY MR. WILSON:

Q. Are you, as we sit here today, reluctant to discuss whether the nurses in this case were negligent in treating Ja'mesha Kinder?

A. I'm unwilling to discuss it because it's not an area that I'm expert in. I've not formed any opinions from that point of view. I'm not prepared to answer that, so I won't.

Q. Do you have any knowledge of any kind concerning when an alarm goes off in a ward such as Ja'Mesha Kinder was on on January 19, 1995, how soon the nurses should respond to the monitor alarm?

A. I don't have any opinion about it.

Q. I didn't ask if you had an opinion, I asked if you had any knowledge about it.

A. I've never read any document that says that the correct response time is X, Y or Z. So, I can't answer that.

Q. Did you read the depositions in this case?
A. I read the depositions that you had done with Jan Hahn and Dr. Zimmerman.
Q. Dr. Hahn expressed opinions in this case that the nurses at Children's Hospital were negligent; isn't that correct?
A. I actually don't remember that, but he may very well have.
Q. Did you read Dr. Klefield's deposition?
A. No.
Q. Did you read the deposition of Nurse Woodson?
A. Again, I read two depositions, two depositions only, Dr. Zimmerman and Jan Hahn.
Q. Have you been informed that there were other depositions in this case?
A. No.
Q. Have you ever asked what depositions were taken in this case?
A. No, I did not.
Q. Could the observations of the nurses and doctors concerning Ja'Mesha Kinder's condition prior to the code, during the code and after the code be relevant to

your opinions as to whether or not Ja'Mesha Kinder was injured from the arrest of January 19, 1995?

A. They could be.

Q. Did you see any reference in the medical records that Ja'mesha Kinder had seizures during the code?

A. Yes.

Q. From the medical records, what was your understanding of the nature and duration of the seizures that occurred during the code?

A. I believe they were described as tonic/clonic And that they had lasted a couple hours. That was my understanding. It wasn't clear to me if that was one single nonstop seizure or there was on and off seizures for a couple of hours. That's what I learned from the medical records.

Q. This letter, which has been marked as Exhibit 2, says: As I told you on the telephone, this baby was admitted to Children's Hospital earlier this year at two months of age with a history of gastroenteritis and hypoglycemia.

Does that refresh your recollection?

A. No. I'm not sure that's exactly what was meant

in the letter. Again, we did not discuss the case. She may have been saying this is the case I told you about.

Q. It says here: As I told you on the telephone, this baby was admitted to Children's Hospital earlier this year at two months of age with a history of gastroenteritis and hypoglycemia.

Is that what she told you in that phone call or you don't remember what she told you in the phone call or is this not what she told you during the phone call?

A. I don't know what your point is here. All I'm trying to tell you is that she asked, will you review the records. Now, she's saying here's the kid I told you about, the kid had this illness and so forth.

I did not discuss any details with her. You're reading that in a way that's different than I think it should be interpreted. We did not discuss the details of the case.

Q. It's your testimony under oath today that Linda Matthews did not tell you during the phone call that this baby was admitted to Children's Hospital earlier

this year at two months of age with a history of gastroenteritis and hypoglycemia?

A. No. I'm trying to say the case was not discussed in that kind of detail. Obviously, we have a baby, we want you to look at the records, can we send the records to you. I don't think I knew any more than that.

Q. My question is very specific: During the first phone call, did Linda Matthews tell you that this baby was admitted to the Children's Hospital with gastroenteritis and hypoglycemia?

A. I don't remember. I don't think so.

Q. Did she tell you that at the initial exam she was noted to be hypertonic and hyper-reflexic?

A. I don't think so.

Q. Did she tell you that when the baby was born, the urine was positive for PCP during the first phone call?

A. I don't think so.

Q. Did she tell you during that first phone call that after the admission to Children's, she had a period of apnea and bradycardia requiring

resuscitation?

A. I think I knew that.

Q. Did she tell you how long the period was of apnea and bradycardia that required resuscitation?

A. I don't recall that we did talk about that.

Q. Did she give you any information during that phone call concerning the child's condition during this period of apnea and bradycardia that required resuscitation?

A. I don't remember talking to her about that.

Q. It states here, which was thought to be due to reflex and aspiration?

A. What was?

Q. The period of apnea and bradycardia requiring resuscitation.

A. What's your question?

Q. Did she tell you during that phone call that that was due to reflux and aspiration?

A. I don't think we discussed it.

Q. It states here that she eventually recovered. Is that what you were told during the first phone call?

A. I don't think we discussed it.

Q. That she was discharged eight weeks later showing very little change neurologically and developmentally from when she was admitted. Did you discuss that?

A. I don't think so.

Q. Was it your understanding when you received these materials that you were to give a full and fair evaluation of the entire case or primarily serve to defend the hospital concerning the allegations?

A. It really wasn't discussed in that way. No one coached me in terms of how to look at the case or anything like that.

Q. Was it your understanding that you were expected to advise the hospital concerning whether or not they should settle the case when you received these materials?

A. No.

Q. Was it your understanding that if you formulated opinions that doctors or nurses at Children's Hospital were negligent, that you were to inform the hospital of those opinions?

A. It was never brought up or discussed.

Q. What was your understanding?
A. It was never brought up or discussed, I had no understanding of it.
Q. When you reviewed these records, did you make any attempt to determine if any doctors or nurses at Children's Hospital were negligent in caring for Ja'mesha Kinder?
A. I made no attempt.
Q. Is that your usual practice when you review records in a medical-legal case, that you make no attempt to determine if the health care provider had deviated from the applicable standards of care?
A. It depends on what you're asked to do. If you're asked to look at this from the standard of care point of view, then that's exactly what your job is. If you're asked to look at it from the point of view of causation, the question is did the arrest cause her condition.

It's two separate questions. I was asked to look at one specific one of them, that's what I did.
Q. Is it your testimony today that when you talked with Linda Matthews prior to receiving this letter on

December 8, 1995, that you were asked only to look at issues of causation?

A. Yes, that's right.

Q. Did she inform you not to look at issues of standard of care?

A. Again, she did not bring it up. It's not something that we discussed or I was told to stay away from or emphasize or not. It just was not -- she told me what she needed and I assumed that she knew what she wanted.

Q. It says here: We do not need a written report at this time. Was it your understanding that they did not want you to write a report in this case?

A. It was -- that's the only communication we had about reports. I mean it was never asked and never offered.

Q. Then attached to this letter, there's yellow pages?

A. Yes.

Q. Are they your notes?

A. Yes, they are.

MR. WILSON: We'll consider Exhibit 2 to

be the two-page letter from Linda Matthews of December 8, 1995 and then four pages of your written notes.

MR. BROWN: Want to mark them separately?

MR. WILSON: Okay.

(Whereupon Exhibit 3 is marked for identification.)

MR. WILSON: By agreement of counsel, Exhibit 2 is only the two-page letter of December 8, 1995. Exhibit 3 is the four-page document, which is Dr. Clancy's notes.

BY MR. WILSON:

Q. Is that correct, Dr. Clancy?

A. Yes.

Q. On page 3 B, it says Children's National Medical Center. Then it says two month female X 34 weeks, transferred from Greater Southeast dash rule out sepsis, needs LP. What did you mean by rule out sepsis needs LP?

A. It's my understanding that the child had been ill, running a fever, vomiting and that I think they had attempted to do a lumbar puncture at Greater Southeast or -- either attempted it or realized it

needed to be done. One of the purposes of sending the child to Children's was to have that done.

Q. Is it your understanding they did an LP at Children's?

A. Yes.

Q. What is your understanding of the LP?

A. That it was basically normal.

Q. Here it says -- is this M-A-C or M-A-E?

A. MAE.

Q. What does that stand for?

A. Moves all extremities.

Q. Any other letters from Children's? I'll show you what I have.

Let me mark this entire set, which is one, two, back of two, three, four, five and six as Exhibit 4.

(Whereupon Exhibit 4 is marked for identification.)

MR. WILSON: We'll call this Exhibit 5.

(Whereupon Exhibit 5 is marked for identification.)

MR. WILSON: This is 6.

(Whereupon Exhibit 6 is marked for identification.)

MR. WILSON: This is 7, 8 and 9.

(Whereupon Exhibits 7, 8 and 9 are marked for identification.)

BY MR. WILSON:

Q. So, when you received this first letter, Exhibit 2, did you at that point in time receive the records from Greater Southeast Community Hospital?

A. I believe so, yes.

Q. Now, if you just confine your opinion to the records of Greater Southeast Community Hospital and the hospitalization records from the time she was born up until January 11, 1995, when she was admitted to Children's Hospital, do you feel that you can opine from those records alone that Ja'mesha Kinder had brain damage prior to the time that she was born?

A. Yes, I can.

Q. And --

A. I'm sorry, I didn't listen. You're saying prior to the time she was born?

Q. Yes.

A. I still think yes.
Q. From those records alone, could you formulate an opinion as to how severe the brain damage was that she was born with?
A. From those records alone, I don't think it would be honest to say that you would have a single outcome in mind. I mean I think it would be difficult to know that for a fact.
Q. From the records at Greater Southeast Hospital, were you able to formulate a diagnosis of what caused her to have brain damage by the time she was born?
A. No.
MR. BROWN: You want a specific cause as opposed to causes?
BY MR. WILSON:
Q. What factors were significant to you in opining that Ja'mesha Kinder had brain damage in looking at the Greater Southeast Hospital records?
A. I guess the rule of thumb here is that the proof of the pudding is in the taste. And if something tastes good, it must be good. If something tastes bad, it must be bad. You would judge the nervous system at

her age by how the nervous system works.

And hers was working abnormally and in a fashion that you would conclude is from a chronic disease already. I think the most striking part of that is the high tone. When people or children are acutely sick, they become low tone. They become limp, they lose muscle tone. Now, ultimately that may reverse and they may become hypertonic in the wake of acute illness.

If I bopped you on the head with a baseball bat, you wouldn't become stiff, you would collapse limply. Acute disease produces hypotonia. So, the description of this child during the Greater Southeast hospitalizations was that she had consistently high tone, arching, the jittery and clonus, that sort of thing.

Also, her main job description, which was basically to feed, was something that she had difficulty doing. Feeding is a neurological act. It requires the coordination of breathing and swallowing and sucking to get the job done. And she was performing that job in an abnormal fashion.

So that the physical description of the child, in terms of her irritability, again, the inconsolability, the abnormal muscle tone, are the physical signs of already chronic disease at that point.

Q. Now, have you ever cared for infants who have been exposed to PCP in utero?

A. Yes, I have.

Q. Approximately how many such infants?

A. A few, maybe three or four in the past couple of years.

Q. And are you familiar with the literature concerning the presentation, treatment and prognosis of infants exposed in utero to PCP?

A. I'm familiar with the literature. It's a difficult area to do good science in because of all the confounding factors and the social lives and the health of the mothers. I know what the papers talk about.

Q. Have you heard of Dr. Chasnoff?

A. Yes.

Q. How is it that you've heard of Dr. Chasnoff?

A. He has published on, I think, largely cocaine,

actually, and developmental effects of that.

Q. Would he be a recognized authority in the diagnosis and treatment of infants exposed to drugs in utero?

A. I think he is very knowledgeable. Authoritative neurologically, developmentally, pharmacologically, pediatrically, how?

Q. As a general pediatrician.

A. As far as a general pediatrician, sure.

Q. How did the infants present to you that you managed to have PCP exposure in utero?

A. Seizures, abnormal muscle tone, poor feeding, small growth is common. Small brain growth, specifically.

Q. Over what period of time did you follow those three to four infants?

A. Just the past couple of years. I don't keep any formal records. I know we've seen a couple of kids in the past couple of years.

Q. Was it your understanding that those children had suffered brain damage as a result of their exposure to PCP, the three to four that you saw?

A. I think that some of them had and that's why I, as a neurologist, would be asked to see those particular kids. There's obviously other children with PCP that may look fine and there's no reason to get the neurologist involved.

