STATE OF OHIO) SS:
COUNTY OF LORAIN)

IN THE COURT OF COMMON PLEAS

****

GARY DIEDERICH, ET AL

Plaintiffs

vs.

DENNIS CARSON, M.D., ET AL

Defendants

Case No. 98CV17126

****

Deposition of ROY G. BROWER, M.D.

Linthicum, Maryland

Wednesday, April 19, 2000

2:30 p.m.

Job No.: 685-1
Pages 1 - 198
Reported by: Martha L. Lees

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NATIONWIDE COURT REPORTERS AND VIDEOGRAPHERS

DEPOSITION OF ROY G. BROWER, M.D.
CONDUCTED ON WEDNESDAY, APRIL 19, 2000

Deposition of ROY G. BROWER, M.D., held at the offices of:

COURTYARD MARRIOTT AT BWI AIRPORT
1671 West Nursery Road
Meeting Room A
Linthicum, Maryland

Pursuant to notice, before Martha L. Lees, a Notary Public in and for the State of Maryland.

DEPOSITION OF ROY G. BROWER, M.D.
CONDUCTED ON WEDNESDAY, APRIL 19, 2000

A P P E A R A N C E S

ON BEHALF OF THE PLAINTIFFS:

BY: DONNA TAYLOR-KOLIS
DONNA TAYLOR-KOLIS CO., LPA
Third Floor-Standard Building
1370 Ontario Street
Cleveland, Ohio 44113
(216)861-4300

ON BEHALF OF THE DEFENDANT:

BY: JOHN S. POLITO, ESQUIRE
BONEZZI, SWITZER MURPHY & POLITO
526 Superior Avenue
Leader Building
Suite 1400
Cleveland, Ohio 44114-1491
(216)875-2767

ON BEHALF OF THE DEFENDANT:

BY: JOHN R. SCOTT, ESQUIRE

REMINGER & REMINGER CO., LPA

113 St. Clair Building

Cleveland, Ohio 44114

Also Present: Dennis Carson, M.D.

C O N T E N T S

DEPOSITION OF ROY *G.* BROWER, M.D.
CONDUCTED ON WEDNESDAY, APRIL 19, 2000

E X H I B I T S (Continued)

DEPOSITION OF ROY G. BROWER, M.D.
CONDUCTED ON WEDNESDAY, APRIL 19, 2000

Note: Exhibits marked and attached.

P R O C E E D I N G S

ROY G. BROWER, M.D.,

having been duly sworn, testified as follows:

EXAMINATION BY COUNSEL FOR THE DEFENDANT

BY MR. POLITO:

Q Let the record reflect that this is the discovery deposition of Dr. Roy Brower as taken under cross-examination by the defendant.

This deposition is taken pursuant to agreement of counsel.

MR. POLITO: And, Donna, if you need a waiver of any defect of notice of services of this deposition.

MS. TAYLOR-KOLIS: That is correct.

MR. POLITO: Okay.

BY MR. POLITO:

Q Dr. Brower, my name is John Polito. I represent Dr. Carson in this lawsuit along with John Scott. I'm going to be asking you a series of questions regarding your opinions in this case.

If at any time you don't understand one of my questions, you tell me, okay?

A Yes.

Q But if you answer one of my questions, I'm going to assume you understood it and rely on your answer. Fair enough?

A Yes.

Q Donna has probably already gone over the ground rules with you, but you're going to have to wait before answering until I'm done with my question. Okay?

A Yes.

Q And we both can't talk at the same time because the court reporter can't take us talking at the same time. Okay?

A Yes.

Q If at any time during this deposition you want to take a break, you just let me know. Okay?

A Yes.

Q One thing I'd ask you to do is speak loudly so everybody in the room can hear. Fair enough?

A Yes.
Q Would you please state your full name for the record, please?
A Roy Brower.
Q What is your home address, Doctor?
A 10 Dulaney Gate Court, Cockeysville Maryland 21030.
Q And your business address?
A Johns Hopkins Hospital, 600 North Wolfe Street, Blalock 910, Baltimore, Maryland 21287.
Q You sent your report on your home address letterhead, true?
A I don't think I put it on my business letterhead. I don't have a home address letterhead.
Q No, but in terms of the address --
A Yes.
Q -- in your report, you used your home address, correct?
A Yes.
Q You didn't use your John Hopkins address, did you, on either report?

