1	IN THE COURT OF CO	MMON PLEAS
2	CUYAHOGA COUNTY	, OHIO
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5)
6	STEVEN MAKSYM, a minor,) CASE NO. 280713
7	etc., et al.,) JUDGE MICHAEL
8	Plaintiffs,) J. CORRIGAN
9	vs.)
10	JOSEPH A. JAMHÔUR, M.D.)
11	et al.,)
12	Defendants.)
13)
14		
15		
16	Oral Deposition of RONALD	GOLD, M.D., an expert
17	witness on behalf of the Plair	ntiffs, pursuant to
18	notice, at the offices of Torc	onto Court Reporters, 65
19	Queen Street West, Suite 1410,	Toronto, Ontario, M5H
20	2M5, before Susan Olubick, a G	Certified Shorthand
21	Reporter and Commissioner of C	Oaths within and for the
22	Province of Ontario, on the 28	Sth day of October, 1996,
23	at 10:45 a.m.	
24		
2 5		And the second
		COPY

1 A P P E A R A N C E S: 2 3 HOWARD D. MISHKIND, ESQ. 4 BECKER & MISHKIND 5 Skylight Office Tower 6 1660 West Second Street, Suite 660 7 Cleveland, Ohio 44113 (216) 241 - 26008 9 For the Plaintiffs 10 11 WILLIAM D. BONEZZI, Esq., telephonically, JACOBSON, MAYNARD, TUSCHMAN & KALUR CO., 12 13 L.P.A. 14 1001 Lakeside Avenue, Suite 1600 15 Cleveland, Ohio 44114-1192 (216) 736 - 875116 17 For the Defendants, Joseph A. Jamhour, M.D., Murty S. Vuppala, M.D., Pediatric Health 18 19 Center 20 21 22 23 24 25

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1	INDEX
2	
3	EXAMINATION BY:
4	
5	MR. MISHKIND
6	MR. MARKWORTH
7	MR. GOLDWASSER 69
8	MR. MARKWORTH 90
9	MR. GOLDWASSER94
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1		DI	EPOSITION	SUPPORT IND	EX	
2						
3						
4	Direct	ion to Wit	ness Not	to Answer		
5	Page	Line	Page	Line	Page	Line
6	None					
7						
8						
9	Reques	t for Prod	luction of	Documents		
10	Page	Line	Page	Line	Page	Line
11	92	1				
12						
13						
14	Stipul	ations				
15	Page	Line	Page	Line	Page	Line
16	96	6				
17						
18						
19	Questi	on Marked				
20	Page	Line	Page	Line	Page	Line
21	None					
22						
23						
24						
2 5						

R, GOLD - 6

1 L_ Upon convening October 28, 1996 at 10:45 a.m. 2 MR. BONEZZI: Would you please swear the 3 witness in? 4 THE REPORTER: I certainly will. _-_--5 6 Whereupon, 7 RONALD GOLD, M.D., having been first duly sworn, was 8 9 examined and testified as follows: 10 EXAMINATION 11 BY MR. MISHKIND: 12 Q, Good morning, Dr. Gold. 13 14 Α. Good morning. Q, Can you hear me? 15 Yes, I can. 16 Α. 17 Q, (Interrupted signal) of Ronald Gold, M.D., who has been identified as one of the experts who will 18 be providing testimony on behalf of the plaintiffs. 19 20 Doctor, I'm going to be asking you some questions this morning pertaining to your opinions 21 22 regarding this case. 23 If I ask you a question that you don't understand, please let me know that and I will attempt 24 to rephrase my question. Would you do that for me, 25

1 please?

2 Α. Yes, I will. 3 If I ask you something, you don't hear the Ο. 4 entire question because of some malfunction of the 5 phone line, at the conclusion of my question, would you inform me that you did not hear the entire 6 7 question and ask me to repeat it? Yes, I will. 8 Α. 9 Q. Okay. And I will also ask that, if there's something that I pose to you, you don't know the 10 answer to it, let me know and I'll move on to another 11 subject. All right? 12 13 Α. Yes. 14 Q. (Interrupted signal) complete name, please? 15 Ronald Gold. Α. 16 Q, And Doctor, you have authored a report in 17 this case dated October 23rd, 1995, sent out to Mr. Mishkind. Is that correct? 18 19 Α. That's right. 20 Do you have a copy of that report in front of Ο. 21 you? Yes, I do. 22 Α. 23 Would you be kind enough to tell me what Q. 24 depositions you reviewed prior to the time that you 25 authored this report.

1 I'm trying to think of the specific ... I Α. don't know if I can list all of them. I know I did 2 3 not see Dr. Levy's deposition. 4 I think the only one I had seen, actually, 5 was the mother's. I don't think I saw any of the 6 experts' depositions before I authored the report. 7 But that's the best of my recollection. The report was based primarily on the hospital records 8 9 that had been sent to me by Mr. Mishkind, not on the depositions. 10 11 Ο. Do you recall reviewing the deposition transcripts of either Dr. Jamhour or Dr. Vuppala? 12 13 Α. Yes, yes, 14 Q, You did that, and that would have been --15 I did that, yeah. Α. 16 Q, __ prior to the time... 17 That would have been prior, right. Α. 18 Q, Okay. The only report that you have that you 19 have authored for Mr. Mishkind. 20 Yes, it is. Α. 21 Q. Have you sent him any additional information since the October 23rd, 1995 report regarding your 22 opinions --23 24 Α. No. Q, __ or regarding any of the information that 25

may have been supplied to you subsequent to 1 2 October 23rd? 3 Α. No. What information have you been provided since 4 Ο. October 23rd regarding this case? 5 6 Α. The nurses' depositions, the deposition of 7 Dr. Levy, Dr. Boost, is it? 8 MR. MISHKIND: Buest. 9 THE WITNESS: Buest. And actually prior to 10 Dr. Kline's deposition also. 11 BY MR. BONEZZI: 12 Q. Okay. Doctor... And there are several others - I don't 13 Α. 14 remember the names - several other medical experts. 15 Q. What is your understanding of the injury that was sustained by Steven Maksym? 16 Α. My understanding is that he has sustained 17 injury from two separate medical conditions: 18 The bacterial meningitis and also from galactosemia. 19 20 Can you go ahead and delineate which one Ο. 21 caused which damage? 22 It's my opinion that the hydrocephalus and Α. the hemiparesis that he suffers from is almost 23 24 certainly due to the meningitis, because these are typical complications of bacterial meningitis. 25 It's

much less likely, and I'm not aware, that galactosemia
 causes those particular neurologic problems.

3 The intellectual deficits and various
4 developmental problems, speech and language, I cannot
5 sort out the separate contributions.

6 Obviously both galactosemia and bacterial
7 meningitis can lead to intellectual deficits and
8 developmental delay, and I am not able to decide which
9 of the -- how much each of the conditions contributed
10 to his developmental and intellectual problems.

11 Q, Mr. Gold, I want you to assume, for purposes 12 of this question, Steven Maksym did not have a 13 galactosemic deficiency, and that his underlying 14 medical problem was an E. coli meningitis.

Assuming that for the moment, can you tell me what he would have sustained in the period of time that we're talking about, from when he was discharged from Deaconess Hospital, until he arrived at the Metro Medical Health Center?

20 A. Okay. The assumption is that all he has is21 the bacterial infection and no galactosemia.

22 Q. Right.

23 MR. MISHKIND: Excuse me, before the doctor
24 answers, let me just show an objection to the
25 hypothetical.

1 But I understand it is a hypothetical and you 2 can go ahead and answer it to the extent that you can. 3 THE WITNESS: Okay. Now, I am going -- I guess I have to ask you to clarify the question a bit. 4 You want me -- I can make that assumption, 5 but the question is then what damage did he have at 6 7 the time he presented to Metro? BY MR. BONEZZI: 8 Q, (Interrupted signal) I want to know is this: 9 10 I want you to exclude from the question the fact that he did indeed have a galactosemic deficiency. 11 12 Α. Right. Assuming that he had only a bacterial 13 0. infection that ultimately caused meningitis, what 14 injury, then, did he sustain, if you can tell me, only 15 from the bacterial meningitis? 16 17 MR. MISHKIND: Same objection, but go ahead. THE WITNESS: Yeah. Well, he could have 18 sustained his entire picture -- almost his entire 19 picture, certainly of hydrocephalus, his hemiparesis, 20 his intellectual deficits, could be caused by the 21 bacterial meningitis. 22 However, clearly some of the features - and I 23 24 am not competent as a neurologist to sort this out -25 but very clearly, by his MRI scans, he has damage not

R, GOLD - 12

2 meningitis, but he does have considerable white matter 3 disease, and that is typical of galactosemia, not of 4 meningitis. Therefore, some of the damage that he has is clearly not due just to meningitis. 5 6 But I cannot separate out the two. Clearly meningitis can cause severe intellectual handicaps, 7 8 delays of speech and language, as well as the motor dysfunction he has, the hemiparesis, and it obviously 9 can cause hydrocephalus. 10 BY MR. BONEZZI: 11 Q. What is the data, the CT scan that you're 12 referring to, please? 13 14 Α. These were the CT or MRI that was done during 15 his admission at Metro. What date or dates (interrupted signal)? 16 Ο. He had one on the -- on October --17 Α. August 25th and another August 28th. And I don't know 18 19 if he had a follow-up. Yeah, on September 1st. On August 25th, what does the CT scan 20 Q, 21 reflect? 2.2 He has "extensive hypodensity of supra- and Α. infratentorial white matter," small ventricles. 23 So he 24 has at that point severe cerebral edema. The follow-up on the 28th, but now -- shows 25

only in the areas I would expect with bacterial

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1 the edema is still present but he's getting ·2 ventricular enlargement.

And repeat CT on the 1st shows increased ventricular size and persistent patchy hypodensities. And the changes initially were interpreted showing cerebral atrophy rather than hydrocephalus.

But the September 7th scan shows he has
marked ventricular enlargement and went on to having a
shunt inserted to relieve the hydrocephalus.

10 Q. Dr. Gold, as far as the August 25 scan is 11 concerned, and what is set forth in that scan on 12 either the radiologic interpretation or your own 13 interpretation, can you tell me what permanent damage 14 had already taken place by that date?

A. On August 25th, there's no way to say whether any of this damage is permanent. Most children -many children with severe bacterial meningitis will show diffuse brain edema, leading to small ventricles, but you can't predict at that point whether they're going to have any permanent damage from the CT scans.

21 Q. At that point, would you able to state, with 22 any degree of medical specificity, meningitis caused 23 the damage or the galactosemia caused the damage or is 24 it a combination of both; as far as the August 25th 25 scan is concerned?