I would be asked to see the children that looked extraordinary for PCP or something along those lines.

Q. Would it be fair to say that when you saw a child who had been exposed to PCP in utero, if that child had abnormal muscle tone, poor feeding and small head size, you would conclude that the child had brain damage as a result of PCP exposure?

A. I think they should be evaluated for abnormal brain, usually by imaging at that point.

Q. Do you feel that if a child is exposed to PCP in utero and is born with hypertonia, poor feeding and a small head circumference, that that is evidence that the child has sustained brain damage?

A. Yes, I do.

Q. Do you feel, if you observe those factors, then that you can conclude that the child does have

permanent brain damage?

A. You said brain damage versus permanent brain damage. If I follow some of those children later, they appear much healthier. They have not been exposed to PCP after they're outside the uterus. There are still some psychological problems that they have in school.

They may not be massive, but they are there. So, I guess it is still permanent because they are still showing some problems with their testing. It's not as obvious as it may have been as a newborn when they were withdrawing or showing more acute neurological signs then.

Q. If a child is exposed to PCP in utero, does not have any seizures in the period from, let's say, a month after it's born, but does have hypertonia, poor feeding and a small head circumference, do you feel that with those factors you can conclude that the child has permanent brain damage?

MR. BROWN: Object to the form of your question. You're assuming facts not in evidence.

MR. WILSON: Well, that's a hypothetical.

MR. BROWN: Actually, you're not assuming

all the facts.

THE WITNESS: I think there is -- yes, I think there is brain damage in that child. At least brain abnormality, put it that way.

BY MR. WILSON:

Q. For such a child, do you have any opinions as to what the prognosis would be?

A. We're doing PCP?

Q. Yes.

A. Prognosis would still be variable. There are some children that will still get through it looking half decent, functional. And for others, I think they're still going to be retarded and handicapped. I don't think there's a single prognosis for that.

Q. For such a child exposed to PCP in utero, with hypertonia and poor feeding and small head circumference in the period after birth, do you have any opinions as to whether it's more likely than not that the child will go on to have a bad prognosis, in terms of mental retardation, cerebral palsy, things such as that?

MR. BROWN: Wait a minute. I object to

the form of the question. I'm not sure what you're asking to base that opinion on at this point. Just the Greater Southeast records or are you talking in general?

MR. WILSON: It's a hypothetical.

MR. BROWN: I object to that. You haven't given him the appropriate facts. Object to the form of your question.

THE WITNESS: I'm going to ask you to repeat it, please.

BY MR. WILSON:

Q. If you are treating a child who has been exposed to PCP in utero and in the immediate post-birth period has abnormal muscle tone, poor feeding and small head circumference, do you have any opinions that such a child would probably go on to have mental retardation, cerebral palsy or otherwise have a bad prognosis?

A. So, you're 51 percent probable, is that what you're asking?

Q. Yes.

A. I can't say that, no.

Q. Would it be fair to say that the presentation of

Ja'mesha Kinder at Children's Hospital was consistent with the expected presentation of a child who had been exposed to PCP in utero?

MR. BROWN: At what time?

MR. WILSON: During the first hospitalization.

THE WITNESS: I thought you asked the question presentation at Children's Hospital.

MR. WILSON: Let me rephrase the question.

BY MR. WILSON:

Q. Would the presentation of Ja'mesha Kinder at Greater Southeast Hospital during the first hospitalization after she was born be consistent with that of a child exposed to PCP in utero?

A. It would be consistent with it, yes.

Q. Can you say, to a reasonable degree of medical certainty, based only upon all of the records from Greater Southeast Hospital, that Ja'mesha Kinder's neurological abnormalities were not attributable to PCP exposure in utero?

A. I'm having trouble concentrating on your question.

Q. Do you want to have it read back?
A. Yes, please.
(Pertinent portion of the record is read.)
THE WITNESS: I'm still having trouble with that. Can I say that it's not due to her presentation?
MR. WILSON: We can have it read back again, but I'd like for you to answer the question.
THE WITNESS: Let me just hear it one more time. Leave out the disclaimer in the middle about that.
(Pertinent portion of the record is read.)
MR. BROWN: Object to the form of the question. You've asked him to opine to a reasonable degree of certainty, I think the standard is probability.
MR. WILSON: I'll amend the question to reasonable degree of medical certainty or probability.
MR. BROWN: I still object to the form.
THE WITNESS: I'm trying to figure out what he is asking. Is her presentation, to a reasonable degree whatever, not due to PCP, based only

on the Southeast?
BY MR. WILSON:
Q. Correct.
A. If you put it based on just the Southeast, I'd have to say that her presentation, in terms of what they knew about her, could be PCP. I don't know if that's answering your question. I want to answer your question, but I want to make sure I understand it.
Q. Can you say, looking at those Greater Southeast records alone, that her problems weren't due to the PCP? I assume the answer is no.
A. I don't know why I'm having trouble with this. Just based on the Greater Southeast, they could be just due to PCP, knowing nothing else.
MR. WILSON: Can we just have an understanding that his opinions will be to a reasonable degree of medical probability or shall I preface all my questions?
MR. BROWN: Fine, as long as you tell him that.
BY MR. WILSON:
Q. Can we have an understanding that any opinions

you'll express will be to a reasonable degree of medical probability unless you say they're not?

A. Sure.

Q. Just so I can shorten up the questions. Do you have any opinions that Ja'Mesha Kinder suffered any brain damage from the time she was born until the time she was admitted to Children's Hospital on January 11, 1995?

A. Any additional brain damage?

Q. Yes.

A. I don't think she had any additional brain damage.

Q. Now, from everything that you know about this case, can you conclude to a reasonable degree of medical probability that Ja'Mesha Kinder has white matter disease of the brain?

A. Oh, she does have white matter disease. I'm certain of that.

Q. Have you ever discussed this case with Dr. Zimmerman?

A. No.

Q. Have you read his deposition?

A. Yes, I have.
Q. Have you incorporated his opinions into your opinion?
A. His opinions about what?
Q. His opinions about what's on the radiographs in this case.
A. Well, I mean I agree with his opinion. The first opinion that I heard about this was reading the CAT scan reports from Children's Hospital. When I looked at the scan, I could certainly see that the white matter was abnormal. I never discussed it or reviewed the scans with any radiologist here.
I would only do it with Dr. Zimmerman, anyhow. But Mr. Brown asked me not to discuss it with him, so I did not. I read his deposition and I understood what his concerns were when he described the findings to you.
Q. What was your understanding of Ja'Mesha Kinder's condition when she was admitted to Children's Hospital on January 11, 1995, of the neurological findings?
A. Well, there's -- actually, there's two contexts for this. One is the neurologic one and one is just

her physical one. The immediate physical context is that she was sick and had a fever and had some diarrhea and that sort of thing.

Q. We're more focused, obviously, on the neurological and long term.

A. It's conceivable that they are actually connected, although I'm not certain of that. She had a number of abnormal neurologic signs, the first of which was the irritability and unconsolability. Second was the persistence of the feeding problem. The third was her relatively small head. Fourth was the high muscle tone.

Fifth was the posturing she would take on in the form of arching of the neck and arching of the spine. The seventh was the hyper-reflexia. And these were -- I didn't count them, but there's literally a couple dozen references to those aspects of her neurologic appearance by nurses, the admitting doctors, the attending doctors, that sort of thing.

Q. When you do a neurological examination of a child, do you normally check and see if they can track objects with their eyes?

A. Yes.
Q. If a child were admitted to Children's Hospital on January 11th, 1995, would a standard physical examination include an examination as to whether the child could track objects with her eyes or not?
A. Well, I don't know what you mean. You mean standard by the pediatrician?
Q. By the pediatrician.
A. I think it probably would be standard. I don't see why it wouldn't be part of their exam.
Q. In a child such as Ja'Mesha Kinder, as she presented to Children's Hospital on January 11, 1995, if she could not track objects with her eyes, would that be an abnormal finding?
A. Yes, it would
Q. Would that be a sufficiently abnormal finding that upon making that observation, the doctor should record that finding on the chart?
A. I would think so.
Q. Did you see any recordation in the chart that Ja'Mesha Kinder could not track objects with her eyes from the time she presented at Children's Hospital on

January 11, 1995 until the time of the code on January 19, 1995?

A. I don't remember any notes that she could not track.

Q. So, in evaluating this case, would it be fair to assume from that lack of documentation that Ja'Mesha Kinder probably could track objects during that time period prior to the code?

A. I would think so, yes.

Q. Do you believe that Ja'Mesha Kinder had a developmental delay prior to January 19, 1995, adjusting for the fact that she was a 34-week prematurely born infant?

A. Yes, I do.

Q. To what extent do you believe that she was developmentally delayed prior to the code?

A. Again, her feeding was not the appropriate feeding for her age. Her ability -- well, her lack of ability to calm herself would be a, if you would, cognitive behavioral disorder.

Self-calming is a trait among healthy children, that they can get themselves comfortable

somehow. Her inability to relax her muscles would be considered inappropriate for her age.

Q. Would you expect a child such as Ja'Mesha, exposed to PCP in utero and born prematurely as she was, to have a social smile in early and mid January of 1995?

A. I don't know when I would -- I would expect her to have a social smile about six weeks after her due date. I don't know what that date is exactly.

Q. At what point in time would you expect a child such as Ja'mesha to turn her head in response to objects?

A. In response to objects?

Q. Or in response to sounds.

A. Turn her head? Newborns will sound orient, there will be some turning in response to sound. It's not very consistent as a newborn, but it's a newborn skill.

Q. Ja'mesha Kinder was born on November 9th of 1994; correct?

A. Yes.

Q. And she was born 34 weeks premature?

A. Okay.

MR. BROWN: I think in fairness, 34 to 35 weeks. There have been various estimates.

MR. WILSON: Fine, 34 to 35 weeks.

BY MR. WILSON:

Q. So, if we call it -- 35, let's say. So that would mean that five weeks after that, she would presumably be somewhat at the level that she was born. So, if we add five weeks to November 9th, then we get approximately December 16th, in rough terms.

She was admitted to Children's Hospital on January 11 of 1995, approximately two months after that.

MR. BROWN: I think that's approximately a month after.

MR. WILSON: A month, I misspoke.

BY MR. WILSON:

Q. Do you believe that Ja'mesha Kinder had made any development past where she would be as a newborn when she was admitted to Children's Hospital on January 11, 1995?

A. Just so I understand, when you say newborn, you

mean her actual newborn period or you mean when she would have been term?

Q. When she would have been term.

A. I don't think she did anything beyond a newborn term infant when she was admitted.

Q. What do you base that upon?

A. On just the way they described her.

Q. Do you feel that there was a recognition at Children's Hospital by the doctors and nurses prior to the code that Ja'mesha Kinder was developmentally delayed?

A. I don't know that it was explicitly recognized.

Q. Would it be fair to say that you didn't see any references to developmental delay prior to the code?

A. No. Not explicitly, no.

Q. Would you agree that no one has documented the presence of seizures in Ja'mesha Kinder prior to the code of January 19, 1995?

A. I think that's true.

MR. BROWN: At any institution?

MR. WILSON: Yes.

THE WITNESS: Still true.

BY MR. WILSON:

Q. Was there anything in Ja'mesha Kinder's findings prior to the code on January 19, 1995 that required acute evaluation by a pediatric neurologist?

A. An acute evaluation? I mean there was nothing acutely wrong with her, therefore, there was no need for an acute evaluation. Does that answer your question?

Q. Yes. Would you agree that the neurological abnormalities that were noted in Ja'mesha Kinder at Children's Hospital prior to the arrest could be consistent in a child exposed to PCP who had gastroenteritis and gastroesophageal reflux?

A. Perhaps the spirit of some of the findings, the extreme degree of arching that was described, for example, the total inconsolability at times, it goes beyond what I've seen just with PCP or with reflux.

And it just seemed like the neurological signs far outshadowed -- there was probably some reflux there. In fact, I think it was pretty well documented later. But I think the neurologic signs were far out of proportion to the reflux.