A I don't think I did.
Q Take a look and you can confirm it for yourself.
A (Witness complies.) That's correct. I put my home address there.
Q What is your date of birth, sir?
A June 17th, 1950.
Q Social Security number?
A 110-38-0522.
Q Doctor, I've had marked for identification purposes a copy of CV. If you take a look at it, that CV, and tell me indeed is that CV current.
MS. TAYLOR-KOLIS: John, I think --
MR. POLITO: It should be at the top. I had them in order.
THE WITNESS: Well, I rearranged them anticipating a different sequence. There's a date, April 5th, 2000, which is the last time I made an attempt to update it.
BY MR. POLITO:
Q Is there any additions, deletions you

want to make to that CV?

A I don't think anything important for these purposes.

Q What you may consider important and I might -- be important are two different things. So I need to know if there's any additions or deletions or corrections you want to make to that CV.

A No.

Q Doctor, do you practice medicine with any other physicians?

A Yes.

Q How many? Do you practice in a group?

A Well, I am member of a group of pulmonary and critical care physicians. That group is approximately 25 in number, plus a bunch of Ph.Ds who do clinic work and then the department of medicine which has over 300 members.

Q But the group you actually practice with are pulmonary critical care physicians, true?

A Yes.

Q Okay. In the group you practice, are

there any family practitioners?

A No.

Q Any internists?

A We are all internists.

Q Okay. But you practice internal medicine specifically as opposed to pulmonary and critical care?

A Critical care internal medicine is very -- it will be based in internal medicine. I think if I said no, I'm not accurate.

Q Okay.

A Especially in critical care medicine; that's all internal medicine.

Q Describe your practice for me though.

A Well, in the last several years my practice has gravitated to intensive care. Prior to the last several years, I had a more balanced practice with some ambulatory medicine, seeing primarily patients with respiratory disease.

But it's fair to say most of these patients have other problems as well, which is why I didn't want to agree that I don't do internal

medicine, and the last several years almost all of my practice is in the intensive care unit.

Q So currently, Doctor, how much of your practice is devoted to intensive care work?

A My clinical practice, 1'11 estimate 85 percent.

Q What's the remaining 15 percent?

A I do some consultation work in the oncology center and bronchoscopy and pulmonary physiology.

Q So in terms of currently, Doctor, none of your work is currently in dealing with primary internal care medicine, true?

A I think that's accurate in relation to how most people interpret the term.

Q You've never practiced as a family practitioner, have you, Doctor?

A For two years I worked in the Indian Health Service in the -- reservation and during that time I was in the adults family practice.

Q What year was that, Doctor?

A 1979 through 1981.

Q So it's fair to say then since 1981 you've not practiced family practice medicine, true?

A Correct.

Q I want to go back to -- you said -- what part of your current practice is clinical medicine?

A Could you restate that? Do you mean what percentage of my time, my --

Q Well, I've reviewed other transcripts of yours that you've given in other cases and I just want to figure out how much time is devoted to research, how much time is devoted to administrative work, how much is devoted to clinical practice of medicine, how much is involved in teaching.

A Okay.

Q If you could break that down for me?

A I'll estimate I'm spending 35 to 40 percent of my time doing clinical work, 30 percent of my time doing research, which is in the intensive care unit, a clinical environment,

and another 80 percent of my time teaching and administrative work.

Q How much is teaching?

A I'm sorry about the humor there. After the clinical and research work, the balance is teaching and administrative.

Q How does it break down? So out of the anywhere from 25 percent to 30 percent, how much of that is teaching and how much of it is administration?

A I would say half and half.

(Short break taken.)

BY MR. POLITO:

Q Do you hold yourself, Doctor, out as an expert in any other field other than internal medicine, pulmonary medicine and critical care medicine?

A No.

Q Have you ever practiced occupational medicine?

A No.