1 I cannot distinguish what -- well, I Α. 2 certainly know that bacterial meningitis could cause these findings. 3 Since I've never cared for a child with 4 galactosemia, all I can say is that it also I know can 5 cause brain edema from the descriptions, but I 6 couldn't distinguish which were involved in his case. 7 Certainly bacterial meningitis could have done all of 8 9 this. 10 Q . When was he admitted to Metro Medical Health 11 Center? 12 Α. On the 21st, Q . 13 You have read Mrs. Maksym's depositions, 14 plural, have you not? 15 Α. Yes. 16 Q, (Interrupted signal) whom Mrs. Maksym contacted regarding her son Steven's condition, 17 18 between the time of discharge on the 17th of August 19 from Deaconess Hospital, until the time that she had her child re-ad -- or admitted to Metro Medical Health 20 Center on the 21st? 21 22 I'm sorry, I missed the very beginning of Α. 23 that question. It didn't come through. 24 Q. What I want to know is are you aware of 25 whether or not Mrs. Maksym contacted any health care

1 provider between the 17th of August and 21st of 2 August, which would have been the day of admission to Metro Medical Health Center. 3 4 I'm aware that she has stated she phoned her Α. 5 pediatrician's office. Q, What date? 6 7 The dates have varied from the 19th to the Α. 8 20th. And when you say "varied"... Q, 9 From -- in her depositions. 10 Α. 11 Q. So she did not know if he called on the 19th 12 or she called on the 20th. Is that correct? That's correct. 13 Α. Q. (Interrupted signal) information, if any, did 14 15 she impart to whomever she was speaking to at the physicians' office on either the 19th or the 20th? 16 17 The information that I'm aware of is that she Α. 18 was concerned about a feeding problem with the baby. Q. 19 Anything else? 20 Not that I am aware of, no. Α. Q. 21 (Interrupted signal) your understanding of the clinical condition of Steven Maksym on the 17th, 22 23 18th and 19th of August, 1989? 24 MR. MISHKIND: Bill? 25 THE WITNESS: Can you define --

R, GOLD - 16

1 BY MR. BONEZZI: 2 Q, Based upon what you've read in the records 3 and based upon what you've gleaned from the deposition 4 transcripts of the mother or the pediatricians. MR. MISHKIND: Did you hear the full 5 question? 6 7 THE WITNESS: Yeah. MR. MISHKIND: Okay, fine. 8 9 THE WITNESS: My understanding of his 10 condition is based on mother's statements and also on 11 the notes of the emergency room physician and the 12intensive care physician at Metro, that the baby had been feeding extremely poorly since the 17th, had been 13 14 sleeping a great deal, and had been vomiting. So his condition was clearly abnormal in --15 16 from the history given by the mother at the time of his admission on the 21st, his condition clearly had 17 18 been normal, if not since birth, certainly since his 19 arrival at home on the 17th. 20 MR. MISHKIND: Did you say normal or 21 abnormal? 22 THE WITNESS: He'd been abnormal the 17th, 18th, 19th; that full span of time. 23 BY MR. BONEZZI: 24 25 Q. Tell me, please, if you can, based upon what

R, GOLD - 17

1 you understand, whether or not Steven was vomiting and 2 was lethargic on the 17th after discharge from 3 Deaconess Hospital? 4 My understanding is he did have vomiting and Α. lethargy after discharge. 5 6 Q, I want to -- on the 17th is what I'm interested in --7 Oh, on the 17th. Α. 8 Q, -- which is the date of discharge. 9 10 From the records, yes, I would say it was Α. 11 present on the 17th. Q, 12What records are you referring to that he was vomiting and was lethargic on the 17th? 13 14 They would be the records -- the admitting Α. histories in the ICU and emergency room at Metro. 15 Ο, What about on the 18th? 16 It persisted. It was the -- these symptoms 17 Α. were present every day. 18 Q., Now, of course that would have also been on 19 the 19th, which is when the mother says she called a 20 21 physician, or on the 20th when she called a physician. 22 Is that correct? 23 Α. That's correct. 24 Q., What extent, if at all, do you believe that 25 the physicians or physicians' office that Mrs. Maksym

1 was speaking to had an obligation or a responsibility to have Mrs. Maksym bring the child in for purposes of 2 examination with that history? 3 MR. MISHKIND: Before you answer. Bill, let 4 me just show an objection, because... 5 6 MR. BONEZZI: That's fine. 7 MR. MISHKIND: __ obviously this particular doctor, as you well know, is not a party to this 8 9 lawsuit and... 10 MR. BONEZZI: Howard, please don't prompt You can object, I don't mind that. 11 him. 12 MR. MISHKIND: Bill, I know, but I'm going to finish my objection. 13 14 MR. BONEZZI: I don't want you telling the 15 doctor, though. 16 MR, MISHKIND: I'm not. If you'd let me finish, I'll let you ask the question. 17 I want the record to reflect that this 18 19 particular individual is not a defendant in the case and any questions as to standard of care addressed to 20 this particular defendant are inappropriate. 21 22 But go ahead and ask the question; or Doctor, 23 if you know, if you understand the question, go ahead 24 and answer it. MR. BONEZZI: Howard, you tried to name him 25

1 as a defendant and you failed.

2 BY MR. BONEZZI:

3 Q. Go ahead, Doctor, please answer my question.
4 A. Well, I'm not -- my understanding is that
5 Mrs. Maksym didn't speak to the doctor but spoke to
6 the receptionist or nurse receptionist, I'm not sure,
7 named Linda.

8 And I think any -- there is a responsibility.
9 A telephone communication is obviously very important
10 in pediatrics, and people who do it have to be
11 trained.

Any time an essentially newborn, because this baby is still less than a week of age, a phone call comes in that there is a feeding problem - although feeding problems, as a general area, are very common in newborns as they have to learn how to feed properly - it always should lead to further questions.

18 And those further questions should be aimed 19 at assessing the general condition of the baby in 20 addition to whether or not they're nursing properly, 21 such as the general state of alertness, responsiveness 22 of the baby, and are there any other symptoms.

So I would expect those questions to be asked
by whoever is receiving the phone call. And if the
person receiving the phone call doesn't have the

1 training to evaluate requests for information from the 2 parents, then they should be referred to the 3 pediatrician or a nurse or someone who is able to ask. 4 So I would have expected whoever spoke with 5 Mrs. Maksym to ask more questions and therefore elicit the history that would suggest the ordinary feeding 6 7 problem, that the baby was not feeding well, was 8 sleeping all the time, was whimpering a lot, and 9 clearly had some abnormal behavior. 10 Q, Are you aware of whether those questions were asked of Mr. Maksym during that phone call or a 11 12 subsequent phone call? 13 Α. No, I am not. I do not know whether they 14 were asked. 15 Q. Okay. Assuming for the moment that the phone 16 call was made on the 19th of August, do you have an 17 opinion, to a reasonable degree of medical 18 probability, whether, had Steven been brought into the physicians' office on the 19th, the diagnosis of 19 either bacteremia, septicemia or meningitis would have 20 21 been made? 22 Objection. MR. MISHKIND: Go ahead. 23 THE WITNESS: I believe if the baby had been

24 seen on the 19th, it would have been obvious that this 25 baby was ill.

1	And that the approp and I think the
2	symptoms, based on what subsequently happened, and
3	based on the condition of the baby and the two
4	underlying disorders this baby eventually has, I think
5	on the 19th the baby would have been sick, either from
6	the galactosemia, bacteremia may have been present,
7	causing symptoms on the 19th also, and that it would
8	have been apparent the baby should be in hospital.
9	BY MR. BONEZZI:
10	Q. (Interrupted signal) an opinion whether or
11	not the baby on the 19th had meningitis?
12	A. I do not know, because it is impossible to
13	say when meningitis starts.
14	Q. You said that the baby may have been
15	bacteremic on the 19th.
16	A. That's right.
17	Q. Assuming that the (interrupted signal) had
18	bacteremia, (interrupted signal) clinical signs would
19	have been present that would have been consistent with
20	bacteremia?
21	A. I think it may have been present. I do not
22	know. I think
23	Q. Hypothetically let's assume
24	A. Okay.
2 5	Q, the infant had bacteremia on the 19th;

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R, GOLD - 22

1 hypothetically.

2 A. Yes.

Q. (Interrupted signal) clinical symptoms would
you have expected to see that would have been
consistent with bacteremia?

A. I would have expected poor feeding, lethargy,
which may have been alternating with periods of
irritability. With the poor feeding, there may have
also have been vomiting. The baby's skin color may
have been affected. That's another general sign.

11 Those would have been the things that may 12 show up. Obviously there are a whole host of other 13 things that may happen, depending on the severity of 14 the illness.

But the early signs are disturbance of
feeding and particularly disturbance of normal mental
status, behavior of the baby.

18 Q. Do you have, at this setting, disturbance of 19 normal mental behavior (interrupted signal) a 20 bacterial or viral infection?

A. I'm not sure -- I did not get it clearly.
Did you ask me was there evidence of abnormal behavior
consistent with an infection?

24 Q. What I wanted to know is that -- because you
25 said that there were two signs that were I believe

hallmarks of an infection or bacteremia, and I believe that you had indicated, unless I heard you wrong, that you have abnormal feeding, you can also have abnormal mentation.

A. Yes, they were present. Now, they're not
specific for infection - they can be signs of any
severe illness - but they are frequently the early
signs of infection.

9 Q. What I want to ask is this: Can you tell me
10 whether or not normal mentation in a newborn who's
11 approximately four to five days old is pathognomonic
12 bacterial or viral infection?

A. It is certainly not pathognomonic, as again,
because any significant disturbance of the baby from a
variety of illnesses, infection, metabolic, a whole
host of things can cause exactly these symptoms.

17 Q. Are those symptoms that have been -18 A. So there is -- there are no patho -19 Q. __ assuming hypothetically again -20 MR. MISHKIND: Bill, let him finish the

21 answer. You're cutting off.

THE WITNESS: I'm sorry. There's nothing -there are no pathognomonic symptoms or signs of
infection in a newborn.

25 BY MR. BONEZZI:

1	Q. Doctor, Can you tell me hypothetically
2	whether or not a metabolic abnormality, such as
3	galactosemia, will also cause lethargy and also poor
4	feeding habits?
5	A. Yes, it can.
6	Q. (Interrupted signal) feeding habits or
7	lethargy could have been caused, in your estimation or
8	your opinion, by either the galactosemia, by
9	(interrupted signal)emia. Correct?
10	A. Could have been caused again, you weren't
11	very clear. I think yes, they both could have been
12	caused by bacteremia or by galactosemia or a
13	combination of the two.
14	Q, (Interrupted signal) other than those two
15	that could have caused that symptomatology or that
16	symptom complex?
17	MR. MISHKIND: Repeat your question, Bill.
18	You cut off again.
19	MR. BONEZZI: (Interrupted signal) a poor
20	transmission here.
21	MR. MISHKIND: I'm sorry?
22	MR. BONEZZI: I said then we've got a poor
23	transmission.
24	MR. MISHKIND: We do. A lot of your words
25	are getting cut off, just maybe the first syllable of

1 your sentence is getting cut off.

2 BY MR. BONEZZI:

3 Q, Other than the galactosemia and the bacteremia, could anything else have caused poor 4 5 feeding in an infant that's four to five days old? 6 Yes. Serious illness involving practically Α. 7 any organ system in the body besides infection and galactosemia could produce exactly these symptoms. 8 9 So that these symptoms are very nonspecific. 10 They just suggest that a serious illness may be 11 present, and therefore have to be looked for. 12 Q, On the day of discharge, which would be the 17th of August, can you tell me whether or not, based 13 14 upon your review of everything that exists and that 15 you've read, whether Steven Maksym was bacteremic at 16 the time of discharge from Deaconess Hospital? 17 I do not think it likely that Steven was Α. 18 bacteremic at the time of discharge, but I also do not 19 think his behavior was normal and that he should have 20 been discharged. 21 Q. (Interrupted signal) the 17th, what behavior 22 was abnormal in your opinion which would have

23 precluded discharge?

A. He had -- I'm going to combine behavior and
laboratory signs. He clearly was jaundiced and his

bilirubin had risen from 6 to 10 within 24 hours.
 Although my original calculations of his
 intake were wrong because of my misreading of the
 nurses' symbols, even when I correct, based on what
 they said the symbols mean in their depositions, I
 think his intake was still inadequate.

7 Again, in isolation, no, because it takes several days for most babies to reach a full normal 8 newborn intake; but the combination of jaundice, his 9 10 inadequate intake, and questions about his behavior 11 that, although not noted in the medical record, were 12clearly concerning the parents about his behavior, would make me come to the conclusion that there was 13 14 some -- there was enough going on that I would want further close observation or competent observation of 15 16 this baby before I discharged him, because I'm not 17 certain that he is normal at the time he is 18 discharged.