Q. You said that you read Dr. Hahn's deposition?
A. Yes.
Q. Dr. Hahn stated in his deposition that gastroesophageal reflux can cause pain to an infant?
A. I believe it can.
Q. Would that be correct?
A. I believe it can.
Q. And if Ja'mesha Kinder were in pain at Children's Hospital from gastroesophageal reflux prior to the code, could that pain contribute to arching and rigidity?
A. I think it can contribute to it, yes.
Q. Did you review the CAT scan that was done prior to the code?
A. Yes.
Q. Did you feel that you could look at that CAT scan and just based only upon that one CAT scan, but including the fact that she was born November 9th at 34 to 35 weeks of gestational age, could you opine from that one CAT scan alone that she had a poor prognosis?
A. Well, no, because that's not the job of the CAT scan. The CAT scan is not there to tell me what the

child's future is. The CAT scan tells me that the child has a white matter disease.

And the prognostic implications for that depend on what causes the white matter disease and how progressive and things like that. It's a perfectly good legal question. But, medically, I don't know how to do that.

Q. Let me phrase the question this way: Knowing that Ja'mesha Kinder was born at 34 to 35 weeks of gestational age on November 9, 1995 and looking only at that CAT scan that was done prior to the code, can you conclude from the CAT scan that Ja'mesha Kinder's hyperlucency was due to white matter disease and not to prematurity, to a reasonable degree of medical probability?

A. Yes, that I'm very clear on. And the reason is basically that the real measure, the yardstick of maturity, for a newborn in terms of the CAT scan will be the cortex. That's really what the driving force is in the migration. The cortical mantel on her was mature. It was basically term.

So, the yardstick says that the cortex has

had enough time to fill in to be term and so that kind of takes the immature issue away. If it was an underdeveloped cortex or immature cortex, then you have to interpret the white matter in the light of the cortex. This cortex was well formed.

This is what Dr. Zimmerman teaches us every day, that when we look at the newborns, that's the first thing you look at is what's the cortex and from there, judge the white matter.

Q. Did you read the report of Children's Hospital of the CT of January 14, 1995?

A. Yes, I did.

Q. Would it be fair to say that according to that report, it was not determined whether the hyperlucency was due to prematurity or due to other causes?

A. Well, it was actually a little bit of a confusing report and a little self-conflicting because it actually comes out and says that it's hyperlucent. I think the implication for a term like that is there's something not quite right with that.

Then it goes back and says, well, maybe it's immature, but maybe it's white matter disease.

So, it kind of waffles on it, quite frankly.

Q. From what you know about this case, would it be fair to say that the doctors at Children's Hospital had not determined by the time of the code whether the hyperlucency was due to prematurity or whether it was due to some other reason?

A. I mean, just judging from the report, they had not made a firm commitment to their opinion on it. I think they left it open. I think, you know, they were right to recognize that the white matter appeared abnormal.

Q. So, you would agree with me that from your understanding of the case the doctors at Children's Hospital carrying for Ja'mesha at the time did not make a diagnosis of white matter disease prior to the code of January 19, 1995?

A. I wouldn't agree with that phrasing on it.

Q. Do you feel they did make a diagnosis of white matter disease prior to the code?

A. In a very general sense, I think they have. If you're going to say white matter disease, you mean like Krabbe's? No. Did they recognize it was abnormal? Of

course, the whole reason they did the scan was because the child was abnormal.

I mean it wasn't just today's your lucky day, you get a free CAT scan. They did this scan with a reason, because they recognized her neurologic abnormalities. So, it wasn't just, oh, another premie that we're looking for a bleed. This is a highly abnormal child neurologically and helps us understand what the physical basis for it is. Plus the fact, of course, that the findings on the scan of white matter disease, whatever is underlying that, would be expected to produce spasticity and hyper-reflexia.

That's the hallmark of white matter disease neurologically is spasticity, hypertonia hyper-reflexia. So, I don't think they could then and I don't think I can today name the enzyme or the virus or whatever that did this. But it certainly is there and it certainly matches her clinical appearance.

Q. But are you saying today that it's your understanding that the doctors at Children's Hospital made the diagnosis of white matter disease in general that Ja'mesha Kinder had prior to the arrest of January

19, 1995?

A. I think they did.

Q. In a child with this CAT scan, would the prognosis be bad if the child had white matter disease?

A. Again, it's not the job of the CAT scan to determine the prognosis. It's the disease that determines how good or how bad it is. There's nothing on that scan that's inconsistent with what we see today in this child. In other words, there's -- it does not surprise me to know how abnormal she is neurologically today in looking at that scan.

The same logic of what you're asking me about the pre-arrest scan is just as applicable to the post-arrest scan. They are same looking scan, so that scan is consistent with a good outcome and bad outcome. It's the child that determines the outcome, not the scan.

MR. WILSON: Let's take a couple minute break.

(A short recess is taken.)

(Pertinent portion of the record is read.)

BY MR. WILSON:

Q. During the break, I went back through your answer. One of the sentences in your answer was the scan, which would be the scan of January 14, 1995, is consistent with a good and bad outcome.

So, would it be fair to say that you can't just look at that one scan in isolation and say this child has a bad outcome?

A. I've already said that. That's not the job of a CAT scan. All you can really say is that it is abnormal and it's the child that shows you what the outcome is.

Q. If you evaluate all of the information that you've reviewed in this case up to the point of the code of January 19, 1995 and put aside the information concerning what happened after the code, during and after the code, could you conclude from the information prior to the code that Ja'Mesha Kinder had a bad outcome?

A. Well, okay, when you say would that provide all the information, that means also knowing the outcome.

Q. Right.

A. I can conclude it, yes.

Q. So, do you understand my question? We know now that outcome is bad.

A. Correct, I agree.

Q. But if you freeze the knowledge as to the knowledge that was available immediately prior to the code to the doctors, and that's presumably the same knowledge that you have today, can you say with that knowledge prior to the code and not knowing the outcome, that Ja'mesha Kinder is probably going to turn out to be bad or would it still be indeterminate at that point in time?

A. Well, she's already turned out to be bad. That's why they did the scan. She's got bad neurologic signs. It's already there.

Q. But the bad neurological signs are obviously different from not being able to walk or talk and having severe developmental delay and retardation and cerebral palsy.

A. Well, it all has to be interpreted in the context of the nervous system. In spirit, what she has today is not that different than what she had back then. Today, she has high tone, trouble controlling

her muscles, hyper-reflexia. So did she before the arrest.

The actual character of the lesions, functional lesions, in her, in spirit, resemble those that occurred before. They are predominantly motor, high tone, hyper-reflexia.

Q. Can you say, with the information available prior to the code, that Ja'mesha Kinder would not develop into a normal child and have a normal life?

A. Prior to the code? Again, medically your question is still asking does the scan make a prognosis. And the answer is still, no, it really doesn't. There are a few times you look in the scan and there's no nervous system and you know it's going to be bad.

But the purpose of that test is to provide an image. And people live on the function of the brain. You live by what the brain does, not how the brain looks. So, the scan is not intended to be a prognostic tool. It's a diagnostic tool. The question can't be -- I know for the purposes of your case, it's askable.

But, medically, it's really not a very pertinent question. That's all I'm saying.

Q. But my question is: Would you agree with me that with the information available to Ja'Mesha Kinder's doctors prior to the code, there was no reason to believe that she definitely had a poor prognosis?

A. You could not be definite at that point, if that's what the emphasis is on.

Q. Would you agree that with the information available prior to January 19, 1995, that it would be consistent with that information to have an outcome where Ja'Mesha Kinder lived a relatively normal life?

MR. BROWN: I'm going to object to the form of your question. I don't understand it. I would ask you to rephrase it. I don't know what you mean by a relatively normal life.

BY MR. WILSON:

Q. Would it be consistent with the information available prior to the code to have an outcome where Ja'mesha Kinder walked, talked and went to school?

A. It would be within the realm of possibility. You didn't say normal, though. You said walked and

talked and went to school.

Q. Yes. Are you familiar with the interpretation of arterial blood glasses?

A. In a general way.

Q. Do you recall what the numbers were in this case or should I dig them out?

A. I recall the pH. I think the CO 2 was 24 perhaps. The pH was 707.

Q. I believe it was 34.

A. 34 was the CO 2?

Q. If necessary, we can dig it out. But maybe it won't be. Would it be correct that the arterial blood gases drawn on January 19, 1995 were consistent with a metabolic acidosis?

A. Yes, they were consistent with it.

Q. And would it be fair to say that it would be consistent with a relatively severe metabolic acidosis?

A. Moderate to severe. It wasn't just a touch, but it wasn't the lowest I've seen. So, I'll stick it in the moderate category.

Q. Are you familiar with the concept of down time, that being the period of time in which the child's

brain is not getting effective blood flow and effective oxygen? Can we refer to that as down time?

A. Yes, except we have to be careful about what constitutes low flow and no flow and things like that.

Q. If we divide down time into short down time, medium down time and long down time, would the arterial blood gases that were drawn immediately after the resuscitation be more consistent with a long down time rather than a short down time?

A. That's an individual thing. I mean, quite frankly, I think it's consistent with both and how low the perfusion got and that sort of thing. So, unless someone can show me a legitimate mathematical way of doing that in her specific -- that's applicable to her situation, then I think that would be very speculative for someone to say, oh, 707, well, that's got to be a 15-minute down time. Recognizing that it's a definite metabolic acidosis, there's no getting around that.

Q. Do you have any estimates as to the period of time of hypoxia or hypoperfusion of the tissues it would take to produce a metabolic acidosis of the level seen in that first ABG?

A. No, not really. Obviously, our interest is in -- today, is in how this affected her brain. The pH is a reflection of her body. So, we're using one to kind of get a mirror into the brain. So, they are not really exactly the same.

Q. Have you yourself attempted to correlate post-arrest ABGs with outcome, neurological outcome?

A. Well, have I attempted to correlate them?

Q. Or are you familiar with any studies that have attempted to correlate them or do you have any knowledge or understanding of any correlation of them?

A. Well, yes. Obviously -- actually, we have looked at that, for example, in the cardiac kids, where -- just from the point of view that they have a circulatory problem, that they have abnormal blood gases. In that population, they have cardiac arrest. That's what their problem is is cardiac lesions. When we've done numbers on it -- and, actually, I can show you what we've done. There is no correlation between outcome and pH, just taken as a number. Now, that means that there were kids that died with good pHs and kids that survived with good outcomes

and bad pHs. It works both ways.

So, I don't know of any way of taking a look at the number and saying, okay, you crossed the threshold. I've never seen anyone come back from that low number and end up with a normal nervous system.

Q. In your answer, you focused on just pH. Do you believe that there may be a correlation between degree of metabolic acidosis and neurological outcome?

A. Well, the pH is the measure of -- that's how you know how acidotic it is. I'm talking about metabolic acidosis. In other words, if you've looked at that stuff, children who have purely respiratory acidosis are almost in a different league.

So that I'm not really talking about respiratory acidosis, I'm talking about metabolic acidosis.

Q. Would you agree that, all things being equal, children with a severe metabolic acidosis would tend to be expected to have more unfavorable outcomes?

MR. BROWN: Well, I object to the form of your question. That's very vague, severe.

THE WITNESS: Again, when we've looked at

outcome and just pH, they are not significantly related. So that's one way of looking at that relationship.

Used as a yardstick of hypoxic ischemia, the worse the pH, the worse the hypoxic ischemia. That's biology talking there. I think the risk is higher to the child that they are going to have hypoxic injury if the pH is lower, but it doesn't actually correlate with the outcome.

BY MR. WILSON:

Q. Would you agree that with the ABGs that were observed in Ja'Mesha Kinder after the arrest, that those ABGs would be sufficiently abnormal to raise the question of a risk of neurological injury?