Q Are you familiar with the standards of

care as they relate to family practitioners?

A In relation to this particular case, I'm comfortable with that. So I'll say yes.

Q So in other cases, you might not be comfortable in testifying against a family doc?

A Yes.

Q How much of your current time is spent in the office, Doctor, seeing patients?

A When you say the office, do you mean in the clinical environment seeing patients or an ambulatory office?

Q Well, I thinking of doctors having offices where patients come and see them in an office such as Dr. Carson, I want to know how much of your time is spent seeing patients in that type of setting currently.

A I don't have an ambulatory practice. So if an office is an ambulatory practice where patients walk in and walk out, the answer is zero.

Q When is the last time you had an ambulatory practice, Doctor?

A It's approximately ten years ago; ten or

eleven years ago.

Q When was the last time you saw a patient as a primary care physician such as Dr. Carson?

A That would be in 1981 when I left the Indian Health Service.

Q What percentage of your practice is referrals from other physicians?

A I'll estimate 50 percent of the patients who I take care of are -- have been previously cared for by another physician, and I'll work with that physician in that context. And the other 50 percent, there's no such physician.

Q Okay. Currently, Doctor, do you have any active patients that are your patients?

A At this moment?

Q Yeah.

A No.

Q Doctor, in your practice do you order chest x-rays?

A Yes.

Q Do you interpret your own chest x-rays?

A I look at all the x-rays, yes.

Q Do you feel comfortable with reading chest x-rays?

A Yes.

Q You would agree though, however, that many physicians like Dr. Carson may rely on radiologists for interpretations of x-rays?

A I agree.

Q And that's entirely appropriate to do?

A Yes.

Q Doctor, I note in -- that you have some publications in your CV?

A Yes.

Q Do any of them deal with the subject matter in this case?

A I think I have a couple of articles or chapters dealing with asthma, cardiopulmonary interactions in asthma.

The subject matter of that material is not very important to this case.

Q If you could tell me which articles you're referring to and if there's a number, I would appreciate it.

MR. POLITO: Off the record.

(Discussion off the record.)

THE WITNESS: I'm going to look one more time. I'm not surprised if it's not here.

MR. POLITO: Off the record.

(Discussion off the record.)

THE WITNESS: I can't find it, but I'll be happy to get that for you.

MR. POLITO: If you could supply that to Donna.

THE WITNESS: Sure.

MR. POLITO: I appreciate it.

THE WITNESS: I'll make a note to myself.

MS. TAYLOR-KOLIS: That's okay. I keep a sheet of whatever we promise.

BY MR. POLITO:

Q Doctor, have you ever written on this subject of hard metal disease?

A No.

Q And by that, do you understand that among hard metal, it was exposure to cobalt and tungsten?

A Yes, I understand that.
Q And you've never written on that subject?
A Correct.
Q Have you given any lectures on this subject of asthma?
A I think I probably have given some lectures to medical students years ago.
Q Do you have any type of notes or handouts from those lectures?
A No.
Q Have you ever given a lecture on the subject of hard metal disease?
A No.
Q Doctor, if I wanted to go to an authoritative textbook on the subject of asthma, could you refer me to one or a couple?
A The term authoritative I know is an important one here and I'm not sure what it means. There's lots of good textbooks with good chapters about asthma.
Q I noticed in your own file you went to various articles. Are the articles that you

pulled up there authoritative on the subject of this case?

A Can you give me a definition of authoritative?

Q What do you understand it to be?

A I don't understand it in this context.

Q Something that you would look at and rely on?

A Rely on? I would look at it with the purpose of getting some enlightenment and would also probably look at it with a healthy level of skepticism.

Q So are you telling me then there's no literature then you would rely on to help you on the subject of either asthma or hard metal disease?

A No. I just -- maybe you're substituting a word relying for authoritative, and I'm not sure where the term is going and what it means here. I do look at numerous textbooks from time to time on various subjects including asthma.

Q Okay. If you wanted to go to a textbook,

Doctor, what textbook would you go to look at if you wanted to look up asthma?

A A good textbook in pulmonary critical care is authored by Murray and Nadel. Another good one by Alfred Fischman.