19 Q. Dr. Gold, you just said something about the
20 parents' concern regarding Steven's behavior.

21 Can you tell me whether or not their 22 concerns, as Ms. Maksym has testified to, are apparent 23 in the generated record, either on the day of birth on 24 the 15th, the 16th or the 17th?

25 A. No, there's nothing recorded about parental

1 concerns in the medical record. These concerns are 2 from the depositions.

Plus again, timing of events in the history obtained from parents, whose baby is severely ill, are not necessarily always reliable because parents are obviously very upset when their baby is desperately ill and in an intensive care unit.

8 However, the history given to both the 9 emergency room physician and the intensive care 10 physician were that Steven was not behaving normally 11 from birth, that he was crying and whimpering and not 12 feeding well since birth.

13 So that my concern about the baby prior to 14 discharge, and the fact that I think he wasn't ready 15 for discharge, are based on these several sources of 16 information - both the medical record, what is in 17 there; and the jaundice and the poor feeding - is 18 enough for me to be concerned about his discharge.

Added to it are the depositions of the parents', plus the history that was given when the baby was admitted to Metro.

22 Q. Dr. Gold, does the record from Deaconess 23 Hospital reflect poor feeding on the 15th and the 24 16th?

A. Well, his totals were not up to normal, of

1 what I would expect a full-term baby to eat. 2 He was eating better obviously than he did on 3 day one, but I think his total intake, in the face of a rising jaundice, is why I'm concerned. 4 5 It's not the single -- if he were not jaundice and that were his intake, I would be much 6 less concerned about it. But the fact that he is 7 showing a rapid rise in his jaundice, and that his 8 intake is also slow to get up to normal, those two 9 10 things are why I would be concerned about sending him 11 home. Q, (Interrupted signal) his intake on the 15th? 12 13 I got it, on the 15th, that's the first day, Α. and I think when I corrected it - I don't have the 14 15 numbers here - I think it's... 16 MR. MISHKIND: I want to give you the record, 17 then. 18 THE WITNESS: Okay. Just **a** second. I'm 19 getting the record, the feeding record. 20 Okay. He took one, two... Four ounces of milk, and I think a half ounce of water. I can't --21 22 I'm not sure about the very first notation. On the 16th, he had a total of 10 ounces of 23 24 And on the 16th, 5-and-a-half -- 17th, milk. 5-and-a-half, before he went home. 25

1	So he was feeding one-and-a-half to two
2	ounces. Most of his feeds were one-and-a-half on the
3	16th. He had two feeds of two ounces on the 17th.
4	BY MR. BONEZZI:
5	Q. (Interrupted signal) the records reflect
6	whether or not (interrupted signal) or did he vomit
7	after he took the feedings?
8	MR. MISHKIND: The court reporter didn't get
9	that. Bill, the court reporter is shaking her head
10	she didn't get the entire question.
11	MR. BONEZZI: Let me restate it, then.
12	BY MR. BONEZZI:
13	Q, Did the records reflect whether or not Steven
14	vomited?
15	A. There is no mention of vomiting in the
16	records.
17	Q. How about the 16th?
18	A. On any of the days.
19	Q. Now, you also mentioned that the poor intake,
20	as you have described it, (interrupted signal) with
21	the rising jaundice, (interrupted signal) you concern.
22	Is that correct?
23	A. That's right.
24	Q. Now, let me ask you this: Is the intake that
25	you have just described, does that by itself cause you

1 to believe that this infant should not have been
2 discharged from the hospital based solely upon the
3 feeding?

MR. MISHKIND: Objection. Go ahead.
THE WITNESS: No, I -- based solely upon
feeding, if he were otherwise normal and did not have
a rising jaundice -- bilirubin, based solely on his
feeding, I don't think that in itself, if everything
else was normal, I would have not hesitated to
discharge him.

11 BY MR. BONEZZI:

12 Q. You have also mentioned that there was a rise 13 in the bilirubin; approximately 6.5, which was 14 obtained I believe on the 16th; 10.2 on the morning of 15 the 17th.

16

A. That's right.

17 Q. Can you tell me whether or not that rise, 18 from 6.5 to 10.2, is within the normal limits of 19 physiologic jaundice for a normal full-term infant? 20 A. In and of itself, they are within the normal

21 limits.

22 Q, What was his bilirubin at the time that he
23 entered Medical Health Center on the 21st?

A. His bilirubin then was 24, which is clearly
abnormal.

1	Q. Can you tell me whether or not 10.2 is
2	abnormal?
3	A. At 48 to 50 hours of age, it is at the upper
4	limits of normal, so it's clearly not abnormal yet.
5	Q. Do you have an opinion of what his bilirubin
6	would have been the 18th?
7	A. I assume it would be higher than it was on
8	the 17th. I don't know how high it would have gone.
9	Q. Can you tell me whether or not it would have
10	been greater than 10-and-a-half?
11	A. I would expect it to be, yes.
12	Q. How much higher, Doctor?
13	A. I can't give you an accurate assessment
14	because I think we're facing a combination of things
15	producing the elevated bilirubin.
16	One is the fact that all babies have some
17	degree of physiologic jaundice, so he has that. He
18	also has galactosemia, which produces jaundice. And
19	he had bacteremia starting at some point, and
20	bacteremia can also lead to abnormal liver function,
21	leading to elevated jaundice.
22	So I do not know at what I can't predict
23	what his jaundice what his bilirubins are going to
24	be on the subsequent days, but I think they would be
25	going up progressively.

TORONTO COURT REPORTERS - TORONTO, ONTARIO

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1 0. Can you tell me which underlying disease 2 process of the liver that caused the rise in the 3 bilirubin? Was it bacteremia or was it galactosemia? 4 Α. I cannot say with any degree of certainty. I 5 know that galactosemia untreated almost always results 6 in jaundice. Bacteremia can result in jaundice; it 7 does not always. But I can't say. I suspect both were 8 involved but I can't give you an estimate of how much 9 each contributed to the jaundice. 10 Q. 11 (Interrupted signal) you agree with me that the level of bilirubin, at the time of discharge, that 12 13 it was at the upper limits of normal, is indeed a 14 normal finding for a full-term infant? 15 MR. MISHRIND: Bill, you cut off again. THE WITNESS: Well, I think it was at the 16 upper limit of normal and was this a normal finding. 17 In and of itself for a full-term infant, yes, 18 that level would have been normal at 48 or 54 hours. 19 BY MR. BONEZZI: 20 Q, Doctor, can you tell me whether or not there 21 22 was any evidence of either infection or bacteremia 23 within 24 hours of discharge from Deaconess Hospital? 24 Α. Based on the mother's history of the baby 25 having poor feeding, and vomiting and sleeping

excessively, these can be symptoms of bacteremia, but they can also be symptoms of galactosemia, and it therefore becomes very, very difficult for me to pinpoint when the bacteremia started.

5 It clearly has to start before the 6 meningitis, because you don't get meningitis without 7 the bacteremia, but I can't -- there's not sufficient 8 detail in the clinical record for me to say that, 9 "More likely than not, the bacteremia started on (this 10 day)'' or "(that day)."

11 Q. Is there anything in the medical records 12 generated from the birth and then subsequent discharge 13 at Deaconess that is confirmatory in the 24 hours 14 preceding discharge of an infection; from the medical 15 records only?

A. From the medical records only, no. The only
way to confirm the presence of bacteremia, though, is
to obtain a blood culture.

19 Q. And how long does it take before the results20 come back?

A. Depending -- well, maybe not. With standard
techniques, you need a minimum of -- sometimes as
short as 8 to 12 hours, but usually 18 to 24 hours in
order to detect a positive blood culture.

25 Q, Can you tell me what is contained in the

1 records from Deaconess, the 16th of August, that would 2 have caused Dr. Vuppala or Jamhour to order a blood 3 culture?

A. There is nothing specifically in the records
up until the time of discharge, in the medical
records, that would indicate the need for a septic
workup such as -- including a blood culture.

Q. Is there anything on the 17th?

9

Α.

8

10 Q. So what you said (interrupted signal) charts, 11 you meant anything that's in those records or at that 12 time, from the time of birth to the time of discharge, 13 there's nothing in the records that would have 14 necessitated a septic workup. Correct?

15

A. That's right.

No.

16 Q. Can you tell me if Mrs. Maksym contacted 17 Dr. Jamhour or Dr. Vuppala following discharge but 18 prior to admission to Metro Medical Health Center? 19 A. I'm' not aware of any contact with their 20 office by Mrs. Maksym.

21 Q. Based upon your review of Mrs. Maksym's 22 deposition testimony, are you aware of whether or not 23 Mrs. Maksym considered either Dr. Vuppala or 24 Dr. Jamhour to be the pediatrician that she would 25 contact when she had a need on behalf of her son,

R, GOLD - 35

1 Steven?

2 Α. I didn't -- from the record, neither of those 3 pediatricians, she did not -- I don't believe she 4 considered those the pediatricians of her son. It was 5 the other doctor who's not in the suit, whose name 6 I... Q, Dr. Skrinsca? 7 That's right. That's who she considered, 8 Α. 9 that she was planning to take Steven to him as the 10 pediatrician. 11 Q. Did you happen to review Dr. Skrinsca's 12 (interrupted signal)? MR. MISHKIND: You cut off, Bill. 13 BY MR, BONEZZI: 14 Did you read Dr. Skrinsca's deposition? Q, 15 16 Α. I don't think I got that one. No, I did not. If I did, I don't recall what he said other than he 17 18 did not speak -- my understanding is he did not speak to the mother. 19 Did you review his office nurse's deposition? 20 Ο. 21 Α. Yes. And she -- her statement is that the 22 only thing discussed was that there was a feeding problem. And she suggested, I think after checking 23 24 with the doctor, to switch the formula. 25 Did the nurse's deposition indicate whether Ο.

Mrs. Maksym complained about normal mentation or
 lethargy?

A. There is no mention that there were any other
complaints, other than the feeding problems, to my
recollection.

Q. Can you tell me whether there's some conflict
in the testimony between Mrs. Maksym and the nurse
relative to the condition of her son when Mrs. Maksym
contacted Dr. Skrinsca's office, or is that something
that you haven't looked at?

A. That's something I did not look at in anydetail, no.

Q. Assuming that nurse (interrupted signal), that the only thing that she was told was Steven was a poor feeder, is that in conflict with the testimony that Mrs. Maksym had provided earlier in her own depositions?

18 MR. MISHKIND: Bill, in fairness to you, just
19 so that the question reads clearly, you did cut off
20 again. The court reporter missed a word.

I think we know what you're asking, but I'drather that the full question be repeated.

23 MR. BONEZZI: Madam reporter, could you read24 back my question, please?

25 THE REPORTER: Yes, sir.
MR. BONEZZI: See if I can fill in the gaps. 1 THE REPORTER: "Q. Assuming that nurse," 2 3 this is where we cut off, "...that the only thing that 4 she was told was Steven was a poor feeder, is that in conflict with the testimony that Mrs. Maksym had 5 provided earlier in her own depositions?" 6 7 MR. BONEZZI: I'll accept that question. BY MR. BONEZZI: 8 Q. Go ahead, Doctor. 9 To my recollection, the only thing 10 Α. discussed -- now, I don't remember from Mrs. Maksym's 11 deposition if she says that she claims she told more 12 to the nurse. 13 Ο. Tell me if you recall (interrupted signal) 14 Maksym had testified in her depositions that Steven 15 was jaundiced. 16 17 I do not recall that. Α. 18 Q. Assuming that Steven was jaundiced 19 (interrupted signal) the phone call was made, would you have expected that to be some information imparted 20 by the mother, Mrs. Maksym, to the nurse? 21 MR. MISHKIND: Objection. Go ahead, Doctor. 22 THE WITNESS: I would not expect the mother 23 24 to impart any information other than what she is concerned about. 25

1 I would expect the nurse or the physician to broaden the questions. If the mother does not 2 volunteer information about the baby, I think it's an 3 obligation of the nurse or the physician, when you get 4 a call that a three or four day old baby is not 5 feeding properly, to go beyond that statement. 6 7 It's not the mother's responsibility to report all the symptoms; it's the nurse or the 8 9 physician responsibility, if symptoms are not volunteered, to ask about the other behavior of the 10 11 baby in addition to feeding. BY MR. BONEZZI: 12 Q., In other words, if the mom does not provide 13 14 that information, it is incumbent upon the doctor, either by his staff or himself, to make the inquiry to 15 determine what the infant's condition is. Correct? 16 17 Α. That's right. Q, Failure to do that, the failure of either the 18 pediatrician to do that or the failure of the office 19 nurse, assuming that she's trained in that, that by 20 itself is a departure from acceptable standards of 21 22 pediatric practice, isn't it? 23 Α. Yes. 24 MR, MISHKIND: Objection. You can go ahead 25 and answer.