A. Yes.

Q. If we just focus on the information available up to, let's say, two hours after the arrest and you were informed that there was a child who had been exposed to PCP and then there was an arrest and the ABGs were what they were, with a pH of 7.07, then the child had seizures of some duration and then we stopped the information as of two hours after the code, would it be

fair to say that, in your opinion, with that information, there could be a good outcome and there could be a bad outcome?

MR. BROWN: Let me note an objection to the type of questions you're asking, where you're asking him to put out of his mind everything he has considered except certain things you want him to consider. He is going to be giving opinions in this case based on everything he has reviewed.

MR. WILSON: I will go into all of that.

THE WITNESS: Your question is we're going to get to the arrest a couple of hours after, we know there's seizures, we know the pH. And the question is can there still be a good outcome at that point?

BY MR. WILSON:

Q. Yes.

A. Of course.

Q. If there was a bad outcome, would those numbers and the seizures be consistent with a bad outcome?

A. And, again, we're talking about outcome from hypoxic ischemia, not from a preexisting thing.

Q. Right.

A. Right. I don't think the die is cast at that point. I actually in practice would not do that. Because I know that in my practice that I didn't really have the information to make a decision like that.

Q. It would be correct in this case, Ja'mesha was scheduled for discharge first on the 18th. Then she had a fever and then she was scheduled for discharge on the 19th of January?

A. There's my understanding.

Q. If she had been discharged on January 19, 1995, do you believe she would have required chronic care at that point, from the time of discharge from the hospital?

MR. BROWN: Can you define chronic?

MR. WILSON: Let me rephrase the question.

BY MR. WILSON:

Q. If Ja'Mesha Kinder had been discharged on January 19th, 1995, what nursing care would she have required if, any?

MR. BROWN: Do you mean at that time or the rest of her life?

MR. WILSON: At that time.

BY MR. WILSON:

Q. Over the next month or two.

A. Nursing care?

Q. Yes.

A. I don't know with the information that anyone had -- were they intending to send a nurse home with the child?

Q. Right.

A. To my knowledge, there was no plan to send this child home to anything other than the care of the parents.

Q. Was there any need, prior to the arrest, to transfer Ja'mesha Kinder to a chronic care facility such as the Hospital For Sick Children?

A. Not that I could see.

MR. WILSON: Mark this as the next exhibit.

(Whereupon Exhibit 10 is marked for identification.)

BY MR. WILSON:

Q. I'll show you what's been marked as Exhibit 10. This is from Susie Ousler's deposition. She is a nurse

employed by Children's who was responsible for some aspects of the transfer of the child to the Hospital For Sick Children. This letter, I believe, does not appear in the chart.

I ask you to read the letter.

MR. BROWN: Have you given him the entire document? I don't think you have.

MR. WILSON: There were other exhibits, which are these. That's the entire document, two pages.

MR. BROWN: Just so we're clear, this is the transfer summary?

MR. WILSON: Yes.

BY MR. WILSON:

Q. My question is: Would this nursing summary prepared by Ms. Ousler, and which is an exhibit in her deposition, be consistent with your understanding of Ja'mesha Kinder's condition at the time of the transfer to the Hospital For Sick Children?

A. From the other place? You mean from Southeast?

Q. No. This document was written pertaining to the transfer from Children's Hospital to the Hospital For

Sick Children approximately March of 1995.

A. Okay. I want to make sure you're talking about the second transfer from Children's?

Q. The transfer out.

A. Yes.

Q. This information would be consistent with your understanding of her condition when she was transferred out?

A. Yes.

Q. It states here under development: She does not track or have any intentional movement, such as reaching or head turning.

Is that consistent with your understanding of her condition when she was transferred out of Children's to the Hospital For Sick Children?

A. It was my understanding that she tracked. The developmental pediatrician described tracking in the note after the arrest. So, I'm not sure I would agree with that.

Q. So, in preparing your opinions, have you assumed that Miss Ousler's nursing summary is incorrect when it states that Ja'Mesha Kinder does not track?

A. Well, first of all, I formed my opinion without this. This is the first I've ever seen this. I don't know -- I just don't know what she bases it on, that this is her personal observation or whatever.

Q. In preparing your opinions, have you made an assumption that Ja'mesha Kinder tracked objects when she left Children's Hospital and was transferred to the Hospital For Sick Children?

A. I didn't base it on that, I based it on the developmental pediatrician specifically describing the tracking.

Q. My question is: In rendering your opinions about this case, have you made any assumptions as to whether Ja'Mesha Kinder did track or did not track when she left Children's Hospital?

A. Again, I didn't make assumptions. I read the chart that described, by the developmental pediatrician, that she tracked.

Q. I guess it's semantics. As we sit here today, in rendering your opinions, do you believe that she did track objects or did not track objects when she left Children's Hospital?

A. I don't have any information on that. When I examined her, she tracked fine. That report is out of -- it disagrees with my other knowledge about her visual behavior at that time.

Q. If Ja'mesha came into Children's Hospital tracking objects with her eyes and left not tracking objects with her eyes, could that represent a significant neurological change?

MR. BROWN: Object to the form of the question with the assumptions you've made.

THE WITNESS: Obviously, if someone came in and could track and later could not track, of course, that's a change.

BY MR. WILSON:

Q. Could that change be significant from a neurological standpoint?

A. Yes, it could.

Q. If we assume that when she came in, she did track objects and when she left she did not track objects, do you have any opinions as to whether, if that change existed, whether it was caused by the white matter disease or by the arrest?

A. Well, you're saying assuming. But she's not blind. I guess I don't know where you're trying to get with this. Maybe that's your business, but I don't think it's answerable.

Q. Okay. It says here: Ja'mesha is at the developmental level of a newborn essentially. Would you agree that was her condition when she left Children's Hospital?

A. That was my understanding of how she looked when she left, yes.

Q. It states: She has achieved no milestones. Is that your understanding of her condition when she left Children's?

A. Yes.

Q. It states: She does not track, we've covered that, or have any intentional movement, such as reaching or head turning.

Is it your understanding that Ja'mesha did not have any intentional movement such as reaching or head turning when she left Children's Hospital?

A. Correct.

Q. Would that be a significant neurological

abnormal finding, that a child did not have any intentional movement, such as reaching or head turning?

A. Would it be a significant finding? Yes.

Q. If a physical examination was done on a child that revealed no intentional movement, such as reaching or head turning, would you expect that to be documented on the physical examination?

A. Yes.

Q. When Ja'mesha Kinder was admitted to Children's Hospital, there was no documentation of a lack of intentional movements in the admitting history and physical; correct?

A. Well, that would not be an appropriate skill for a newborn. Reaching, for example, is a four-month skill. For a newborn, you wouldn't write -- she is not standing, she's not playing the piano either. You wouldn't put that on the medical records.

Q. You're saying that when Ja'Mesha Kinder came into Children's Hospital at her adjusted age level, you wouldn't expect any intentional movements?

A. I said reaching. You would not expect deliberate reaching movements with the hands at that

age.

Q. How about any intentional movements? Would you expect to see any intentional movements in a child such as Ja'mesha presenting to Children's Hospital in January of 1995?

A. Actually, not intentional. I mean most behaviors there are reflex. For example, even the turning head to sound is not an intention, it's sound to reflex. Nipple goes in the mouth and they reflexively suck.

There's a difference between volitional movement and moving in response to -- what they described when she came in were reflex, turning to sound, lifting her head up, things like that. She would not be expected, by her age, to have voluntary under her will control as a newborn.

Q. Are there any milestones that you feel Ja'mesha Kinder should have met by January 11, 1995, but she failed to meet?

A. We've already talked about that.

Q. That's right, we have. I'll move on.

Would you turn to your report?

MR. WILSON: We'll have this marked as Number 11.

(Whereupon Exhibit 11 is marked for identification.)

BY MR. WILSON:

Q. Let me show you what's been marked as Exhibit 11, a copy of your report.

A. Okay.

Q. If you turn to the last page of your report, did you find that she had a clear delay of gross motor activities?

A. Did I? Yes.

Q. At the top of that page, did you find that Ja'mesha Kinder had a spastic quadriparesis?

A. Yes.

Q. Did you make any appraisal of her overall intelligence level?

A. I was unable to do that by a physical examination.

Q. Or by your interaction with her, did you make any appraisal of her intelligence level?

A. No, that's not an accurate of assessing

intelligence.

Q. Have you reviewed Dr. Charash's evaluation of Ja'mesha Kinder?

A. No.

Q. Are you familiar with Dr. Charash?

A. Oh, yes.

Q. Have you been on the other side of lawsuits from him in the past?

A. Yes.

Q. He states that, quote, she is unfortunately quite severely disabled. Would you agree with that statement?

A. Yes.

Q. He continues: And she has been correctly diagnosed as having cerebral palsy, spastic quadriplegia. Would you agree with that?

A. Yes.

Q. And Dr. Charash states: She is unable to creep, crawl, sit, kneel, stand or walk. Would you agree with that?

A. Yes.

Q. He states: She is able to finger feed herself,

but cannot hold a bottle, nor can she attempt to use utensils. Would you agree with that?

A. I don't have any basis to agree or disagree.

Q. He goes on to say her handedness is not determinable. Would you agree with that?

A. I did not determine handedness in her, I don't know if someone else could or couldn't.

Q. He states: She doesn't seem to drool excessively. Would you agree with that?

A. Let me see if I comment on that. I don't describe any drooling in here.

Q. You would agree with that?

A. That she wasn't drooling? I don't think I saw any drooling.

Q. He states her dentition has been slightly delayed. Would you agree with that?

A. I didn't check her dentition.

Q. Would you agree that you found her head size to be within normal limits at the time of your examination?

A. Yes, I did.

Q. Would you agree with this statement by Dr.

Charash: She shows rather severe generalized spasticity with exaggerated stretch reflexes and increased deep tendon reflexes?

A. I agree with that.

Q. And he states, quote: She has what appears to be 30 degree flexion contractures about her knees?

A. I didn't -- I don't know what the degrees were. If he measured them, that's fine.

Q. Did you find flexion contractures about her knees?

A. Yes.

Q. The plantar responses are extensor and sustained ankle clonus can be elicited. Would you agree with that?

A. Yes.

Q. He states: The hips show considerable adductor tightness. Would you agree with that?

A. I recall her that way, I didn't record it.

Q. Trunk control is rather poor. Would you agree with that?

A. Yes.

Q. He states: Head control is only fair.

A. I thought it was okay, she wasn't wobbly.
Q. He states: Interestingly, she does appear to be alert to her environment and seems to pay attention to it. Is that consistent with your observation?
A. Yes.
Q. He states: This young lady suffers from a static encephalopathy. Would you agree with that?
A. It appears to be static encephalopathy, yes.
Q. He states, quote: The manifestations include cerebral palsy, a spastic quadriplegia of rather severe degree. Do you agree with that?
A. I do.
Q. And he states: She also has a divergent strabismus?
A. I didn't see that at the time.
Q. Dr. Charash also states: For the moment, she is not suffering from convulsive seizures.
A. That appears to be true.
Q. He also states that, quote: She does have a number of orthopedic problems which flow from her spastic quadriplegia. Would you agree with that?
A. Yes.

Q. He states, finally: Her vision and hearing seem to be normal.
A. I agree with that.
Q. He states, quote: The degree of her disability is rather significant in terms of the motor deficit and it is viewed as being permanent. Would you agree with that?
A. Yes.
Q. Dr. Charash states, quote: It is unlikely that she will ever be ambulatory and she will always be in part dependent upon physical efforts from others for activities of daily living. Would you agree with that?
A. No, not really. I suppose it depends on what you mean by ambulatory. It's relatively rare that a child has no walking in any way, shape or form. That may be very labored and with a lot of effort.

But I sort of see her as being able to walk with a lot of effort. Not a community walker, but a house walker perhaps. The second part is will she be dependent, I would agree with that.