I have critical care textbooks on my bookshelves and they have commentary about asthma. My favorite is edited by an intensivist named Rippe, R-I-P-P-E. Another good one is edited by Sevetta. Another good one by Paul, Schmidt and Wood.

Q I'm sorry, what was the last one?

A Paul, Schmidt and Wood. Three editors.

Q Am I to understand the first two are pulmonary care textbooks?

A Yes.

Q And the last three are critical care textbooks?

A Yeah.

Q Where would a -- how about -- give me a family practice textbook that Dr. Carson --

A In think internal medicine textbooks are

widely available, and I suspect many family practitioners will use them. And a good bread and butter textbook in internal medicine is by Harrison and another one by Stein.

Q 'Do you subscribe to any journals dealing with family practice?

A No.

Q Have you ever?

A No.

Q Do you subscribe to any journals in internal medicine?

A New England Journal of Medicine.

Q Anything else?

A No.

Q Do you subscribe to any occupational medicine journals?

A No.

Q Can you tell me any occupational medicine textbooks you would go to on the subject of hard metal disease?

A Well, I looked at a couple of occupational textbooks, and if you like, I can

tell you those.

Q You looked at it for this case?

A Yes.

Q Why did you do that?

A So I would have some more familiarity with the problem that the patient is thought to have.

Q You didn't have it prior to then?

A Very little. There's a recent text edited by Dr. Rom, R-O-M. It's entitled Environmental and Occupational Medicine. Another source I looked at, a text edited by Raymond Parkes, P-A-R-K-E-S, entitled Occupational Lung Disorders.

Q Doctor, how do you define standard of care?

A I'd say it's a level of care that a group of physicians would agree upon is an acceptable level of care.

Q In one of your transcripts you define standard of care as defined by people with similar levels of training and experience working with

similar levels of resources.

Do you stand by that definition?

A I think I would stand by that. I think that was pretty good, by the way.

Q Do you know anything at all about Dr. Carson's training and education and experience or his resources that he has available to him?

A Well, here's what I think I know. I believe he completed medical school and residency in family medicine and that his -- I gather from his medical records that I reviewed in preparation for this case that his practice is primarily office-based practice where patients are ambulatory.

Q As opposed to yours which is not ambulatory?

A Correct. With respect to resources available, I think -- you know, in the United States, of course, communications are so easy, libraries, subscriptions, textbooks and so on are so readily available, so I'd assume that those resources are available to Dr. Carson.

Q At the time you wrote your initial report, did you have any familiarity with his training and education and experience?

A I don't think I had that familiarity at the time. I don't think I -- I don't think so.

Q From your review of Dr. Carson's deposition, did you find him to be well educated and well trained and appear to be a capable and conscientious physician?

A Would you -- there are several things there. Can we go in one by one?

Q Sure. Well educated?

A I have no problem with the education.

Q Well trained?

A I guess a similar thing. Yes, no problem.

Q Appear to be a capable and conscientious physician?

A I think so, yes. The only hesitation there is I'm only limited to the medical records that I have based on those.

Q You also had his deposition as well,

true?

A Yes.

Q Doctor, you agree when practicing medicine you have to look at it prospectively, true?

A Yes.

Q It's much easier for doctors to have looked at it from a retrospective standpoint, true?

A Yes. By this I think you mean I should not try to use any information that was ultimately available in terms of diagnosis and then retrospectively criticize him.

Q Correct.

A I agree with that.

Q You knew, Doctor, when you got this case, what the patient was ultimately diagnosed with, true?

A Yes.

Q So as you began reviewing Dr. Carson's records, you already knew the end of the story, true?

A Yes.
Q Dr. Carson didn't have the benefit of that, did he?
A No. In relation to where I think your suggesting with the last couple of questions, I will be happy to get into the detail of the visits and explain why I'm giving the opinion I have independent of any knowledge of the ultimate outcome.
MS. TAYLOR-KOLIS: Don't worry. He just likes to ask that question.
THE WITNESS: I just want to --
BY MR. POLITO:
Q So the record is clear, Doctor, you knew as you were reviewing all the records of this physician (Indicating), you knew the end of the story, true?
A Correct.
Q What does nonspecific symptom mean, Doctor?
A It's a symptom that's associated with several different problems. It's not specific or

uniquely associated with one problem.