TORONTO GQURT REPORTERS - TORONTO, ONTARIO

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1 THE WITNESS: Yes, I think it is. 2 BY MR. BONEZZI: Dr. Gold, what time was Violet, who is 3 Q, Dr. Vuppala and Jamhour's nurse, contacted by the Ohio 4 Department of Health regarding obtaining another blood 5 6 test for screening purposes? What was the date? Well, the date was the 24th of August, when 7 Α. a Mr. Porter telephoned the office. Q, We've already discussed the scans that were 9 10 obtained on the 25th. 11 Α. That's right. Q. Can you tell me whether or not that which was 12apparent on the scans on the 25th in all likelihood 13 (interrupted signal) also in existence on the 24th? 14 15 Α. Yes, I suspect there may have been some. It 16 might have been worse on the 24th. 17 No, the therapy started on the 25th. Ιt certainly would have been present on the 24th in the 18 19 scan. 20 Q, And can you tell me what permanent injury (interrupted signal) would have been caused from the 21 interpretation of that scan? 22 23 In other words, what exists on that scan, can you tell me if there would have been any permanent 24 25 damage from that?

R, GOLD - 40

1 No, the findings on the scan on the 24th --Α. 2 the 25th are only those of severe brain edema. 3 That in and of itself may resolve completely. 4 It just means there's extra fluid within the brain, 5 and it doesn't at that point show you that there has been any permanent damage. 6 SO I -- that's why follow-up scans have to be 7 To see what evolves. 8 performed: 9 So that one scan, in and of itself, and even 10 the scan on the 28th, although the ventricles are 11 getting bigger, still don't know yet the extent of the 12 damage or whether there is any permanent damage. How long had the extra fluid been in 13 Q. 14 existence? 15 The fluid, that brain edema starts to Α. accumulate soon after. I can't •• certainly within 16 17 hours of the onset of meningitis. 18 It's reflecting the damage to blood vessels, particularly to the brain capillaries, as a result of 19 20 the inflammation caused by the infection. And that 21 occurs early after the onset of meningitis. 22 Q, Is the injury (interrupted signal) 23 ... gressive from the compression that takes place with 24 the edema? 25 MR, MISHKIND: Did you get the question?

1 THE WITNESS: I think a word cut out. Т 2 assume you meant is the injury progressive as the result of the edema. 3 BY MR. BONEZZI: 4 Q, That's what I asked, yes. 5 6 Yeah. There's obviously a time relationship. Α. 7 And the severity of the edema, the consequence of brain edema is interfering with normal blood flow to 8 the brain cells, to the neurons. 9 10 So the amount of damage that occurs depends both on the pressure, the absolute pressure build-up 11 12 within the skull, and how long that lasts. And it's very -- I can't -- no one -- we 13 don't measure these relationships in babies, because 14 15 it would require invasive procedures, so I can't give you an accurate time course of what happens; but the 16 17 higher the pressure, the greater the edema that you see, the greater the probability of -- that there will 18 be death of brain cells because of failure of their 19 20 getting normal blood supply. Q, 21 Dr. Gold, when is the first time that a 22 diagnosis of galactosemia could have been made in this 23 case? 24 Well, the diagnosis of galactosemia I believe Α. 25 should have been suspected at the time of admission to

Metro, because the baby, although is septic, has
 findings that suggest, as the physicians noted in
 their differential diagnosis, that there might have
 been a metabolic disorder at the time of admission
 because of his markedly enlarged liver, abnormal liver
 function and severe hypoglycemia.

7 So that, although each of those findings can 8 on occasion appear in a child just with bacteremia or 9 sepsis, it is unusual enough for them all to be 10 present in a child like this, combined with metabolic 11 acidosis.

12 So they were correct in thinking that a 13 metabolic disorder might be present, and they began to 14 consider the workup of that in addition to treating 15 his sepsis.

16 Certainly when the screening test was 17 positive on the 24th, that could have -- should have 18 led to prompt retesting with confirmatory tests. So 19 the diagnosis certainly could have been made within a 20 few days.

21 Q. What screening test was positive on the 24th?
22 A. The screening test taken at birth, sent to
23 the state laboratory.

Q- You're talking about the information that was
provided by Mr. Porter at the Ohio Department of

Health to Violet at Dr. Jamhour's office? 1 2 Α. That's right. 3 0, Did Mr. Porter tell Violet during the 4 conversation (interrupted signal) ...tosemia, or did 5 he tell her that the initial results were suspicious 6 and a second test should be obtained? 7 He said the first -- oh, sorry. Α. 8 MR, MISHKIND: Hold on one second. Part of 9 the question again cut off. 10 THE WITNESS: Okay. The question, as I 11 understand it, is did Mr. Porter tell Violet that the baby had galactosemia or did he tell her that the 12 13 screening test was positive. He told her that the screening test --14 15 BY MR. BONEZZI: Q, 16 The screening test was suspicious. Suspicious, because it's a suspicious answer 17 Α. you get with the screening test. 18 19 In a sense the test is positive, but is only 20 a screening test; therefore, a confirmatory test 21 should be done. Did Mr. Porter tell her, Violet, (interrupted Q. 22 23 signal) screening test should be obtained? I'm sorry, I couldn't hear the question. 24 Α. Тоо 25 much got cut off.

1 Q, Sorry. During this conversation between Violet and Mr. Porter, Did Mr. Porter explain to 2 Violet how quickly the test should be obtained? 3 4 Α. I do not recall whether he said this was an urgent procedure or not. I don't recall whether he 5 said anything about the timing of the follow-up test. 6 I would have expected him to, since it is an 7 emergency if you're suspecting galactosemia, but I 8 9 don't recall what his testimony was in deposition. Q, If he failed to impart the urgency, the 10 11 urgent nature of obtaining this test, do you believe 12 that Mr. Porter, on behalf of the Ohio Department of Health, failed to carry out their own responsibilities 13 14 in providing information necessary to attest by either Dr. Jamhour or Dr. Vuppala? 15 MR. MISHKIND: Let me object for two reasons: 16 17 Number one, your characterization is inconsistent with 18 Dr. -- or Mr. Porter's testimony; and secondly, as you 19 well know, the Ohio Department of Health is not a 20 party to this lawsuit. 21 But more importantly because your characterization is inconsistent with what he did 22 23 testify to, but go ahead and answer. I would expect the laboratory 24 THE WITNESS: director or who was ever making the phone call about a 25

suspicious galactosemia screening test, that they
would inform whoever they were talking to, or
hopefully not inform but remind them, because they
should know this fact, that a positive or a suspicious
screening test does require confirmation to be
obtained as soon as possible, that it is indeed an
emergency.

8 BY MR. BONEZZI:

9 Q. Did you read Mr. Porter's deposition?
10 A. I did, but it was long enough ago that I
11 don't -- I didn't read it again in preparation for my
12 deposition, so I don't recall exactly what he says he
13 told Violet.

14 Q. By the way, what did you review in15 preparation for this deposition?

A. The main things I reviewed were my report and
going back over the medical records.

Q. Dr. Gold, have you reviewed any publications
or texts or (interrupted signal) types of published
material on the subject of either galactosemia or E.
coli meningitis in preparation for this deposition?

A. The only -- not in preparation for this
deposition. In terms of reviewing material for my
review of the case in writing my report, the only
thing I reviewed was the original article in the New

England Journal of Medicine about the occurrence of
 sepsis -- the increased risk of sepsis in babies with
 galactosemia.

Ο, And which article is that, sir? 4 MR. MISHKIND: If you recall. 5 THE WITNESS: I know it was the original 6 7 article that did appear in the New England Journal of 8 Medicine. And I think it actually came from Boston, but I'm not sure about that, but it was the first to 9 describe the association of E. coli, sepsis and 10 galactosemia. 11 BY MR, BONEZZI: 12

Q. Doctor, on the day of discharge from
Deaconess, what information was provided to
Dr. Vuppala (interrupted signal) allowed him to make
his decision for discharge?

A. Well, since there's nothing written, the only -- I -- he apparently was informed about the bilirubin going to 10 and I assume, I would have to assume that he was told by the nurses that they had no concerns about the baby overnight, since the time of the discharge examination by his partner.

23 Q, Now, there's clearly no (interrupted signal)
24 in the record that would suggest between the time in
25 which Dr. Jamhour examined this infant and the time of

1 discharge, there was any suspicion of infection.

2 Correct?

3

A. That's correct.

Q. (Interrupted signal) what information, if
any, Mrs. Maksym provided to Dr. Jamhour at the time
that he examined (interrupted signal) evening of the
16th?

A. There is nothing in the record that says
9 Mrs. Maksym provided any information to Dr. Jamhour.
10 Q. Did Mrs. Maksym testify what information she
11 provided to him, if any?

A. She said -- claims that she expressed her concern both to Dr. Jamhour and to the nurses about Steven's feeding but then regurgitating what to her seemed like a lot after every feed, plus the fact that he seemed to be sleepy all the time.

17 Q. The same information does not exist in the
18 record. Correct?

19 A. That's right.

20 Q. (Interrupted signal) between the testimony of
21 Mrs. Maksym and the generated records from Deaconess
22 Hospital. Correct?

23 A. That's right.

24 Q. Dr. Gold, do you have an opinion of the
25 timing sequence of when a pediatrician is to examine

1 an infant prior to discharge?

In other words, does the doctor have to
examine the infant physically before they discharge
it, or can they examine the infant within 24 hours of discharge?

A. I really -- there are two things that make
that difficult: Number one, I have not been involved
with normal newborns for the last 16 years, since I've
been in Canada.

10 And when I was involved with normal newborns 11 in my prior position in Connecticut, we were not 12 discharging babies at 48 hours or 24 hours.

And when you were discharging babies at four to five days, it was indeed standard practice to frequently do the discharge diagnosis the day bef -the discharge exam the day before.

I really don't feel that I'm -- it's fair for me to speak about the standard of care relative to what I consider early discharge; namely, 48 hour discharges.

I would expect that, if you're sending the baby home that early, you want your discharge examination to be done as close as is feasible, and I wouldn't want it to be anything more than 12 hours prior to discharge. Because a lot can change in that

R, GOLD - 49

1 12 hour period, obviously. 2 Q, From the record, nothing changed though. 3 Correct? 4 Α. That's right. 0. Do the records set forth whether or not there 5 was any bowel movement on the 16th? 6 7 Α. Yes, there were. Is that indicative, at least if you're having Q, 8 9 bowel movements, that you're also having an intake? 10 Not an easy question, because you can have Α. 11 enormous bowel movement rates with no intake at all if 12 you're having diarrhea. The fact that he had bowel movements and was 13 14 having intake, if you have no other disease and you're 15 starving, obviously your bowel movement rate goes 16 down. He was having bowel movements. It's... 17 Q, On the 15th and 16th. Correct? On the 15th and 16th, right. And he had one 18 Α. 19 on the 17th also. Q. The morning of the 17th. 20 21 Right. That would say that yes, he probably Α. 22 is having some intake, but it doesn't help me quantify 23 it. 24 Q, Okay. Can you tell me the level of activity, according to the records, on the day of discharge? 25

A. He is listed as being active in the nursing
 notes on this sort of summary nursing record on all
 three days.

The only comment that suggests anything other than activity is the one comment on the 15th by the mother's nurse or LPN that he was lethargic. Otherwise everything is commented as being active with

8 lusty cry.