Q. To the degree that she'll always be in part dependent upon physical efforts from others for

activities of daily living?
A. I think that's true.
Q. Dr. Charash also states: She will likely not be commercially employable. Would you agree with that?
A. Meaning in the main stream of the American work force? Yes.
Q. You state in your report: Despite her cerebral palsy, she seems to be able to consume her nutrition in an adequate fashion?
A. Yes.
Q. Did you find that she was mobile to some extent when you examined her?
A. No. Well, I mean not to locomote. I know she can scoot, but that's not considered true locomotion. It's not effective to get your body from point A to point B.
Q. As a result of your examination, have you formulated any opinions that Ja'mesha Kinder will not have a normal life expectancy?
A. I was not asked to make any opinion about life expectancy.
Q. Have you formulated any opinions, as we sit here

today, that her life expectancy is anything other than a normal child?

A. Well, it is less than a normal child. I don't think she's in a category where the limitation would be like four years from now she is going to be dead. The main reason I think that is that her swallowing is pretty effective. She is taking everything by mouth and she is adequately growing.

Maybe you're not, maybe you are familiar with the Eyman and Grossman paper where they look at the different outcome categories. She is not in the profound category because those people basically are tube fed and they have, quote, no locomotion. I don't think she's going to be in that category of having zero locomotion.

She's taking by mouth, so she would probably be in the moderate category that Eyman and Grossman talk about. But that is a reduced -- it's not 70.2 years. But it's not like five years from now we expect her to have expired.

Q. Could you pull out your 26 (b) 4 statement?

You're familiar with these, of course?

It's a statement prepared by counsel as to what counsel expects that you might say.

A. Yes.

Q. Let's go to the end of the first paragraph. It says: Dr. Clancy is expected to express the opinion that Ja'mesha Kinder suffered permanent neurological injury and damage in utero.

Can you state today what the cause of her permanent neurological injury in utero was?

A. Abnormal white matter development.

Q. Is that genetic, in your opinion?

A. Well, I guess it could be. But I don't know that for a fact. In other words, she is behaving like a static white matter abnormality. Whether it be genetic or viral or PCP or some other thing, I don't know.

Q. As we sit here today, do you know of any other factor other than this white matter disease that you can conclude to a reasonable degree of medical probability has caused or contributed to Ja'mesha Kinder's medical condition?

A. Well, contributed would be the PCP. I'm certain

that's contributed something. To say that I know for a fact that it is the cause of her white matter disease, I don't know that for a fact.

Q. Anything else?

A. No, no other factors.

Q. So, to what extent do you believe that the PCP exposure in utero has contributed to Ja'mesha Kinder's problems at the present time?

A. Well, to the extent that this child's nervous system was formed under the influence of PCP, which is a powerful drug anesthetic for animals, as you know. And we don't recommend it to mothers to put their babies on PCP. It's a drug that targets the nervous system.

That's the whole idea of the anesthetic is to go to the nervous system, make changes. There are animal models of PCP -- not animal models, human models of brain cultures grown under the influence of PCP. And they damage the cultures. So, yes, I think the PCP contributed to it.

Q. So, do you believe that the PCP caused Ja'mesha to have cerebral palsy?

A. No, I don't think it is the cause. I don't know how to connect it to the white matter. I think the white matter disease is the prime mover in her. I think her PCP contributes to her neurologic disability. I don't know that it contributes to the white matter disease, though.

Q. Well, if she did not have white matter disease, would she still have cerebral palsy from the PCP exposure?

A. I don't think so.

Q. If she did not have the white matter disease, do you believe that Ja'Mesha Kinder would still have irritability tremors and hyper-reflexia from the PCP exposure?

A. No. I think that those symptoms were mostly her white matter disease.

Q. If Ja'Mesha Kinder did not have white matter disease, do you believe she would be mentally retarded from the PCP exposure?

A. No.

Q. Do you believe that Ja'Mesha Kinder suffered brain damage as a result of any exposure to smoke in

utero, smoking, the mother smoking?
A. No, not really.
Q. If we go to the second page, can you conclude to a reasonable degree of medical probability that the low blood sugars during the first few weeks of life probably contributed to her brain damage?
A. No, I actually don't think that -- it says here it may have. I don't think it did, based on the information I have. Specifically, they weren't that low. And, secondly, there was no specific neurological sign when she had the low blood sugar.
It wasn't like she passed out or had more tremors or anything like that. It didn't seem to really affect her in an obvious way.
Q. Do you think that Ja'Mesha Kinder suffered brain damage as a result of the low blood sugars that she had when she was at Children's Hospital prior to the code?
A. For the same reason, no, I don't.
Q. Is that opinion to a reasonable degree of medical probability?
A. Yes.
Q. Are you fairly confident in that opinion or are

you more wavering about it?

A. No, it's something that you have to consider. It really says may and that would be as far as I would consider it medically speaking.

Q. Now, with respect to the CT and MRI scans after the code, would you agree that the CT and MRI scans do show generalized cerebral atrophy?

A. No, I don't agree with that.

Q. You did observe that in the reports, didn't you?

A. Yes.

Q. Do you believe that the reports are wrong when they report cerebral atrophy?

A. I think that the conclusion -- I don't think you can actually tell that from a report. I don't think that MRIs are very good in really knowing what's atrophy. For example, in this hospital now, they really don't talk about atrophy. They talk about the size of the subarachnoid space.

The decision of whether that represents too much water or not enough brain really depends on what's the child been through, what's the head circumference, do we have other scans to compare it to,

things like that. So, I see what they are looking at on the scan. I can see the size of the subarachnoid space. Could it be atrophy? It could be atrophy.

It can also be other things. The child was on a ventilator after the second scan. So, I would not accept that at face value is what I'm saying.

Q. This is a hypothetical question. Under some circumstances, could an episode of HIE have cerebral atrophy as a resultant complication?

MR. BROWN: You're asking him is there any possible scenario he can think of where that could occur?

MR. WILSON: It's a hypothetical.

MR. BROWN: I'll object to it.

THE WITNESS: Is there a scenario in which HIE can lead to cerebral atrophy, yes.

BY MR. WILSON:

Q. Did you think that Ja'Mesha Kinder was ready for discharge prior to the arrest on January 19, 1995 from Children's Hospital?

A. Yes, I did.

Q. Of course, she remained in Children's Hospital

up until approximately mid March of 1995; is that correct?

A. That's correct.

Q. Would you agree that the arrest that she had on January 19, 1995 was a substantial factor in her remaining in the hospital from January 19, 1995 up until mid March?

A. Was it a substantial factor?

MR. BROWN: I object to the form of the question. You can answer, if you can.

THE WITNESS: Well, I mean only in part. The real issue was that now she was having life-threatening reflux and that had to be understood and addressed and treated as best they could.

The cardiac arrest isn't really the central issue, it's the consequence of the aspiration and the reflux. The real prime mover was that she had declared her reflux as the problem.

BY MR. WILSON:

Q. Would you agree that the cardiac arrest of January 19, 1995 was a substantial factor in her remaining in the hospital up until mid March of 1995?

MR. BROWN: Object to the form of the question.

THE WITNESS: It was a factor, yes.

BY MR. WILSON:

Q. Would you agree that it was a substantial factor?

A. Yes, I do.

Q. Then would you agree, as we sit here today, you do not have any opinions that Ja'Mesha Kinder does suffer from a genetic disorder to a reasonable degree of medical probability?

A. I don't have an opinion that she does suffer from a genetic disorder.

Q. Now, would you agree that there's a sequence of physiological events that culminate in a complete cardiac arrest? There is a set of stages that a patient would go through?

A. Oftentimes there is, yes.

Q. In this case, do you have any opinions as to the most likely initiator of the events of January 19, 1995, for example, reflux?

A. I think that's probably the most likely. The

second is that she could have had a seizure causing aspiration just as easily. In terms of historical information of having formula in her mouth and the streaks on her chest x-ray, aspiration is part of it. Whether it was the first thing or as a result of the seizure, for example, it's not known.

Q. Would you agree that in this case the most likely scenario was that the process of January 19, 1995 started with gastroesophageal reflux?

A. In other words, it may be. It's possible. All I'm saying is that she certainly has reflux. And the question is knowing that there was a seizure after, is there a scenario in which the seizure triggered her own reflux, which can happen. All they would find is a child with formula in her mouth and streaks, without having seeing the original seizure and finding a post-event seizure.

So, that is a scenario. There's no way of knowing that anymore than just a speculation, which is what it is. Her reflux is at least part of the deal with her arrest.

Q. Would you agree with me that it's more likely,

with the history in this case, that she first had reflux and then later had a seizure than that she first had the seizure and then had reflux?

A. Well, I don't know if it's more likely, but that's the information that's available is that.

Q. Do you have an opinion at the present time that the more likely scenario was that she first had a seizure and than had a problem with reflux on January 19, 1995?

A. The question was did --

Q. Do you have an opinion that she first had a seizure on January 19, 1995 and then had the subsequent problems, the process started with a seizure?

A. I think it's speculation. It's certainly possible, but there's no historical information to substantiate that.

Q. Just to clarify things, not to beat that into the ground, would you agree that most probably the process started with reflux on January 19, 1995?

A. Yes, I agree with that.

Q. Then once she refluxed, what was the most probable scenario of what happened? What would happen

next?

MR. BROWN: Let me just note an objection to speculation because nobody witnessed the event.

THE WITNESS: Probably respiratory depression or apnea after that.

BY MR. WILSON:

Q. What would be the mechanism of respiratory depression or apnea?

A. There's a reflex involving the taste buds of the epiglottis that when there's food around those taste buds, there's a supression of breathing.

Q. Then what would the next step in the process be, a gradual suppression of breathing?

A. Yes.

Q. Is it necessary for the reflux material to be aspirated in the lungs to have that suppression of breathing or would it just be through the taste bud mechanism that you mentioned?

A. It does not have to enter the airway, to my knowledge.

Q. Would there be, in this case, a gradual depression of respiration before the heart rate became

affected?

A. I'm not sure about that.

Q. Do you have any opinions as to whether the depression of heart rate occurred simultaneously with the depression in respiration rate or if there was a sequence of first respiration depression and then cardiac depression?

A. Just from looking at the monitor printout that Mr. Brown showed me, it looks like the respiratory rate is depressed, followed later by a bradycardia.

Q. And would you agree that a complete cardiac arrest would represent a culmination of events including both respiratory and cardiac depression?

A. Could it? Yes, it could.

Q. Would you agree that generally --

MR. BROWN: Object to the form of your question.

BY MR. WILSON:

Q. -- it takes a period of time before a child has a complete cardiac arrest under circumstances similar to this case?

A. Well, you mean instantaneous versus some nonzero

period of time? Sure.

Q. Would it be fair to say that a complete cardiac arrest in a patient such as this patient on January 19, 1995 represents a culmination of physiological events?

A. If there was a complete cardiac arrest, I'm sure it would be a culmination of events.

Q. Do you have any estimate, in a child such as Ja'Mesha Kinder, as to how much time would typically elapse between when there was esophageal reflux and when a cardiac arrest would occur, a complete cardiac arrest?

A. No idea.

Q. If it was in a child like Ja'Mesha Kinder, would there be a variable period of time for that?

A. I've never seen anything written about it.

Q. Do you have any opinion of any kind on that, how much time would elapse between cardiac arrest and esophageal reflux?

A. I just don't know.

Q. Would there have to be a period of significant ischemia and hypoxia in order to result in a complete cardiac arrest in a child such as Ja'Mesha Kinder?

A. No. I mean there can be rather sudden arrhythmias and so forth. In other words, it can certainly happen that after a short period of respiratory arrest, that you just lose the heart rate. You just have to go with the actual numbers on the child. Whatever theoretically could happen, the question is what do we know that did happen. We have that information from the monitoring strips.

Q. If Ja'Mesha Kinder was found without any pulse and without any observable respirations, would there normally be significant ischemia or hypoxia that would proceed her getting to such a point?

A. What do you mean by significant?

Q. A clinically significant hypoxia and a clinically significant ischemia.

A. There can be, but I mean not every child that has an arrest is damaged. So that of course it's significant, it has to be addressed. Is it set in stone that every arrest is followed by brain damage or body damage? No, of course not.