Q Doctor, when were you first contacted in this case --

MS. TAYLOR-KOLIS: You can use your correspondence file.

THE WITNESS: Yeah, I would have to look back --

MR. POLITO: Go ahead.

THE WITNESS: -- to see when I was first contacted. I think I will have to find the letter, the cover letter --

MR. POLITO: They are in there, Doctor. They are in there.

MS. TAYLOR-KOLIS: I think that might be it. We shouldn't think these are all the letters --

THE WITNESS: Well, there's a letter dated July 31st, 1998 and this is the cover letter that came with the three-ring binder with the medical records.

BY MR. POLITO:

Q So what you're referring to is Exhibit 5?

A Yes.
Q Okay. And it came along with Exhibit 12?
A Yes.
Q Okay.
A And this is not the first contact with Ms. Kolis because she called me on the phone, I'm pretty sure. Well, I'm certain, and asked me if I would have a look at this case.
Q Did she tell you what the case was about in a nutshell?
A I don't honestly remember, but it's hard to imagine I would have agreed to look at the case without her telling me. So, yes, I'm virtually certain.
Q Would it be fair to state that it's virtually certain that before you even looked at any of the records, you already knew that the man was ultimately diagnosed with hard metal disease?
A I think that's probably true.
Q Okay. Have you ever reviewed any other cases for Ms. Kolis?
A No.

Q Do you know how she got your name?
A She explained to me that she got my name from some compilation of medical directors of residency programs.
MS. TAYLOR-KOLIS: GMAD. Go ahead.
BY MR. POLITO:
Q Other than this case, have you reviewed any other cases for Ms. Kolis?
A No.
Q What were you asked to do, Doctor?
A Well, I don't have a distinct recollection of our conversation in terms of what I was asked so do, but I undertook the case for the purpose of giving an opinion --
Q Okay.
A -- about whether there was a problem in the management of the patient.
Q And specifically you were asked to review Dr. Carson's care?
A Yes.
Q Were you asked to review Dr. Leano's care?

A No.
Q Were you asked to review Dr. Arora's care?
A No.
Q Were you asked to review Dr. Dacha's care?
A No.
Q Were you asked to review the care rendered by the emergency room physician at Elyria Memorial Hospital?
A No.
Q The only care you were asked to review in this case was the care rendered by this physician, Dr. Carson?
A I think that's right.
Q Were you asked to review whether or not Gary Diederich was in any way responsible for his own disease?
A I don't think I was asked to comment on that.
Q So the sole thing you were asked to do by Ms. Kolis was to look at this physician's care?

A I think that's right. The only reason I'm being a little tentative here is that I'm not certain Ms. Kolis did not ask me to comment on the other physicians' care, but I'm certain that shortly after getting involved in the case that was the focus.

Q Well, did you in any of your reports comment on the care good or bad on the other physicians?

A As you know, the answer is no.

Q Did you in your report comment good or bad on whether or not Gary Diederich was a responsible patient or not?

A No.

Q From my review, Doctor, you wrote your initial report on September 23rd of 1998. I think it's in here. Let's get this out of the way. We don't need that anymore.

MS. TAYLOR-KOLIS: Did you mix it --

MR. REMINGER: Which? The reports?

MR. POLITO: Yeah. They are here somewhere.

MS. TAYLOR-KOLIS: Okay, John, there you go. All right.

BY MR. POLITO:

Q And that's Exhibit 3, correct?

A Yes.

Q Okay. You also wrote a report dated August 5th, 1999, correct?

A Yes.

Q And that's Exhibit 4?

A Yes.

Q Have you authored any other reports in this case other than 3 and 4?

A No.

Q Are there any drafts that you have in your possession?

A No.

Q You brought today with you your complete file on this case, true?

A Yes.

Q Okay. Nothing has been removed?

A Correct.