12

9 Q. As far as Dr. Vuppala knew the day of 10 discharge, Steven Maksym had a lusty cry and was 11 active. Correct?

A. That's correct.

13 Q. And according to the records, there was no 14 evidence this infant was either (interrupted signal) 15 ...emic or had any signs of infection. Correct?

16 A. Well, he had no signs of infection according17 to the record, that's correct.

18 If mother had expressed her concerns about 19 her lethargy and feeding problems to Dr. Jamhour, I 20 would have expected that information either to be 21 recorded or passed on to Dr. Vuppala by Dr. Jamhour. 22 Q. It's difficult, from review of the records 23 and reviewing the deposition testimony, what actually 24 took place on the 15th, 16th, 17th, up the 21st.

25 Correct?

1 A. Yes, it is. 2 MR. BONEZZI: Doctor, I'm going to stop at this point. And if anybody else has questions I'll 3 4 let them go ahead. And I thank you for your time, sir. 5 THE WITNESS: You're welcome. 6 7 ______ 8 ' EXAMINATION 9 BY MR. MARKWORTH: 10 Q, Doctor, my name is Dale Markworth. I do have some questions for you. I represent Deaconess 11 Hospital in this litigation. 12 You've told us that you prepared your 13 14 October 23, 1995 report and that's the only report 15 that you prepared. Correct? That's right. Α. 16 Q, Were there any earlier editions of that 17 report? 18 19 Α. I don't think so. I mean, that was the only 20 report I sent and read. I might have -- I don't remember whether I had a draft which I discussed with 21 22 Mr. Mishkind and then sent him a final version based on our discussions. That I don't recall. 23 Q. 24 That may --25 A. There's no earlier, you know, I don't have a

R, GOLD - 52

1 series of reports, though.

2 MR. MISHXIND: I can certainly represent to you that I've never seen a draft, nor did I discuss 3 4 anything with the doctor before he sent me the October 23, '95 report. 5 6 BY MR, MARKWORTH: 7 Q. What did you understand that your role was as an expert witness in this case at the time you 8 9 prepared this report? 10 Α. At the time I... Well, my role changed, 11 because when I was first contacted about the case the 12 galactosemia was not known. So I initially thought I was talk -- asked to review evidence about the 13 14 appropriateness of the management and timing of 15 diagnostic endeavors related to meningitis. At the time I wrote the report, obviously the issue of the 16 17 galactosemia had arisen.

18 My assignment to my understanding was to 19 review the medical record to try to determine the 20 specific issues related to onset of his infection, 21 when it might have occurred, when meningitis would 2.2 have occurred, and to determine whether there were 23 opportunities to have recognized this sooner and 24 intervened sooner, and whether earlier intervention 25 would have led to a different outcome.

1 They were also obviously to assess the 2 standard of care in the first week of this child's 3 life. When were you first retained? 4 Q, MR. MISHKIND: If you can remember. 5 THE WITNESS: I don't remember. I know it 6 7 was --BY MR. MARKWORTH: 8 9 Q, Was that --It was prior to when galactosemia was 10 Α. discovered during the course of ... And that came 11 after you first contacted me. 12 MR, MISHKIND: Yeah, the best 1 can tell you 13 is sometime during the course of that first 14 litigation, the first lawsuit. Exactly when, I don't 15 16 know. BY MR. MARKWORTH: 17 Q. As of the time that you prepared your report, 18 19 were you satisfied that you had all the information 20 necessary for you to prepare that report? 21 At the time of the report, yes. Α. 22 Ο. And at the time of preparing your report, did 23 you seek or ask for any additional information which 24 you did not obtain for any reason? 25 Α. No.

1 At the time that you prepared this report, my 0. 2 understanding is that the only depositions that you 3 reviewed were the mother's deposition and the pediatric physicians' depositions of Dr. Jamhour and 4 5 Vuppala. Correct? Probably Violet's also. 6 Α. 7 MR. MISHKIND: No, I don't think so, Doctor. 8 THE WITNESS: No? MR. MARKWORTH: Well, I'm asking the 9 10 questions. 11 MR. MISHKIND: Okay. 12 MR. MARKWORTH: Okay, Howard? MR. MISHKIND: Well, the deposition of Violet 13 clearly was taken afterwards so he couldn't have 14 reviewed it. 15 16 THE WITNESS: Okay. 17 MR. MARKWORTH: That's fine. But I'm after the doctor's recollection, not your recollection. 18 MR. MISHKIND: Fine. 19 20 MR. MARKWORTH: Or your prompting. 21 MR. MISHKIND: I'm not prompting him. Ι assume you want the record accurate. 22 BY MR. MARKWORTH: 23 24 Q. Were you made aware, at the time that you 25 prepared your report, that the depositions of any

R, GOLD - 55

1 nurses had been conducted? 2 Α. No. Q, If you had been made aware that the 3 4 depositions of the nurses had been conducted, would you have requested the same? 5 6 Α. Yes. When did you first ever receive any Q. 7 depositions of any Deaconess nurses? 8 I think just recently, in the last package 9 Α. 10 you sent me. 11 Q. By "recently," we're talking about a matter of weeks? 12 13 A. Yes. What else did you receive apart from the Q. 14 nurses' depositions most recently? 15 16 Α. Dr. -- several of the expert depositions: Dr. Levy. I had seen his expert report bef -- I'd 17 seen the written reports, but the depositions of 18 19 Dr. Levy. Dr. Boist? MR. MISHKIND: I'm going to let the record 20 21 reflect that the doctor doesn't have any of his material with him today so he's testifying as to 22 23 memory. THE WITNESS: Yeah, but it was the -- it was 24 25 primarily the depositions of the medical experts that

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I received in addition to the nurses' ones recently. 1 2 BY MR. MARKWORTH: 3 Q. Have you ever received and/or reviewed any information or material that was generated or used by 4 Deaconess Hospital as part of a program of patient 5 information or education? 6 7 Α. No. MR. MISHKIND: Objection to the form of that 8 question in terms of "generated or used," but the 9 10 answer stands. 11 THE WITNESS: I assume you mean the discharge 12 packages that... BY MR. MARKWORTH: 13 Q. 14 Yes. 15 Α. -- for parents. No. 16 Q, In your report, you indicate that, 17 "Throughout his stay in the nursery at Deaconess Hospital, the daily nursing summary describes Steven 18 as having pink skin color." Is that still your 19 20 testimony today? No, I misinterpreted the last one clearly. 21 Α. 22 thought it said pink, but it's... I assume 23 J-O-A-U-N-D is jaundiced, on the 17th. Q. So that in your report is incorrect. 24 25 Correct?

1 Α. That's right. Q. And that is, in reference to your review of 2 the record, again was incorrect. 3 That's right. 4 Α. 5 Q, In your report, you refer to "A healthy full-term infant, with birth weight of 8 pounds 4 6 ounces should take approximately 20 ounces per day, '' 7 at a rate of about 2.5 ounces per pound, "after 8 feeding has been well established within a few days of 9 10 birth." 11 Α. That's right. 12 Q, I have a few questions about that statement, Do you still hold that as your opinion today? 13 Doctor. 14 Α. Yes. Q, 15 Is that statement based upon any outside source or reference material? 16 17 Α. I'm sure it's based on my pediatric training and therefore would have been based on standard 18 19 pediatric textbooks that I read during my training. ${\tt Q}_{{\tt f}}$ Can you cite any reference for any of us to 20 look it up and say, "(2.5 ounces per pound) after 21 22 feeding has been well-established within **a** few days of 23 birth"? Can you cite any record? 24 I would say any of the standard pediatric Α. 25 textbooks: Nelson; any of them, to describe newborn

1 feeding.

Q. Now, when you say, "after feeding has been well established within a few days of birth,'' what are we talking? Like before when you were talking about four or five days?

6 Α. It varies enormously with -- from one baby to the next. Some babies are feeding full volume within 7 the first day, especially if they're bottle fed rather а 9 than breast fed, because it usually takes a minimum of three or four days for breast feeding in terms of 10 11 volume to be reasonably established. It may take longer until mother and-baby are nursing well 12 together. Bottle fed babies sooner. So certainly 13 within three to four to five days; but there's a wide 14 variation. 15

Q. And prior to that time there can be a wide variation, prior to the time before feeding has been well established, as to what a baby may intake.

19 A. That's right.

20 Q. Would the fact that a baby was showing
21 consistency and even increased amount of feeding be
22 consistent with a baby that is going onto a well
23 established pattern of feeding?

24 A. Yes. You would want that.

25 Q. Is there anything in this chart, in this

1 record, relative to Steven Maksym that would indicate that this baby was not showing an increase in his rate 2 3 of feeding and intake? 4 MR, MISHKIND: When you say "this chart," you 5 mean just the Deaconess record. 6 MR. MARKWORTH: I'm saying just the Deaconess 7 record. 8 THE WITNESS: In the Deaconess record, he's increased a bit, from 1-and-a-half to 2. And he's 9 stable at that rate. 10 BY MR. MARKWORTH: 11 Wouldn't you agree -- well, first off, your 12 Q. testimony -- or strike that. 13 14 In your report, you originally had the feeding rate at 4 ounces the first day, 6 ounces the 15 second day, and 5 ounces in the first half of the 16 17 third day. Correct? Right. And those numbers are wrong, based on 18 Α. the statements of the nurses in the deposition as to 19 what these symbols mean. 20 Q. And even at the rate of 5 ounces in the 21 22 second day, that rate of 5 ounces that you're testifying to today is based upon your reviewing now 23 24 the nursing depositions. Correct? 25 That's right. Α.

1 And can you tell me what the feedings Q, 2 actually were that give you the number of 5 ounces as 3 of August 17? I'm looking for the time of the feeding 4 and the amount of the feeding, Doctor --5 Α. Okay. 6 Q. __ in your reading of the chart. 7 Okay. My reading it now, I get 2 ounces at Α. 2:00 a.m., 2 ounces at 6:30 a.m., and 1-and-a-half at 8 9 9:30. 10 Q, So now we're up to 5-and-a-half ounces. Correct? 11 12Α. That's right. Q, Again, for a half day, that would represent 13 14 still an increase over August 16. Correct? 15 A slight increase. I got his total now for Α. the 16th at 10 ounces. 16 Q, 17 Okay. Doctor... Corrected total. 18 Α. 19 Q. All right. You observed in your report that, "The jaundice was not noted in the nursing notes, 20 21 which described his skin as pink even at 54 hours of 22 age, when his total bilirubin had risen to 10.2." 23 And you went on and you said, "Since the observation of normal skin color in the nursing notes 24 was clearly incorrect, it is reasonable to question 25

the reliability of the other observation recorded in the nursing notes, especially those describing him as active and having a lusty cry throughout his stay in the nursery." Correct?

5

A. That's what I said.

Q. And based upon the one incorrect observation
as you reported it, that there was normal skin color,
you would conclude that the rest of the observations,
as far as the baby being lusty and active, you would
suspect them?

A. I think -- as I said, I think it's reasonable
to -- it was -- if my original statement had been
correct, it would have been reasonable to question the
accuracy of the observations.