So, really, the question isn't whether

it's clinically significant. Of course, there is a clinical need to know about it. But whether it's a damaging degree of ischemia, that's a slightly different question.

Q. So, let me ask you this: From your experience as a pediatric neurologist, if you had 100 patients who had gastroesophageal reflux and then had a complete cardiac arrest and a complete respiratory arrest and had an ABG with these numbers, do you have any estimate as to what percentage of those patients would have some degree of permanent brain damage?

MR. BROWN: I object. You're asking him to assume facts that are not relevant in this case. If he can answer.

MR. WILSON: That's a hypothetical.

MR. BROWN: You're asking him to speculate on something.

THE WITNESS: This is not a complete cardiac arrest. We can talk about that. We've got some heart activity. And what you need to consider then is really the duration of the ischemia, among other things.

And the information that's available for a newborn, which, again, in terms of the biology of this child, she is newborn like, would be that for slowing of the heart rate, for bradycardia, aside from total -- the heart is not moving at all, the window is about 25 minutes before the onset of damage. So, this really is more pertinent for the labor and delivery room.

The fetal heart is low, perfusion is low, the baby is acidotic. How much time might pass before the onset of damage? And the figures on that are about 25 minutes. If the issue is total cardiac arrest, meaning there is no heart action, it is truly zero, then it comes down more into -- for a newborn, about nine to ten minutes.

Then I assume that between those two extremes of either slow heart rate or no heart rate, there is probably a curve that connects those two. But, obviously, no nobody knows how to fill the points in.

BY MR. WILSON:

Q. Have you ever prepared life care plans on patients with cerebral palsy and spastic quadriplegia?

A. No.

MR. BROWN: Let me just tell you that I expect to ask him certain questions about needs for Ja'Mesha Kinder in the future. That is maybe not a life care plan. But he will be asked what kind of needs she will have for the future, including care needs.

BY MR. WILSON:

Q. Would you agree that Ja'Mesha Kinder is most likely to require care for the rest of her life?

A. Yes, I do.

MR. BROWN: I object to the form of your last question. It's too vague.

BY MR. WILSON:

Q. Let's assume that at age 25, Ja'Mesha Kinder is living in a house of her own. What types of care would she need at that point?

MR. BROWN: Object to your assumption.

THE WITNESS: Basically, activities of daily living, preparing food, bathing, dressing, getting the groceries in, paying the bills and stuff like that. I agree she will be a dependent person and

require assistance to get the job done.

BY MR. WILSON:

Q. Would she be able to utilize a motorized wheelchair?

A. As far as I know, she would be, yes.

Q. Do you believe that she would require a motorized wheelchair for ambulation?

A. I don't know. All I can say is that she actually has pretty good hand dexterity. She can do things with her fingers, so she could operate a little chair. If you can see and use your hands, you can use a motorized wheelchair.

If she needed that much support, I think it would be reasonable to provide her with a motorized wheelchair.

Q. Do you foresee that by age 25 she would be ambulating without the need of a motorized wheelchair?

A. Perhaps in her house. I don't think, again, this idea of a community -- like I want to go down to Seven-Eleven, I don't think so. If it's a matter of I want to go from this couch to go to the kitchen, probably. But that's a house ambulator.

Q. Do you foresee that by age 25 she'll be able to get in her motorized wheelchair, for example, go to a van and drive the van to the Seven-Eleven?

A. No, I don't think so.

Q. Why not?

A. I don't think she has the physical coordination for that, as I see her today.

Q. Do you think she will ever be able to drive a vehicle?

A. I can't really say.

Q. If she were to go shopping, she would need an attendant to take her to the shopping place; is that correct?

A. That's the way I would see it now, yes.

Q. Do you see Ja'Mesha Kinder, at age 25, being able to do shopping if she were physically transported to a store? Could she choose what dress she wanted, for example?

A. I don't think that's likely.

Q. Why wouldn't it be likely?

A. I think children can say I like this red dress. In terms of is that the appropriate dress, is that the

appropriate size, they need to get in the fitting room to try it on and that's not likely to happen.

She might certainly have preferences for the styles and colors and so forth, but I think she will still need supervision for that kind of activities of daily living.

Q. Do you think that by age 25 she will be able to brush her teeth?

A. Yes, absolutely.

Q. To feed herself with a knife and fork?

A. I think so, yes.

Q. Do you believe that by age 25 she would be able to take a bath or shower without assistance?

A. Not without some assistance, no.

Q. Do you believe that by age 25 she would be able to transfer from a bed to a wheelchair without assistance?

A. Yes.

Q. Do you believe by age 25 that she would be able to talk in a normal sense, in terms of pronouncing words and sentences?

A. I'm not expecting that, no.

Q. Do you have any estimates as to how far Ja'Mesha Kinder is likely to progress in school?

A. Well, I mean she will attend school by law until she's 16. In terms of how far she gets, that is hard to say. Her handicap that's most conspicuous now is her cerebral palsy, her motor handicap.

The purpose of school is for intellectual development. I don't really have a good handle for what her mental ability is. I think you asked me, when I examined her, could I tell her mental state. I find that very hard.

Q. Are you familiar with the Wood School?

A. Yes.

Q. Would you give me your understanding of the Wood School?

A. It's a private special education facility. I think there's a -- not inpatient, but on campus area, so that the children can live there, if it's necessary for whatever reason.

Q. Have you ever had any of your patients attend the Wood School?

A. Yes.

Q. Do you have an opinion as to whether it's a good program or a bad program?
A. It's considered a respectable, reputable program.
Q. Do you feel that Ja'Mesha Kinder could benefit from being at the Wood School for a period of time in the future?
A. I think she could benefit from being in lots of different kinds of schools. I don't know that it's obligatory for her to go to that school or any inpatient school. If she's in need of dvelopmental services and a program has that to offer to her, sure, she would benefit from it.
Q. One of our experts is Dr. Raphael Minsky. Are you familiar with him?
A. Yes.
Q. He has recommended that she go to the Wood School and included that in the life care plan. Do you feel that those services are not warranted for Ja'Mesha Kinder?
MR. BROWN: There as opposed to elsewhere? I don't understand your question. Do you want to know

if he thinks there's something unique about the Wood School?

MR. WILSON: No. Let me rephrase the question.

BY MR. WILSON:

Q. A recommendation was made that Ja'Mesha Kinder could benefit from being at the Wood School in the future. Do you feel that recommendation is medically inappropriate?

A. No. It's not inappropriate, it's not just obligatory.

Q. What types of patients, in your experience, have benefitted from a period of time at the Wood School?

A. Well, first of all, if the problems are very comprehensive, so it's not just physical therapy, but dozens of other things, at least everything is in one area, number one. Secondly, if the family is unable to provide the kind of support or the environment that's necessary, then the school provides the environment rather than the family.

The third part is the financial part. That's a private school. It's a very expensive school.

They don't hand out free spots to the school, so there has to be the ability to pay.

Q. Do you have any affiliation yourself with the Wood School?

A. No.

Q. Would you agree that the events of January 19, 1995 were a factor in Ja'Mesha Kinder's hospitalization at the Hospital For Sick Children?

MR. BROWN: He is not going to give opinion testimony on that. You can answer, if you can. I think your question is too vague and I object to it.

THE WITNESS: Was the arrest a factor in prolonging her hospitalization?

BY MR. WILSON:

Q. Yes.

A. Yes, it was.

MR. BROWN: That wasn't his question.

THE WITNESS: That's what I heard.

BY MR. WILSON:

Q. Was the arrest of January 19, 1995 a factor in her continuing to be hospitalized at the Hospital For Sick Children after she left Children's?

A. Was it a factor? It was a factor, yes.
Q. Let's suppose that there were no x-rays of any kind in this case. Would you agree that Ja'Mesha Kinder's present clinical condition would be consistent with HIE?
A. No.
MR. BROWN: Object to your assumptions.
BY MR. WILSON:
Q. Why do you say no?
MR. BROWN: Form of the question.
THE WITNESS: Because aside from the x-rays, there are other ways of getting similar information. For example, just like what they were looking for in the x-rays was edema. Well, clinically, that can be determined by filling the fontanel. they can fill the fontanel after cerebral edema from hypoxic ischemic injury. That was not her situation.
An acute injury of the brain should cause hypotonia and she persisted in being hypertonic afterwards. That will not tell me that the brain has been injured. In the early hours after her arrest, she was placed on neuromuscular blocking drugs so that they

could control her breathing. As soon as those were let up, they described her mental status as being alert, being visually attentive and looking around. That does not sound like a brain damaged child to me.

When the developmental pediatrician saw -- developmental psychologist, the Ph.D., saw the child and had seen the child before, the idea again is that functionally the nervous system is functioning the same after the arrest as before the arrest. And the EEG which was obtained was expectedly abnormal. It was mildly abnormal.

But knowing everything, again, but the imaging, knowing how bad off this child is, the question would still be, all right, we've got an EEG done right after an arrest, of course it's going to be abnormal, is it abnormal indicating that there's damage to the extent that would correlate with what we have today, severe spastic quadriparesis? Also, resounding no.

So, was she sick during the arrest? Clearly, she was sick. Did it damage her multi-organ things? We don't have any evidence of that. Did it

actually damage the brain? We don't have evidence of that either. What we have are the seizures. I think those are post anoxic or post-arrest seizures, I don't know what else to call them. But aside from the seizures, the rest of it does not fit.

Of course, we do have the imaging. And we have a lot of imaging, as a matter of fact. We have before, the day of, three days later and another couple of weeks after that. So, it's not like, well, you can get just the right timing so the edema is gone and this is here and so forth. They covered those bases top to bottom in terms of imaging and there's just not the signs of HIE in the scans.

BY MR. WILSON:

Q. If an event such as this happened at your institution here at the present time, would you recommend imaging with spectroscopy?

A. No.

Q. Why not?

A. Well, because we have diffusion weighted imaging. If you're talking about acute HIE, I think it's as good as we can do with MRI.

Q. So, under those circumstances, spectroscopy would not be indicated?

MR. BROWN: Under what circumstances?

MR. WILSON: Where a child has a suspected or actual cardiac arrest and there's a question of HIE.

MR. BROWN: At what point in time?

MR. WILSON: Either the acute phase or the chronic phase, would spectroscopy be clinically indicated?

THE WITNESS: I mean there's an indication for it. You could say, well, she had an arrest, let's do it. That's the indication. I think what the question is when those tests are done -- we know something happened. The question is has there been damage to the brain as a result of the event or the menningitis or whatever and has the stress or the dysfunction actually --

Are you off the brink of physical injury or is it just a close call or are you actually getting damage. That's really what the question is. For example, when we now do these so-called diffusion weighted images by MRI, if those show us the

abnormalities, then I'm confident that tissue has been damaged. If you simply do spectroscopy, it's sort of like an EEG. They will say, hey, the chemistry is off.

Of course, his chemistry is off. I want to know, though, is it going to be set in stone permanent tissue damage. That's what I really want to know. Spectroscopy will tell you that the child is not right chemically. I already know that. I want to know is there permanent tissue damage. That's where the imaging comes in. That's my slant on it when I see the kids in the cardiac unit that have had an arrest.

BY MR. WILSON:

Q. Wouldn't you agree that spectroscopy can be a more senstive indicator of HIE than either CAT scans or MRIs?

A. Well, it can be more sensitive to say did something happen. But, again, to say is this tissue damage, I don't think it distinguishes that. You can certainly see tissue damage on CAT scans. I mean it's been very successfully used for years for that.

Part of the issue is when you see it, can you tell the instant it happens or do you have to wait

for a day for all the edema and the swelling. It's not whether it shows it or not, it's the time line of it as well.

Q. In some patients with HIE, could spectroscopy show evidence of HIE that CAT scans or MRIs do not show?

A. Not that I know. I don't really know that that's been -- not that I know of.

Q. Have you yourself followed children who have had suspected hypoxic ischemic events?

A. Yes.

Q. What kind of neurological followup examinations should be done in such children?

A. Well, the most directed examination is a motor examination. So that in terms of what you can objectively get information about, I can examine a six-month-old and know if it's specific or not. I can't sit there and ask him to add a column of numbers or take three apples away from four.