Q Now, in terms of prior authoring your

report, in terms of correspondence, you have what we've already identified as Exhibit 5, true?

A Yes.

Q Which was sent to you, Exhibit 12, correct?

A Yes.

Q Okay. And you received a subsequent letter dated August 19th, or some additional records were sent?

A Yes.

Q And I believe those are Exhibit 13?

A Yes.

Q From my review of the records, those were the only correspondence you received prior to authoring your first report?

A I think that's right.

Q Now, after you wrote your first report, then you received the deposition of -- strike that.

After you wrote your first report and before you wrote your second report, you received Exhibit 7, true, which is the deposition

of Dr. Carson?

A Well, the dates -- 1 don't argue with the dates.

Q I think it's clear from reading your report, then you had talked about reviewing Dr. Carson's deposition transcript?

A Yes.

Q I'm sorry. I apologize, really it's Exhibit 8. Donna told you in the first, Exhibit 7, that they were taking the deposition, and then 8, she sent you the transcript too?

A True.

Q And I take that back. You also prior to authoring your second report, also apparently received Dr. Arora's letter which is dated -- Exhibit 14?

A It's going pretty fast here.

Q Okay. Take your time.

A And I think you're confused. Right. Maybe we should just start it all over again.

Q Okay. Well, we'll start all over again. It's clear when you initially wrote your initial

report, what you had was Exhibit 12. Is that true?

A Yes.

Q When you wrote your -- and you also had Exhibit 13?

A I believe that's correct.

Q Okay.

A Let's double check to make sure that the date of Ms. Kolis' letter that came with Exhibit 13 precedes the date of my report.

Q Which is there; August 19th, 1998.

A Correct, that is the cover letter that came with that supplement and my letter with my first report is dated September 23rd.

Q Then after you wrote your first report, you received Dr. Carson's deposition, which is marked as Exhibit 16?

A Yes.

Q Okay. You also -- and you can take a look at your report if you want.

A You're referring to my second --

Q Second report. Here it is. Which is

Exhibit 4, true?

A Yes.

Q You also reviewed Dr. Arora's letter which is dated -- I mean, which is marked as Exhibit 14?

A Correct.

Q Did you -- did you review anything else prior to authoring your second report?

A I don't think so.

Q Okay. And then since you authored your second report, you have reviewed a couple of additional things, true?

A I saw a deposition from Dr. Mehta.

Q Okay. Which is Exhibit 15?

A Yes.

Q M-E-H-T-A. Okay. You also reviewed the expert report of Dr. Carl Culley, C-U-L-L-E-Y, Jr.?

A Correct.

Q From the Cleveland Clinic?

A Yes.

Q And that's Exhibit 17?

A Correct.

Q You also reviewed the expert report of Dr. Anthony DiMarco which is Exhibit 18?

A Correct.

Q Is there any other documents -- we'll get to these in the medical literature in a second -- but are there any other documents other than medical literature you have reviewed for this case other than what we've talked about?

A I don't think so.

Q I want to go over a couple so the record is clear on a couple things, Doctor. Grab your first report, if you would, Doctor. I want to be clear on the record what indeed you did review when you rendered your first report, okay?

A Yes.

Q At the time you rendered your first report, you had the Elyria Memorial Hospital and Medical Center records from 1983 through 1997?

A Yes.

Q Okay. You also had Dr. Carson's office records from March of '93 through March of '97?

A Yes.
Q You also had the medical reports of the Elyria Medical Clinic from August of '96 through December of '96?
A Yes.
Q You had medical record of Dr. Dacha from March of '97 through November of '97?
A Yes.
Q And finally you had the medical records of the Cleveland Clinic from June of '97 through October of '97?
A Yes.
Q When your rendered your first report, those were all the records that you reviewed in rendering your opinions?
A Yes.
Q And then, as we indicated, since you wrote your first report, what you had in addition to write your section report was Arora's report as well as Dr. Carson's deposition?
A Yes.
Q When did you review the medical

literature in this case, before your first report or your second report?

A Both.

Q So you got some in before the first report?

A Yes.

Q And then some more after the second?

A Yes

Q Were these articles you obtained yourself?