15 Q. Okay. Now that you know that your original 16 statement was incorrect, and that we can suspect your 17 interpretation of the chart, is it fair to say that we 1% can have some question as to the reliability of your 19 interpretation of this chart?

20

MR. MISHKIND: Objection.

THE WITNESS: I clearly misinterpreted a photocopy of the chart as saying pink when it was jaundice. And since these -- the notations used by nurses are not ones that I've seen used elsewhere in my 35 years, I misinterpreted those numbers too, 1 that's clear.

2 BY MR. MARKWORTH:

Q. Would you agree that, since the nurses, then, did make the observation of the jaundiced condition of this child's skin, that we cannot question then the reliability of the other observations that they made, as you said in your report, relative to the baby being "active and having a lusty cry throughout his stay in the nursery"?

MR. MISHKIND: Objection. Go ahead. THE WITNESS: The only reason -- I can't assess the reliability, evaluate the reliability of those observations.

I have no reason to question them except for the statements of the parents' that disagree with them. I am not in a position to make a decision as to which observations are correct. I still have other concerns about the baby.

19 BY MR. MARKWORTH:

20 Q. Relative to the observations of the parents, 21 would you agree that it's the testimony of the parents 22 or of the mother that the baby was jaundiced at birth? 23 A. My recollection is that she stated jaundice 24 was present on the first day of life. I don't recall 25 that she said it was at birth.

1 Q. As you sit here today, do you have an opinion 2 as to whether or not this baby was jaundiced even at 3 birth?

4

A. I doubt it was jaundiced at birth.

Q. As you sit here today, do you have an opinion
that this baby was jaundiced on the first day of life?
A. I don't know. I know it was jaundiced -- had

a bilirubin of 6 at approximately 30 hours of age. I 9 don't know whether the previous evening jaundice would 10 have been detectable. His rate was not -- at that 11 hour was such that I doubt that there was jaundice the 12 previous day visible.

13 Q. What is your definition of lethargy?
14 A. Lethargy is a failure to make normal
15 responses, either spontaneously or in response to
16 stimulation, based on the age of the baby and the
17 baby's state; namely, whether the baby is normally
18 sleeping or normally awake.

19 So it is an assessment of -- when I use the 20 term lethargy, it means the baby is responding less 21 than I consider normal, at a time when he appears to 22 be awake or she appears to be awake and not sleeping. 23 Q. You referred to the history of Steven Maksym 24 after discharge from Deaconess Hospital on August 17th 25 and before being returned to the emergency room at

1 Deaconess Hospital. Correct?

2 A. That's right.

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Q. Now, the history as far as what the condition
d of Steven was during that period of time, the source
for that comes from Mrs. Maksym. Correct?

A. It ultimately is all from Mrs. Maksym, either
from her deposition or from the history she gave at
the time of the second admission.

9 Q. And that would be a history given both at the
10 emergency room at Deaconess Hospital, and again on the
11 transfer over to Metro Health. Correct?

12 A. That's right.

MR. MISHKIND: And Dale, just so you're not surprised, when you say "the transfer over," "and at Deaconess Hospital'' is what he said before in terms of the intensive care.

17 THE WITNESS: No, the emergency room was at18 Deaconess, and then he went to Metro.

19 MR. MISHKIND: Right.

20 MR. MARKWORTH: Right.

21 MR, MISHKIND: But when you said "on the
22 transfer over," it was the history given at Metro.

23 MR. MARKWORTH: Metro.

24 THE WITNESS: Yeah.

25 MR, MISHKIND: Okay.

THE WITNESS: Yeah. It was an independent
 history.

3 MR. MISHKIND: I didn't know what you meant 4 by "the transfer over,"

5 BY MR. MARKWORTH:

Q. Did you find any inconsistency between the history that was recorded at Deaconess Hospital, when she went -- when Steven was taken there, and the history at Metro Health, when Steven was transferred there, as compared to the history as described by the mother in her deposition?

A. Well, I... The first part, I don't think there are any inconsistencies with a recorded history at Deaconess ER versus Metro ER and Metro ICU, except they become a little more detailed at Metro, because they had more time. They weren't in the triage situation. They were dealing with a very sick baby.

And by the time they wrote their notes, they had considerably more time to get more information from the mom, compared to the physician at Deaconess. But there weren't any inconsistencies in those histories between them.

Whether either of them were inconsistent with mom's history in her deposition, I don't recall that there are any significant differences. I don't think

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1 she talked about with any of physicians the fact that she had called a doctor in between the two admissions. 2 I don't have it in my notes and I don't 3 4 recall it being in the record that she mentioned to 5 them that she had called a physician. But that's the only other thing I don't recall. 6 Q, When you prepared your report, you did look 7 at the Deaconess Hospital records for the original 8 admission, and you compared what was in that record, 9 10 that chart --11 Α. Right. __ with what the mother gave as a history. 12Q. Correct? 13 14 Α. Yes. Okay. And you were looking for whether or 15 Q, not there was any consistency or inconsistencies 16 17 between the two. Correct? Okay. Well, mom didn't give any history in 18 Α. 19 the first record. Nothing of mother's history is recorded during the birth history. 20 21 Q, But you looked at the deposition testimony --22 Α. Yeah. -- of mom. ο. 23 24 Α. Yes. Q, And as you've said, in part you're relying on 25

1 mom's history in formulating the opinions you're
2 rendering here today.

A. In terms of our history, I would find the recorded history at the emergency room visits and at Metro more reliable because they're closer to the event than her deposition statements, and there was no medical/legal issue involved at the time she gave the history that might affect her memory, that clearly can happen when she's giving the deposition.

10 Q. And likewise, there's no medical/legal
11 situation affecting all the various different care
12 givers --

13

A. That's right.

14 Q. .. at both Deaconess Hospital and at Metro
15 Hospital when they made their entries regarding their
16 observations at or about the time that they made those
17 entries.

18

A. That's right.

19 Q. So those entries likewise are not clouded by
20 reason of any kind of medical/legal effect.

A. Not specifically, no. The reason I say that
is many medical records are clouded by worries about
medical/legal issues, even if they shouldn't be; more
so in the States than Canada.

25 MR. MARKWORTH: Okay. One second here.

1 Doctor, I don't have anything further at this time. 2 3 4 EXAMINATION BY MR. GOLDWASSER: 5 6 Q, Dr. Gold, I have several questions for you. 7 First let's start off by asking if it's not true that а you've been evaluated to -- you've been hired, I'm sorry, to evaluate the standard of care of the care 9 10 givers involved with Steven Maksym. Is that true? 11 Α. Yes. 12 Q, Have you also been retained to evaluate that 13 which is the cause for Steven Maksym's brain damage? 14 Α. Yes. 15 0 -If asked, do you have an opinion as to 16 whether or not the care givers at Metro Health were in 17 compliance or not in compliance with standards of 18 care? 19 I think they were in compliance with Α. 20 standards of care relative to diagnosing and treating 21 meningitis and sepsis. I do not think they were in compliance with diagnosing and recognizing the fact 22 that he had galactosemia. 23 24 Q, If asked, are you prepared to render opinions 25 as to whether or not Steven Maksym's brain damage is

1 as a consequence of the delay in the diagnosis and 2 treatment of galactosemia?

3 Α. I am clearly not an expert in galactosemia and its management, and I would have to defer to 4 5 Dr. Levy and suitable experts in its management; other than the general pediatric knowledge that galactosemia 6 7 causes brain damage, and what I take to be the general understanding that the whole reason for screening is 8 9 not to prevent sepsis but is to recognize the disease 10 so that you can get the child on the appropriate 11 lactose-free diet as soon as possible, because the 12 general understanding is the sooner the better.

13

Q. The last --

14 A. The general pediatric understanding of the15 disease.

16 Q. The last statement in your letter, the last 17 sentence in your letter, you state, "Initiation of 18 proper dietary treatment within the first week or two 19 of life would have prevented much of the damage which 20 he suffered."

21

Do you still hold that opinion?

A. The damage referring to the damage caused by galactosemia. I would hold that opinion, but I would again say that that's my opinion as someone with general pediatric knowledge; not as an expert in galactosemia, and they are the ones who will have to say whether -- the impact of timing of dietary intervention.

My understanding is that the earlier the
better, but that clearly not all damage can be
prevented, unfortunately, regardless of when you start
dietary therapy.

Q. What is your understanding of the amount or
quantity of galactose that Steven was receiving while
on bottle feeding only?

11 A. Prior to admission to...

12 Q. No. Up till whenever it was, however old he
13 was, and as long as he was on bottle feeding,

14 whatever...

15 A. Right.

16 Q. Well, let's ask you: What is your 17 understanding as to how old he was before he was taken 18 off bottle feeding only?

A. Bottle feeding only was sometime around sixmonths, and additional foods being added.

Q. And where did you get that information from?
A. That's my recollection of the deposition
statements, or of the statements from the medical
experts, I don't remember which, talking about his
diet.

1 You're sure of that six months or are you Q. 2 just --3 No, that's my recollection. Sometime during Α. 4 the first year of life, other foods were added to his diet. 5 6 Ο. All right. 7 Α. Ordinary baby foods. Q, The mother's testimony I believe is nine 8 9 months, nine or ten months, he was strictly on bottle feeding. 10 11 Α. (Nods head.) 12 Q. But nonetheless, do you have any understanding as to how much galactose he was getting 13 14 while on bottle feeding only? 15 Okay. Initially he was getting full lactose, Α. when he was on this initial formula prior to discharge 16 in the first few days of life. 17 After the first week, when he was finally put 18 19 back on oral feeds at Metro, he was on pregistimil, 20 which was lactose-free. He stayed -- I don't know how 21 long he stayed on the pregistimil but then was also 22 switched either -- I think he stayed on pregistimil 23 for the first year. So he was on a lactose-free 24 formula. Q, Which, by coincidence, is the treatment 25

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1 regiment for galactosemia, is it not? 2 Α. That's right. But that treatment regiment 3 also avoids other lactose-containing foods. Q. Well, what other galactose-containing foods 4 5 was he receiving while he was on bottle feeding only? If he's on bottle feeding only, none. Α. 6 Q, 7 Right. The question begs the answer. Right? (Nods head.) 8 Α. Q, How much galactose was Steven receiving, 9 10 based upon what you know of the facts of this case, 11 once he was off bottle feeding? 12 Α. He would have -- I assume he was on cow's milk intake. I cannot calculate his daily intake, but 13 14 what he would have been receiving would have been the normal intake for any child on an unrestricted diet. 15 Q, Well, how do you know that? Are you guessing 16 17 or do you know that fact to be the fact of this case? I do not know that to be the fact. Α. 18 Q. Dr. Gold, let me just caution. This is a 19 very serious lawsuit for all concerned. I would ask, 20 if you're guessing, you tell us; if you know from the 21 22 facts of this case, then tell us that as well. 23 Well, the description was after he was off Α. 24 bottle feeding, he was on an ordinary diet until the 25 diagnosis of galactosemia was made.
1 Q, Did you read the mother's deposition that I 2 took of her? I was brought in, my client, Metro 3 Health, after the initial lawsuit was filed. Did you 4 read the second deposition of the mother? 5 Α. I read it, yes. Q. Do you recall what she told me when I asked 6 7 her? No, I don't. 8 Α. 9 Q, Do you have an opinion as to whether or not 10 the amount of galactose that a galactosemic child is receiving will have an impact upon whether or not that 11 12 child will experience brain damage? 13 MR. MISHKIND: Let me just object, only 14 because the doctor already qualified and indicated 15 that he's not an expert --16 MR. GOLDWASSER: That's why I asked the question, Howard. 17 MR, MISHKIND: 18 -- in the area -- let me 19 finish, please. ... Not an expert in the area of 20 galactosemia, and I think he even indicated that he 21 would defer to Dr. Levy with regard to those issues. 22 So I mean, you can certainly ask, **but** my objection is noted for the obvious reasons that he's already told 23 24 you. 25 THE WITNESS: I do not know what the dose

response curve is for galactose and galactosemic
 damage.