That's just not a relevant question for them at that development age. But if the toes go up and there's clonus, I can see that with my eyes. So

that the neurological examination that's the most relevant, I think, is the motor examination because it's really the most objective thing.

Q. How often should that be done?

A. I don't think there's any set rule. Usually, since these children -- the children in question are often delayed in their development, so six calendar months can pass and actually developmentally only two months has changed. So, it tends to be on the order of a few months, six months, depending on the needs of the child.

Q. If you were treating Ja'Mesha Kinder now as her treating doctor, would you recommend that she have fasting blood studies?

MR. BROWN: Let me note an objection. He is not a clinician in the sense that he is a primary care physician who manages patients. He's a consultant. I object to you asking him that question. He is not going to give any opinions about that.

THE WITNESS: Can I hear the question again?

MR. WILSON: Let me rephrase it.

BY MR. WILSON:

Q. When you examined Ja'Mesha Kinder, did you see any reasons to do any fasting blood glucose study?

A. On the day I examined her? Not on the day I examined her.

Q. From your review of the medical records in this case, would you recommend at the present time that Ja'Mesha Kinder have a fasting blood glucose study?

A. Well, I mean I haven't looked much into this issue with hypoglycemia. If her doctors felt they had nailed that down and it wasn't a problem, it doesn't need to be explored any further. If there is a legitimate concern that that really hasn't been put to bed completely, then a fasting blood sugar is one way of taxing her system and seeing how long she can go, that kind of thing.

I know it was done when she was in the hospital, but the extenuating circumstances was she was sick and nourishment wasn't great. Who knows what was really being tested. Was it her circumstances or her? Then I think the blood glucose stabilized.

I didn't really form any opinion about how

pressing the need was to do that. It would depend if someone felt that that needs to be resurrected and examined. I didn't see that need myself.

Q. When Ja'Mesha Kinder was at Children's Hospital, did you see anything in the medical records that you thought necessitated a 36-hour fasting blood glucose with checking keytones and free fatty acids?

MR. BROWN: He is not being offered to express opinions on the metabolic or endocrine management of this patient.

THE WITNESS: Well, all I can say to answer your question is I know that some of her spot glucoses were low. Again, one way to test her system out is to then stress it by fasting her, making her liberate her own glucose and mobilize her own glycogen stores. And that's all I know about this. So, in that sense, it sounds fine to me.

BY MR. WILSON:

Q. Do you think that would have been a good idea?

MR. BROWN: When?

BY MR. WILSON:

Q. When she was at Children's Hospital.

A. I thought they did a fasting sugar on her.
Q. Do you think that when they did the fasting sugar, they also should have checked for keytones and free fatty acids?
THE WITNESS: He's not going to offer opinions on that issue.
THE WITNESS: I don't know about that.
BY MR. WILSON:
Q. Let's suppose that she had a 36-hour fasting blood glucose test in the near future and they checked for keytones and free fatty acids, do you have any opinion as to what a test like that might show on Ja'Mesha Kinder?
A. Again, that's way out of my league.
Q. From your review of the records, can you say that that test would be abnormal?
A. Can I predict that a 36 hour -- no, I can't predict that.
Q. Have you ever treated patients with hyperinsulinism?
A. Yes.
Q. About how many patients?

A. Well, we see a couple a year in the situation that they come in as newborns with low blood sugar. A lot of times, they'll have seizures. That's how I get into it. They come to see the surgeons.

My treatment of them really is to look at their EEGs and manage their seizures. I'm not managing their glucose and things like that.

Q. Isn't it true that Ja'Mesha Kinder's symptoms and brain damage would have been explained by hyperinsulinism?

A. Hyperinsulinism? Just having a high insulin level? Never heard of that. You mean separate from glucose? No.

MR. WILSON: No further questions.

BY MR. BROWN:

Q. I think you've answered this, but let me be clear. Do you have an opinion as to whether Ja'Mesha Kinder suffered any brain damage as a result of the events on the morning of January 19, 1995?

A. In terms of permanent brain damage, I don't think so, again, based on the physical findings and the absence of physical changes on the CAT scans.

Q. You mentioned all of the clinical bases for that opinion?

A. I'll make it explicit. Number one is that her so-called multi-organ damage did not materialize. Secondly, as soon as it was available to see her, her mental status was described as awake and alert, not comatose, as you would expect from a brain damaged Child.

Third thing was the -- when she could be assessed again, her motor tone was high, as it always had been, rather than low, which is what you would expect in acute brain damage. The CAT scans did not show hypoxic ischemic changes.

Q. What kind of changes should it show if there an acute hypoxic ischemia?

A. First of all, obvious changes. Because as I've been saying all along, to look at this child now, she is obviously abnormal neurologically. We've got a very abnormal child. If we're going to realistically attribute that to the hypoxic ischemia, then I've got to see some -- not just trivial changes on the CAT scan, but some rip roaring changes.

If we're going to pin it on that, by God, show me the damage on there. That's the one thing that's missing here.

Q. What kind of changes would you expect to see on the scans if it was an acute hypoxic event serious enough to cause the symptoms she has today, signs and symptoms?

A. The most visible on the scans would be the brain swelling. It's the same as any other kind of injury. If you twist your ankle, it swells up. If you burn your finger, you get a blister, it swells. If you damage your brain, it's going to swell also.

That's an easy call on the CAT scan. The report in the chart does not describe hypoxic ischemic changes.

Q. Was there ever any swelling of the brain?

A. So, the cardinal feature, the easiest thing to see -- again, we've got a baseline scan on the day and three days later, had every possible chance to show itself in the form of swelling.

And thank God they did the scans, whatever their intentions were. It makes this causation

question a lot clearer in my mind.

MR. BROWN: I think that's all I have.

BY MR. WILSON:

Q. I have a few more.

Let's suppose that another CT scan was done between the CT scan that was done right after the arrest and the one done, I think it was four days later, that that showed cerebral edema.

MR. BROWN: Let me object to the form of the question. It wasn't right after the arrest, it was 16 hours.

MR. WILSON: That is correct. I'll rephrase the question.

BY MR. WILSON:

Q. Let's suppose a CT scan was done between number two and three after the arrest and the CT scan showed cerebral edema. If you saw cerebral edema on that CT scan, consistent with the other facts in this case, would you agree that this event could have caused brain damage to Ja'Mesha Kinder?

MR. BROWN: Object to the form of your question. You're assuming facts not in evidence.

THE WITNESS: Assuming what is not true -- none of the scans show any of this, that's why we look for them. Because if they show them, we will say we have an old scan without edema, now we have an arrest with edema, that's one of the signs of injury, so, yes.

BY MR. WILSON:

Q. So what?

A. So, yes. If I found, in some in-between scan, edema, that's why you do it, to find evidence for that. Again, the point is that this is already an abnormal child.

So, the question is not just did it cause it, but rather did it contribute in some form to her current condition because she was already abnormal before. That's why they did the first scan, she was already abnormal neurologically.

Q. So, if there were a CT scan done between CTs two and three that showed cerebral edema, then it could not be excluded that Ja'Mesha Kinder had some brain damage from this event?

MR. BROWN: You mean based on that scan at that time?

MR. WILSON: And whatever else we know about this child.

MR. BROWN: The followup scans as well.

THE WITNESS: Just let me hear it again, please.

BY MR. WILSON:

Q. If we take the same case, but we add a CT that was done between CT two and three that showed cerebral edema, with that addition, would you agree that the possibility that Ja'Mesha Kinder had brain damage from the events of January 19, 1995 could not be excluded?

MR. BROWN: Object to the form.

THE WITNESS: If I saw edema on that, then I would have to consider the possibility that hypoxic ischemia contributed to her injuries.

BY MR. WILSON:

Q. If you were to read a deposition in which a nurse testified that when she went into the room, being the first nurse that entered the room, and found Ja'Mesha Kinder to be without any pulse and without any respiration and being blue, could that testimony have an impact upon your opinions?

A. I suppose it could.
Q. If a child has preexisting white matter disease, would you agree it's possible that that could make the child's brain more susceptible to a hypoxic insult than a normal child?
A. No, I wouldn't buy that. I have no reason -- they are two different types of chemistry. I don't think it makes them more susceptible to hypoxic ischemia because they have white matter disease.
MR. WILSON: That's all.
BY MR. BROWN:
Q. Let's talk for a moment about patterns of edema that one should see in the time sequence if there is a serious acute brain injury from hypoxic ischemia. What's the time frame of the pattern?
A. For scans -- for CAT scans, I expect the onset of edema by about 12 hours after the arrest. And, secondly, that it peaks about 36 to 48 hours after arrest. And then, again, assuming the child survives and recovers and there's no further events, then maybe over the next ten days it's slowly going away.
So, the entire time course, though, is a

couple of weeks worth of edema. This is not a flash in the pan.

Q. If there had been edema after the scan on the 15th, would you expect to see edema on the scan of the 23rd?

A. Absolutely, sure.

Q. Would you expect to see any atrophy on the scan on the 23rd from a hypoxic ischemic insult on the 15th?

A. No, it's too soon for that.

Q. Did you ever see any evidence of brain atrophy at any time, including as recently as the MRI of July of '95?

A. Again, I'm going to evade the question. Her subarachnoid spaces are larger, but her head circumference is normal. So, I can't really say that's atrophy there. All I can say is the size of the subarachnoid space is larger.

Q. Would being on a ventilator affect either temporarily or permanently the subarachnoid space?

A. Her first scan was what, the 14th? She not on a ventilator. Then she has the arrest. She is on a ventilator now, she's got a tube in her chest, they are

keeping a positive pressure in her lungs to keep them open. The spinal fluid has to drain from the brain through the veins into the heart, which is in the chest.

So, when you put a child on a ventilator, that pressure increases back up through the veins, if you would, so that the size of the subarachnoid space increases a little bit. The pressure goes up in the spinal fluid a little bit when they are on ventilation.

Q. Do you know whether that can cause any permanent changes in the cistern drainage system of the brain?

A. It does not. All it does is redefines the size of fluid spaces so that once they are opened up, they are going to stay open, they are not going to collapse back down. Those are largely potential spaces unless hydrocephalus opens them up.

It really is a matter of water flowing through them. This has much more to do with the dynamics of water flowing than actual brain at this point.

Q. Are there types of seizures known as tonic/clonic?

A. Yes.
Q. Especially in newborn or premature babies?
A. Yes.
Q. How do the seizures manifest themselves in premature or newborn babies or how can they?
A. They can have pretty obvious seizure convulsions or tonic/clonic. They can also be pretty deceptive. There was a child where the doctors thought she was having seizures because there was twitching in her leg.

They actually did an EEG to be sure about that and it turns out they were wrong, those were not seizures. It's sometimes hard to tell.

Q. Do you know if an EEG was done at Greater Southeast?
A. To my knowledge, it was not done.
Q. Do you know if any movements were described by the caregivers there which could be consistent with seizure activity of a newborn?
A. Well, in the sense that she was arching, that's just like the tonic phase of the tonic/clonic seizure, you are arching. Any half decent doctor or nurse would be able to tell the difference between a convulsive

arching and nonconvulsive arching.

Q. Can twitching and jitteryness be caused by seizure activity?

A. In a generic sense, yes, particular abnormal-looking movements. And those were generally described there.

Q. Are you able to say that she did not have any type of seizure activity at Greater Southeast?

A. She certainly had abnormal movements. They were never assigned an epileptic basis. That's really about all I can say. It was never recognized she had seizures before they were concerned after the arrest.

Q. Do you know if she was ever evaluated at Greater Southeast by a pediatric neurologist?

A. Not that I know of.

Q. Do you know if anybody made any assumptions as to the cause of the jitteryness and irritability?

A. Well, the assumption was that it was related to the PCP. However, you know, the idea of withdrawal is that pretty quickly, once the stuff gets out of your system, then you're okay. This stuff is out, you're no longer withdrawing.