A Yes.

Q Could you tell me, Doctor, and give me the exhibit numbers, what medical literature you reviewed prior to your first report?

A I believe an excerpt from a chapter in the textbook by Raymond Parkes that I mentioned early.

Q What exhibit number?

A Exhibit Number 20.

Q Okay.

A I had this available to me prior to preparing the first report and also this excerpt

from another occupational -- another book on occupational asthma.

I didn't mention this earlier; the editors are Bardana, B-A-R-D-A-N-A, Montanaro and O'Hollaren. This is Exhibit 24.

Q Any other literature that you reviewed prior to issuing your first report?

A No.

Q Would you agree that both of those articles from texts -- or I think they were both from textbooks?

A Yes.

Q They are occupational textbooks, medicine textbooks?

A Yes.

Q Did you pull up any literature from any family practice journals or texts or internal medicine texts prior to authoring your first report?

A No.

Q Let's talk about your second report. What articles did you review for your second

report?

A I didn't review any additional literature for the second report.

Q Did you review some after you wrote your second report?

A Yes.

Q What literature was that?

A The sections from the chapter by the -- in the most recent textbook on occupational lung disease or occupational medicine. This is Exhibit 19, the text by Rom.

Q Okay.

A And I also referred to a lengthy report by an NIH committee convened to provide information to clinicians caring for patients with asthma. This is labeled Exhibit 21.

Q What was the date of that?

A This is published in 1991 in the Journal of Allergy and Clinical Immunology, volume 88, page 425.

Q Anything else?

A I also visited the NIH's web site to see

a more recent version of that same report.
Q When you say more recent, when was that?
A 1999.
Q Have you now told me about all the medical literature then that you have reviewed for this case?
A I think we have covered it all.
Q Doctor, have you reviewed any medical literature, any practice textbook?
A No.
Q Any internal medicine textbook?
A No.
Q You went to specialty journals and textbooks, true?
A Yes.
Q Doctor, I noticed in your file you kept some notes which I believe were marked as Exhibit 2. Could you pull those out?
A (Witness complies.) Yes.
Q When were those notes generated?
A I believe 1 prepared these before generating my first report to Ms. Kolis.

Q There are also various stickies on Exhibit 12. Would those have been created prior to authoring your first report?

A The vast majority of those stickies were there in preparation for the first record.

Q And I would assume the same thing for Exhibit 13, which is that light blue -- were any stickies on that --

A There are no stickies, but there are lots of underlining and some comments, and these would have been done before the first report.

Q Other than that Exhibit 2, do you have any other independent notes as opposed to the notes written on medical records or depositions?

A Well, I don't think so. But if they're not on this table, the answer is no.

Q Okay.

A There's nothing else that's not on this table.

Q Have you ever seen Dr. Leano's records?

A No.

Q Okay. Other than Dr. Arora's report,

have you seen any records from him?

A No.

Q Have you ever seen any pharmacy records on this patient?

A I think the answer is no unless they're in these binders here.

Q Have you ever seen any records from the Bureau of Worker's Compensation on this patient?

MS. TAYLOR-KOLIS: Objection, but you can answer it.

THE WITNESS: No.

BY MR. POLITO:

Q Have you ever seen any chest x-rays, the actual films?

A Yes.

Q When did you receive those?

A I received those about two weeks ago.

Q Did you make any notes regarding your review?

A No.

Q And those were the chest x-rays done or ordered by Dr. Carson?

A Yes.
Q I'm sorry, how many films was that?
A Offhand, I don't know. There were approximately ten films.
Q Okay. Were they all chest x-ray films?
A I think they were.
Q Other than those approximately ten chest x-rays films, have you seen any other films in this case?
A No.
Q Have you seen any videos or photographs of the patient, the plaintiff Gary Diederich?
A No.
Q Have you seen any records from Mr. Diederich's employer?
A No.
Q Have you seen any materials, safety data sheets from his employer?
A No.
Q Have you seen any records regarding what dust, chemicals, fumes Mr. Diederich was exposed to?

A Other than what's commented in by Dr. Mehta, I have not seen anything else.