3 BY MR. GOLDWASSER:

Q. Do you know if there's any correlation
between brain damage as versus kidney damage or liver
damage in galactosemic children who are receiving
galactose?

8 A. Other than they are at risk for all three, I
9 don't know if there's a correlation -- I don't know
10 what the correlation is.

11 Q. Are you at all qualified to discuss with me 12 the significance of the laboratory values when Steven 13 was tested for galactosemia?

14 A. No.

Q. Doctor, I could short circuit probably an
hour of the intended questioning I had for you,
depending on how you respond to what I'm about to ask
you.

You've authored a report in which you do state an opinion that much of the damage he suffered is due to the failure to initiate proper dietary treatment within the first week or two of life. If asked, will you state that at trial or will you beg off and say you're not qualified to state

25 that?

1 MR. MISHKIND: Let me just object to your 2 characterization of what is stated in the record in 3 terms of "much of the damage.'' I'm not sure where you're referring to. 4 MR. GOLDWASSER: I'm reading, I'm quoting --5 THE WITNESS: It's the last sentence. 6 7 MR. GOLDWASSER: __ directly from what the doctor said. The last sentence in his report. 8 BY MR. GOLDWASSER: 9 Q. 10 Now, Doctor, if you're going to make that statement in trial in front of a jury of our peers, 11 12 I've got to ask you about that. Are you going to make that statement or not, 13 if asked at trial? 14 15 Α. My general response to questions about the galactosemia is that I am not an expert on 16 17 galactosemia. And if asked do I think early treatment would 18 prevent brain damage, I will say yes, that is my 19 20 understanding of the situation. But for the treatment 21 and management of galactosemia, I defer to the 22 galactosemia experts. 23 Ο. When you were initially retained, 24 galactosemia, as you have indicated, was not an issue in this case. Isn't that true? 25

1 Α. That's right. 2 Ο. And when you were initially retained, you 3 understood that the damages that Steven had 4 experienced was a general central nervous system disorder brain damage. Correct? 5 6 Α. That's right. Q, 7 And when you were first initially retained, it was I assume your impression that the brain damage 8 was secondary to E. coli meningitis. 9 That's right. 10 Α. Q, Can we agree, then, sir, that all of the 11 12 brain damage that is presently demonstrated by Steven through all the testing he's undergone is consistent 13 with a child who suffers a severe bout of E. coli 14 meningitis beginning at about six days of life? 15 16 MR. MISHKIND: Objection. Go ahead. 17 THE WITNESS: No. The brain damage that I do not think is consistent is the later MRI scan showing 18 significant white matter disease, which is not usually 19 20 seen with bacterial meningitis. 21 I am not in a position to say what the functional correlate of that white matter damage is in 22 23 terms of his performance; and I'm also not -- I don't 24 think anybody is able -- at least I'm not able to 25 say -- I can tell what structural parts of his damage

are clearly most likely related to his meningitis, but 1 it is I find not -- I cannot differentiate beyond his 2 3 hydrocephalus and his hemiparesis which was caused by 4 meningitis and which was caused by galactosemia, since both can affect intellectual and developmental 5 6 problem -- cause developmental problems to the same 7 degree and are not in any way unique that I could say, "This is galactosemia and this is meningitis." 8 9

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BY MR. GOLDWASSER:

Q. Are you telling me that, but for that MRI 10 11 finding, you would concur that at least what he demonstrates functionally can be consistent with E. 12 13 coli meningitis only?

14 MR. MISHKIND: Objection to form. Go ahead. THE WITNESS: Clearly children who have E. 15 16 coli meningitis who don't have galactosemia can be 17 profoundly damaged, as damaged or more so than Steven. So it could all be meningitis. 18

19 But we know he has galactosemia that was 20 untreated for four years or for a good portion of that 21 four years.

22 BY MR. GOLDWASSER:

Q. 23 Do you appreciate the significance of the 24 laboratory finding of galactose-l-phosphate?

MR. MISHKIND: Objection. He's already said

1	that he's not
2	MR. GOLDWASSER: I'm just asking.
3	MR, MISHKIND: Okay.
4	THE WITNESS: As being present, absent or
5	elevated.
6	BY MR. GOLDWASSER:
7	Q. Right.
8	A. Yes.
9	Q. Do you understand the significance of it?
10	A. Yes.
11	${\tt Q}$, You do. Okay. What is the significance of
12	the fact that Steven's galactose-l-phosphate was
13	measured at 4.4 while on a galactose-free diet, and
14	only 3.8 one day after his removal from any exposure
15	to galactose?
16	MR. MISHKIND: Objection. Go ahead, Doctor.
17	THE WITNESS: I would not be able to
18	interpret whether that is an expected decline or not.
19	That is why we have metabolic experts.
20	BY MR, GOLDWASSER:
21	Q. Do you know why metabolic experts or
22	endocrinologists will repeatedly measure a patient's
23	galactose-l-phosphate while they're on a
24	galactose-free diet?
25	A. One is to make as a way of assessing how

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1 strictly avoidance of galactose is occurring, because it will go up quite promptly when there is any 2 3 significant -- I don't know what guantity of galactose 4 intake it requires to elevate it, but it responds very promptly if the diet is kept to very strictly. 5 6 Q, And it will go up if the child is receiving 7 galactose. That's right. So the fact that it fell makes 8 Α. 9 you wonder about the reliability of the first value, 10 since we know he has galactosemia. Q. 11 Well, we know that as of January 14, 1995, 12 well more than a year after he was initially 13 diagnosed, his lactose-1-phosphate is a measure of 14 4.4; and within days after it was initially suspected, 15 his galactose-1-phosphate was lower, at 3.89. Do you have any impression as to the 16 significance of that? 17 No, because I don't know what the variation 18 Α. 19 between repeat laboratory tests is of that asset, so I 20 don't know if that's a significant change or not. 21 Q, Do you know that if there's only a 3.8 level 22 in galactose-1-phosphate as to whether or not the 23 patient is at risk of suffering the complications that 24 are presumed to occur from galactosemia? 25 MR. MISHKIND: Objection.

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1	THE WITNESS: I do not know.
2	BY MR. GOLDWASSER:
3	Q, Dr. Gold, as a pediatric infectious disease
4	expert, how often have you diagnosed galactosemia?
5	A. Never.
6	Q, As a microbiologist taking care of children,
7	how often have you treated children who will come to
8	you with E. coli sepsis meningitis and are also
9	diagnosed as having galactosemia?
10	A. One, perhaps, my recollection when I was a
11	resident, but none since.
12	Q. And as a specialist in the treatment of
13	infectious disease of children, I assume that you are
14	one of those front-line physicians taking care of
15	children who present with E. coli meningitis. Is that
16	true?
17	A. Yes.
18	Q, So can I assume that, from what I guess is an
19	extensive pediatric infectious disease practice, that
20	you've seen, just as you've indicated, one case of a
21	child presenting with E. coli sepsis meningitis and
22	galactosemia?
23	A. And galactosemia
24	Q. Yes.
25	A yes. It's a rare disease.

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1 Q. Very rare, isn't it?

2 A. (Nods head.)

Q, Your answer is...?

4 A. Very rare.

Q. Thank you. Is it not true, sir, that when
children present at six days of life as sick as Steven
Maksym presented to Metro Health Medical Center, that
these children often do not survive?

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A. That's true.

10 Q. And what is a precipitating cause of death 11 with children who don't survive when they present with 12 E. coli meningitis?

A. Well, he had more than E. coli meningitis; he had sepsis. So he had generalized. So he could have died of overwhelming septic shock, or he could have died from the brain edema and brain damage associated with severe meningitis. Either one could have killed him.

19 Q. So the point is that many of these children
20 who do die do die as a consequence of the
21 complications of meningitis.

A. That's right. Most of those deaths occurwithin 24 hours of onset of the disease.

Q. And many of those children who survivenonetheless suffer the morbidity of the consequences

1	of meningitis. Isn't that true?
2	A. Of the babies who are as sick as Steven
3	was
4	Q, Yes.
5	A when he presented to Metro, yes.
6	Q. So as an infectious disease expert, you would
7	not be surprised that Steven Maksym has suffered brain
8	damage as a result of the meningitis.
9	A. No.
10	${f Q}$. Would you agree that the meningitis, with
11	which he presented and was treated for at Metro
12	Health, was severe enough to have affected his
13	cognitive ability on a permanent basis?
14	A. In all probability, yes.
15	Q. Would you agree that it was significant
16	enough to have affected his language development?
17	A. Yes.
18	Q. What about his motor development?
19	A. Yes.
20	${\tt Q}$. Was the E. coli sepsis meningitis, when he
21	presented to Metro Health, severe enough to have
22	affected his attentive abilities?
23	A. Yes.
24	Q. Were they severe enough to have affected his
25	hearing?

1	A. Yes.
2	Q. Were they severe enough to have affected his
3	visual perceptual ability?
4	A. Yes. But in those cases you would usually
5	see, on subsequent MRIs, structural damage in the
6	appropriate visual cortex, which I don't think he has.
7	Q. So are you telling me that in this case,
8	these developmental disabilities that I've just
9	outlined in Steven's case are unrelated to the
10	meningitis?
11	A. No.
12	${\tt Q}$. Even in the absence of the MRI findings you
13	have alluded to?
14	A. Sorry, I'm getting lost
15	Q. All right. Maybe I don't understand you.
16	A in the negatives. I think all of the
17	findings that you have mentioned are compatible with a
18	child who had severe sepsis meningitis at presentation
19	to Metro, and can be seen in children just with
20	meningitis without galactosemia.
21	Q. But on your review of the record, have you
22	noticed that the physicians who were taking care of
23	Steven before the galactosemia was diagnosed were
24	rendering advice and counselling based upon their
25	assumption that his deficits were secondary to the

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1 complications of meningitis? 2 Α. That's right. Q. 3 Thus, can we agree that what these 4 neurologists were seeing, who were taking care of him, was consistent with meningitis? 5 Α. 6 Yes. MR. MISHKIND: Objection. 7 BY MR. GOLDWASSER: 8 Q, Now, where I'm confused is you make reference 9 10 to an MRI --11 Α. Uh-hum. 12 Q, \_\_ examination. What MRI examination specifically are you alluding to? 13 14 Α. "A MRI scan performed on September 14, 1994 15 revealed diffuse injury to the white matter, mainly in 16 the right hemisphere but also on the left as well. The damage was consistent with the demyelinating 17 pattern of galactosemia." 18 19 So that was the MRI performed after the 20 diagnosis of galactosemia. And I'm sure that the 21 history was included on the x-ray requisition. 22 So the interpretation was made not in the absence of diagnosis by the radiologist, which often 23 24 changes interpretation. Are you qualified to render an opinion as to 25 Q.

1 whether or not what is seen on that MRI you've just
2 made reference to is also consistent with children who
3 experience meningitis, as did Steven?

A. The pattern of damage that I am familiar with
in children who've had neonatal meningitis or
meningitis at any age is not, except in premature
babies, diffuse white matter damage.

8 It is primarily damage to the gray matter, to
9 the ventricular system, rather than diffuse white
10 matter damage.

If the disease is severe enough, there could be obviously global infarction of brain, but usually gray matter suffers much more than white matter.

I am not a radiologic expert that could look at this MRI scan and tell you this is galactosemia versus meningitis. All I can say is, of the patients I have cared for, and in reviewing the imaging studies of children with meningitis, diffuse white matter damage is not the characteristic finding in the survivors.