Q. Do you know how long it takes before you would normally expect the system to be clear enough that there would not be neurological symptoms from PCP?

A. I mean the drug would be out of the bloodstream in a couple of days. The question is how long it would have the effects on the nervous system. Might be another week, if it's just the drug withdrawal.

Q. Would you expect it to have an effect on the nervous system for three weeks?

A. No.

Q. If the child was still jittery and irritable and arching and hypertonic and hyper-reflexive at two to three weeks, would you have an opinion as to whether that would be due to the PCP?

A. I think it makes it much less likely, again, because they have these scores. They gave the withdrawal scores. Those really didn't change that much. It wasn't like they were high and got lower and then finally fizzled out. They stayed pretty constant during the whole time.

Now, of course, they were ascribing all that to PCP. I think they were anyhow, but she wasn't

really getting better even though time had passed and the stuff was out of her system.

Q. Do you have an opinion as to the cause for the irritability, the hypertonicity, the hyper-reflexia, the jitteryness and feeding problems that she experienced at Greater Southeast?

A. Yes.

Q. What is it?

A. She had a white matter disease that caused all those things.

Q. Do you have an opinion as to whether it was permanent at the time of her birth?

A. I think it was permanent.

Q. Do you have an opinion as to whether any of the findings that you found when you examined her was due to the white matter disease that existed at birth?

A. Well, they are the same findings. She is still hypertonic, hyper-reflexic, has clonus and things like that. Again, she still has white matter disease. As far as I'm concerned, that hasn't gone away.

MR. BROWN: That's all I have.

MR. WILSON: A few more.

BY MR. WILSON:

Q. Are you familiar with any studies where patients who have had white matter disease have then suffered a hypoxic ischemic insult?

A. No.

Q. Have you examined x-ray studies on patients with white matter disease who have had a hypoxic ischemic insult to look at edema changes and over time after the insult?

A. No, not as a study. I'm not sure I've -- I can't say I studied that.

Q. Are you familiar with any literature of any kind as to the x-ray findings on patients with white matter disease who have suffered a hypoxic ischemic insult and what those findings look like?

A. No, I can't say any specific study.

Q. Would you agree with me that the seizures that Ja'Mesha Kinder had on January 19, 1995 were more likely caused by hypoxia and ischemia rather than her white matter disease or other causes?

A. The immediate answer would be yes. I don't think it's a consequence that happened after the

arrest.

Q. Are you familiar with patients with white matter disease who have a benign course and a good outcome?

A. Well, I'll say yes, but I have to give a little qualification on it. First of all, we're excluding prematures with white matter disease, prematures and PVLs and all that kind of stuff?

Q. Yes.

A. I've had kids that have definite white matter disease and they are, oh, not too bad. They're not normal, but they are not severely spastic or severely learning disabled. But they've got their neurologic problems.

Q. Of patients with white matter disease, think of the best patient that you can think of in terms of outcome. What's their daily life like?

A. As a child, again, living with parents, under their supervision, special education, not in a wheelchair, ambulatory. That would be the best that I'm aware of.

Q. Can a person who has white matter disease live independently?

MR. BROWN: I object to the form of the question unless you're going to give him the clinical picture and so forth.

BY MR. WILSON:

Q. Can some patients who have white matter disease be independent in their activities of daily life?

MR. BROWN: I object to the form of the question. You're asking him to speculate. Secondly, unless you ask him to assume the facts consistent with the clinical picture of this patient, I object.

THE WITNESS: I think there are some that are living independently.

BY MR. WILSON:

Q. Do some patients with white matter disease graduate from high school?

A. Yes.

Q. Do some patients with white matter disease attend college?

A. Yes.

Q. Do some patients with white matter disease graduate from college?

A. I assume so, yes.

Q. With respect to opinions concerning how long the effects of PCP exposure in utero last in a neonate and infants, would you defer to Dr. Chasnoff in that respect?

A. Not really, I have enough experience. I've followed kids through and they are usually kind of chilled out within a week or so. Some of them are longer, but this child's never went away.

Q. Can you say that Ja'Mesha Kinder's irritability and hypertonicity that she demonstrated at Children's Hospital was probably not due to PCP exposure?

A. That's my opinion. My opinion is that she had a white matter disease that was the basis for all those things.

Q. Are there any tests of any kind that could be done now to prove or disprove whether or not Ja'Mesha Kinder has white matter disease?

A. They've already been done. She does have white matter disease because when we looked at her white matter on imaging, CT and MRI, it is abnormal. Therefore, she does have white matter disease.

The question is, well, what chemical is

out of wack. We've already talked about that there is a laundry list of things you can check through.

Q. You would agree with me that the doctors at Children's Hospital did not make a definite diagnosis of white matter disease by the time she was discharged?

A. Well, in their notes, they talk about hyperlucencies in the white matter. To say diagnosis three, leukodystrophy, that's not there.

Q. Do you think that it's within the province of a general pediatrician, looking at all of the medical records that exist concerning Ja'Mesha Kinder and examining her, to make a diagnosis of white matter disease?

A. It's happened before, I don't know that there's a rule that says they can't make the diagnosis.

Q. Would you expect a general pediatrician, with all the medical information that you have available, to make a diagnosis of white matter disease?

MR. BROWN: Let me object to that. When you talk about all the information that he has available, he is an experienced and trained and court certified pediatric neurologist.

MR. WILSON: That's where my question goes to.

MR. BROWN: Pediatricians aren't trained in the same way.

BY MR. WILSON:

Q. Do you feel that you have to be a pediatric neurologist or a pediatric neuroradiologist to make the diagnosis of white matter disease or would you expect other general pediatricians or other subspecialties in pediatrics to be able to make the diagnosis of white matter disease?

A. Again, it's possible that a knowledgeable pediatrician with similiar experience has seen a case before and could arrive at that diagnosis properly. I think chances are that someone like Dr. Zimmerman, who has seen a lot of white matter disease, or a neurologist who has seen some of them would have a better shot at making the diagnosis.

Q. Do you feel that a competent neuroradiologist working together with a competent pediatric neurologist could review all of the information available in this case and conclude that Ja'Mesha Kinder does not have

white matter disease?

MR. BROWN: He isn't going to testify to the standard of care for a competent pediatric neurologist, but I'll let him answer.

THE WITNESS: They can diagnose anything they want. If you image the white matter and it's abnormal and her clinical signs are those of white matter disease, I think you're stuck making some diagnosis of white matter disease. I don't know what else you can do.

So, I don't think you can have it both ways. You couldn't say the scan is abnormal, the kid is abnormal, it's not white matter disease.

BY MR. WILSON:

Q. How do you explain the fact that the doctors at Children's Hospital were looking at the same scans that you're looking at, except for the Georgetown scans, but never made a definitive diagnosis of white matter disease?

A. They did. They described hyperlucent white matter. They also described a very abnormal child. In terms of actually putting -- the, aha, putting it

together, no, I don't think that happened yet when she had left there.

MR. WILSON: That's it.

BY MR. BROWN:

Q. Just so I'm clear, with respect to PCP, I believe you testified about this, do you have an opinion as to whether PCP was a factor in the white matter disease in utero?

A. I can't really say. I know that it is the cause of her white matter disease. The question that was asked earlier was could it contribute to her abnormal neurologic status, and I think it probably did.

Q. You mentioned a study measuring the effect of PCP on brain tissue?

A. Yes.

Q. Could you describe that for us?

A. Right. The very brief background is that in human beings, it's very muddy water. Because, again, it's usually not just PCP, it's that plus other drugs and nutrition, smoking and who knows what else. So that the question is how can we understand how PCP alone affects the developing brain.

So that the model is to take actual human brain tissues that are grown and cultured and so forth and see what happens when PCP is added to the soup, basically. When that happens, this is human tissue, it's not monkeys or rabbits or rats or things like that, human brain cell tissue, there's a profound effect of PCP on the way that brain grows.

Q. Who did that study?

A. I would have to provide that for you. I can put -- I have to get something for you too, as a matter of fact, the slides, so I can provide you with that.

Q. Do you recall the profound effect?

A. It basically stunts the axons from growing from the neurons. So that the idea is that the neuron sends the axon that's destined to go down to your toes or your hands or whatever. It inhibits the axon's formation.

The study doesn't directly look at white matter, but axons are what the white matter wraps around. It would be interesting to know there is a connection, but the study does not address that.

Q. Is proper axon function necessary for good motor

coordination skill?
A. Yes. There should be a little sign, don't leave home without it. You need your axons to get the job done.
BY MR. WILSON:
Q. Do you have any opinion as to how much less care in the future Ja'Mesha Kinder would need if her mother had never used PCP during her pregnancy?
A. I don't know, no.
Q. Do you have any opinions that Ja'Mesha Kinder would require less care in the future if her mother had never used PCP?
A. I think she probably would need less care. I have no way on earth to quantify it. It seems reasonable common sensical that that be the case, but I would be very reluctant to say ten percent or 50 percent or whatever.
Q. Can you describe any elements of care that she wouldn't need if her mother hadn't used PCP, in the future or at present?
A. Well, I mean, just as an example, the white matter, as we know, has produced mostly spasticity in

her. There's a lot of needs we talked about that are related to her spasticity, CP and physical therapy and wheelchairs and things like that. Cerebral palsy is not the same as mental retardation.

There are some people that are perfectly normal intellectually, yet have CP. I suspect that the effects of the PCP have more to do with her cortex and the thinking and reasoning association, but that's hard to quantify again. Because at this age, in a handicapped child, to do IQ testing is darn near impossible.

I think that the PCP would have more cognitive mental processing effects than spastic cerebral palsy, so if -- she wouldn't have needed special education because of the PCP as opposed to just needing physical therapy, that kind of thing.

Q. Are you familiar with any studies of what happens when you take a child's brain who has been exposed to PCP in utero and then subject that child's brain to a hypoxic ischemic insult such as Ja'Mesha Kinder had?

A. I'm not.

Q. Would exposure to PCP in utero make Ja'Mesha Kinder's brain more susceptible to a hypoxic ischemic insult than that of another child?

A. I mean I just don't know that there's any information on that that's ever been specifically looked at.

Q. Would it be possible?

A. It might be possible, but that would be speculation.

MR. BROWN: I object to speculation.

BY MR. WILSON:

Q. Could a brain that has both white matter disease and exposure to PCP in utero be more susceptible to a hypoxic ischemic insult than a normal brain?

MR. BROWN: Object to the form of the question. You're assuming they are two separate matters and you're asking about possibility.

THE WITNESS: Again, I don't have any reason to think that a white matter disease will make your neurons more susceptible to hypoxic ischemia.

BY MR. WILSON:

Q. Could a child's brain be more susceptible to a

hypoxic ischemic insult if the brain has both white matter disease and prior exposure to PCP?

A. Again, I have to speculate. I don't really think so.

MR. BROWN: Object to the form of the question. Calls for speculation.

BY MR. BROWN:

Q. Of those children you've seen with white matter disease who have gone on to high school, did any of them have the clinical signs and symptoms of Ja'Mesha Kinder at her age?

A. No, this would be kids that will show up later with mild problems.

MR. BROWN: Thank you. What about signature?

THE WITNESS: I don't need to read it.

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(Whereupon the deposition was concluded at 6:30 p.m.)

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C E R T I F I C A T E

STATE OF NEW JERSEY:

COUNTY OF BURLINGTON

I, Margaret Dickinson, Registered Professional Reporter-Notary Public within and for Burlington County, State of New Jersey, do hereby certify that the foregoing transcript of the testimony of Robert Clancy, M. D. was taken before me at Children's Hospital, 324 South 34th Street, Philadelphia, PA, 19104, on Friday, November 15, 1996; that the foregoing testimony was taken in shorthand by myself and reduced to typing under my control, that the foregoing pages 1 to 151 contain a true and accurate transcription of all of said testimony.

_____

Margaret Dickinson
Notary Public

My Commission Expires
September 7, 1999