Q. Your knowledge of galactosemia has beenacquired how, whatever knowledge you have?

A. From my medical school and pediatric training
in metabolic diseases and from training in general
pediatrics. It has not been by being involved in the

1 care of these patients, obviously. From whatever training and/or reading you've 2 Ο. 3 had on this subject, do you know whether or not if 4 most if not all damage - brain damage, that is suffered by galactosemic patients occurs during the 5 first year of life, if left untreated? 6 7 A. I cannot answer that question. I don't know whether -- how long the damaging event continues. 8 Q . I think you've already answered this question 9 but I'm compelled to ask any way: Can you quantify 10 how much brain damage would have been prevented in 11 12 Steven's case if dietary treatment began when he was off the bottle feeding? 13 14 Α. No. Do you know from your reading and/or your 15 Ο. studies as to whether or not about 50 percent of 16 17 galactosemic children who are treated early may still have learning difficulties? 18 19 MR. MISHKIND: Objection. 20 THE WITNESS: I do not know and cannot give an estimate on that. 21 22 I know that there's a high rate of neurologic problems in galactosemic babies regardless of dietary 23 24 therapy, and many still sustain damage, **yes**. In my 25 understanding --

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MR. MISHKIND: Doctor, you've answered his
 question.

3 THE WITNESS: No, but my understanding of the
4 screening program is the point of the screening
5 program is to detect the disease as early as possible.
6 BY MR. GOLDWASSER:

Q. Sure. Doctor, I understand that, but you've
just told me, then, that you do know that even those
who are treated may sustain damage.

A. Well, overall treated may sustain damage. I
don't know whether -- what the extent of early
treatment in terms of quantitating prevention of
damage.

14 Q. Do you know from your reading as to whether 15 or not a galactosemic child can suffer injury 16 prenatally by way of transplacental galactose received 17 from a heterozygous mother?

18 MR. MISHKIND: Objection. Go ahead.
19 THE WITNESS: I would assume they can, but I
20 have not read on the subject and can't give you a
21 definite answer.

But I see no reason why it couldn't occur.
And obviously one of the medical experts says yes.
BY MR. GOLDWASSER:

25 Q. Did you know that the mother in this case

1 turned out to be a heterozygous mother? 2 Α. No, I did not. I would assume she is. Q, 3 Why do you assume she is? 4 My assumption is it's not a soma recessive Α. 5 disease, or my recollection is that it isn't. Q. Do you know as to whether or not 6 7 galactose-1-phosphate is reported to be responsible for mental retardation? 8 Α. I don't know... No, I can't answer that 9 question. It is a marker. Whether it is the toxic 10 11 agent or not, I don't know the answer. 12 Q, Do you know from your studies and your reading that even in the presence of good dietary 13 14 control, the prognosis as to whether or not they'll be brain damaged is variable? 15 MR. MISHKIND: Objection. Go ahead, Doctor. 16 17 THE WITNESS: I know the outcome is variable, but I could not give you any specifics. 18 19 BY MR. GOLDWASSER: 20 Q, Doctor, to summarize your opinion, then, on 21 the subject of the proximate cause or the 22 precipitating cause for Steven's neurologic deficits 23 and developmental delays, it's my understanding that 24 you are assuming that perhaps galactosemia contributed 25 to causing some of them but you cannot quantify or to

1 state to what degree. Is that true? 2 MR. MISHKIND: Objection. Go ahead. 3 THE WITNESS: That's true. BY MR. GOLDWASSER: 4 Q. And your assumption is based merely upon the 5 fact that you have learned, from your education and 6 7 your reading of the literature, that galactosemia left untreated can result in brain damage. 8 That's right. 9 Α. Your opinion is not based upon any developed 10 Q. expertise on the subject. 11 12 Α. That's right. MR. GOLDWASSER: No further questions, sir. 13 Thank you. 14 MR. BONEZZI: No further questions. 15 MR. MARKWORTH: What did...? 16 17 MR. MISHKIND: He said, "No further questions." 18 MR. MARKWORTH: All right. I have a few 19 20 more. MR. MISHKIND: All right. 21 \_\_\_\_\_ 22 EXAMINATION 23 BY MR. MARKWORTH: 24 25 Q. Doctor, you wouldn't disagree, would you,

1 that galactosemia even treated can result in brain 2 damage? 3 MR. MISHKIND: Objection. 4 THE WITNESS: It can if treatment is delayed, is my understanding. 5 BY MR, GOLDWASSER: 6 7 All right. Is it -- do you --Ο. Α. There can be damage even under the optimal 8 circumstances of early diagnosis and treatment. 9 10 Q, Okay, Doctor. Doctor, you indicated that you reviewed the nurses' depositions. When you did that, 11 12 did you take any notes at that time? 13 Α. No. 14 Did you receive any kind of summary of those Ο. nurses' depositions? 15 16 Α. No, I just had the depositions. 17 Ο. Okay. When you reviewed the other depositions in this case, did you take any notes 18 relative to those depositions? 19 20 Well, I took notes of all the records that I Α. 21 had for preparing my report --22 Q . Are those notes --23 -- to make my report. Α. 24 Q. Are those notes still in your file? 25 Α. I have to see. I don't know.

1 Would you check for those; and, if they are, Q. 2 would you provide them to Mr. Mishkind, who can then 3 forward to us a copy of the physicians' notes, please? Doctor, you've told us about some of the 4 observations in your written report that are not 5 6 correct. 7 Are there any other observations or conclusions in your written report that you'd like to 8 9 correct here today? 10 The only thing is the feeding and the Α. No. 11 jaundice, and what we've already discussed. Q, 12 Doctor, item number 3 in your conclusions, 13 you're talking there about the "No response was made 14 by the pediatricians or the hospital,.," 15 Α. Okay. Q, 16 "...and no follow-up was made to determine what had been done for the child." So I assume that 17 is still your opinion today? 18 No, that, with the deposition it was clear 19 Α. 20 that when the report came to Deaconess, which was considerably after the fact, Deaconess contacted 21 appropriately I guess the office of Dr. Jamhour and 22 23 Vuppala to say what had happened or tell him, "We got 24 this report. What's happened?'' 25 Q. All right. So at this point you have no

criticism of Deaconess Hospital relative --1 To that screening. 2 Α. Q. -- to that screening test. 3 4 Α. Yeah. Okay. Do you have any criticism of any Ο. 5 6 individual nurse, based upon your review of her deposition testimony? 7 MR, MISHKIND: Solely based? Solely based 8 upon the deposition testimony? 9 10 MR, MARKWORTH: Based upon the testimony of 11 the nurse in her deposition. 12 MR. MISHKIND: Objection. Go ahead, if you 13 can answer the question. THE WITNESS: 14 No. BY MR, MARKWORTH: 15 Any criticism you have of Deaconess Hospital, 16 Ο. is that then based upon the fact of the testimony of 17 the mother concerning the history that she has given 18 relative to feeding of her child and/or vomiting of 19 her child compared to what the chart has to say and 20 what the nurses have said in their sworn testimony? 21 22 Α. As far as Deaconess Hospital, clearly there's a conflict between the nurses and the mother. 23 And I think the major issue, as far as I'm 24 concerned, is not Deaconess Hospital but the decision 25

to discharge, which is the physician's responsibility. 1 2 Q. So if you have any criticism relative to 3 rendering any opinion regarding Deaconess Hospital, it would be whether or not a history as given by mom was 4 accurate as opposed to all the independent notations 5 by the various nurses who cared for this child? 6 7 A. And if accurate and -- well, I guess the issue is if mother's history is accurate and nursing 8 was informed, why didn't nursing respond and inform 9 10 the doctor. 11 Q. And upon that -- or strike that. That 12 opinion that you hold in that regard is reliant upon the history that mom gives. 13 As far as Deaconess Hospital nursing is 14 Α. 15 concerned, yes. MR. MARKWORTH: Thank you. 16 17 \_\_\_\_\_\_ 18 EXAMINATION BY MR. GOLDWASSER: 19 Q . 20 Doctor, just a follow-up here. You mention 21 in your letter the average intake of newborns. Tell me, sir, what is the average intake of 22 23 milk of a toddler such as Steven Maksym at age nine 24 months on a daily basis? 25 He's probably up between -- I'm guessing at Α.

1 his weight by then. If he's an average nine month 2 01d --3 Q. Nine month old. 4 -- he's probably -- and that's his sole Α. source of food? 5 6 Q, No. Let's assume it is not his sole source of food. 7 It depends on how much non-milk food he's 8 Α. 9 getting, but it would probably be between 500 and 750 lo ml. Q. 11 500 what? 12 Α. 500 to 750 milliliters, depending on --Q. How does that translate to ounces? 13 Oh, ounces. That would translate to 750... 14 Α. Divide by 30. 15 Q. Divide by 30? 16 17 Α. Yeah. 18 Q. Okay. You allude to the August 25th, 1989 CT scan showing "extensive hypodensity of all supra- and 19 infratentorial white matter.'' 20 21 Α. Right. What does that mean? 22 Q, That means there's a lot of water in the 23 Α. 24 brain, excessive amounts of water in the brain, so 25 it's less dense than usual to the radiation.

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| 1  | MR. GOLDWASSER: Thank you, sir. No further       |
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| 2  | questions.                                       |
| 3  | MR. MISHKIND: Okay. Bill, are you finished?      |
| 4  | MR. BONEZZI: Yes, I am. Ask about waiver of      |
| 5  | signature, Howard.                               |
| 6  | MR. MISHKIND: Yeah, I'm going to have the        |
| 7  | doctor read the depo. Okay. We're done.          |
| 8  | Whereupon the examination adjourned at 1:00 p.m. |
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| 1        | CERTIFICATE                                                   |
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| 2        |                                                               |
| 3        | I, SUSAN OLUBICK, a Shorthand Reporter in                     |
| 4        | and for the Province of Ontario, hereby certify that          |
| 5        | the foregoing is a true and accurate transcript of the        |
| 6        | deposition of said witness who was first duly sworn by        |
| 7        | me on the date and place hereinbefore set forth.              |
| 8        | I FURTHER CERTIFY that I am neither attorney                  |
| 9        | nor counsel for, nor related to or employed by, any of        |
| 10       | the parties to the action in which this deposition was        |
| 11       | taken, and further that ${\tt I}$ am not a relative or        |
| 12       | employee of any attorney or counsel employed in this          |
| 13       | action, nor am ${\tt I}$ financially interested in this case. |
| 14<br>15 | Susan Olubick, CSR.                                           |
| 16       | SUSAN OLUBICK,                                                |
| 17       | CERTIFIED SHORTHAND REPORTER                                  |
| 18       |                                                               |
| 19       | My certificate expires: June 4, 1999.                         |
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1 INSTRUCTIONS TO WITNESS 2 Read your deposition over carefully. It is 3 4 your right to read your deposition and make changes in form or substance. You should assign a reason in the 5 appropriate column on the errata sheet for any change 6 made. 7 After making any changes in form or 8 9 substance, and which have been noted on the following 10 errata sheet, along with the reason for any change, 11 sign your name on the errata sheet and date it. 12 Then sign your deposition at the end of your 13 testimony in the space provided. You are signing it 14 subject to the changes you have made in the errata 15 sheet, which will be attached to the deposition before filing. You must sign it in front of a witness. The 16 witness need not be a notary public. Any competent 17 adult may witness your signature. 18 19 Return the original errata sheet to the 20 examining attorney (attorney questioning) promptly. 21 Court rules require filing within 30 days after you receive the deposition. 22 23 24 25

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| 1   | SIGNATURE PAGE                                         |
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| 3   | RONALD GOLD, M.D.                                      |
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| 5   | I hereby acknowledge that I have read the              |
| 6   | aforegoing deposition, and that the same is a true and |
| 7   | correct transcription of the answers given by me to    |
| а   | the questions propounded, except for the changes, if   |
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