Q Have you ever seen the affidavit of Gary Diederich attached to his case against his employer?

MS. TAYLOR-KOLIS: I'm going to object. You can answer the question.

THE WITNESS: No.

BY MR. POLITO:

Q Have you ever seen the deposition of Gary Diederich or Tony Diederich taken in this case?

A No.

Q Have you ever seen the deposition that was taken in their case against the employer?

A No.

Q Have you ever spoken with or examined Gary Diederich?

A No.

Q Ever spoken with any of his family members?

A No.

Q Have you spoken with any of his treating

physicians?

A No.

Q Ever spoken with any physician about this case?

A I don't think I've ever talked to another physician about it.

Q You've not gone to any of your occupational medicine physicians and talked to them about it?

A No.

Q Or anybody in your group?

A Correct.

Q Have you spoke with any fellow employee --

A Excuse me. I asked one of my colleagues whose focus is asthma if he could point me towards guidelines that I ultimately obtained and are labeled as Exhibits 21 and 23. In the context of that discussion, I told him I was reviewing this case.

Q Why did you ask him?

A As I mentioned, he focuses on asthma and

I was reasonably sure that he would know where to steer me to find these guidelines.

Q Have you spoken with any of Mr. Diederich's fellow employees or supervisors?

A No.

Q Is there any information you've asked for and not been provided?

A No.

Q It's fair to say you are aware that Mr. Diederich started at Diamond Products back in 1985, correct? 1986, I believe?

A You know the year better than me, but it is my understanding he was working there for a number of years before Dr. Carson saw him.

Q It would be fair to say then from 19 -- if he started 1986 through 1993, is it your understanding during those seven years he had been exposed to cobalt and tungsten?

A Yes.

Q Do you know what type of exposure he had during those years; was it daily exposure, weekly exposure, monthly exposure?

A I believe it was frequent, probably daily from what I've read about his work and the workplace.

Q During those seven years that he worked prior to seeing Dr. Carson, did he ever wear a protective mask, any type of protective equipment?

A It's my understanding that he generally did not from comments I've read in the records that are available to me.

Q What is your understanding of the type of materials he was exposed to during his employment?

A I believe cobalt is one and tungsten, I think, was another that I believe he had been exposed to.

Q Anything else?

A I don't know. I don't know anything else for sure.

Q And what was the basis of the fact that he was exposed to cobalt and tungsten?

A My basis? Do you mean what do I base my response on?

Q Yeah.

A By what I've read in the records available to me, mainly Dr. Mehta's evaluation.

Q Were you aware that when he saw Dr. Mehta, he brought in materials, safety data sheets to him?

MS. TAYLOR-KOLIS: I'm going to object to the characterization. The testimony of Dr. Mehta was that he asked the patient to obtain them. So that you're clear on the context.

THE WITNESS: So would you restate the question?

BY MR. POLITO:

Q Let me back that up. Prior to Dr. Mehta, had Gary Diederich ever told anyone he had been exposed to either cobalt or tungsten?

A I don't recall any comment on that in the records that I have.

Q Now, he was first diagnosed with hard metal disease in 1997?

A That's right.

Q When in your opinion, to a reasonable

degree of medical probability, did Gary Diederich first contract hard metal disease?

A I suspect it happened insidiously starting when he took employment at his workplace.

Q So 1986?

A If that's when he started, then, yes 1986.

Q And it's your opinion, to a reasonable degree of medical probability, that from 1986 through the time in 1997 it progressively got worse?

A Yes.

Q What is hard metal disease, Doctor?

A It's a disease of the lungs caused by certain metals that are encountered in some work environments, such as cobalt and tungsten, and cadmium is another on the list. Perhaps nickel. Causes coughing --

Q I'll get to the signs. I just want to know what is it first. So it's disease of the lung caused by certain metals?

A Yeah, that's a start.

Q We'll get to the signs and symptoms in a second. What is the pathophysiology?

A I'm not an expert on the pathophysiology of this disease. It's inflammation in the lungs. The pathology shows inflammation, shows some peculiar giant cells. There's necrosis that occurs in the interstitial of the lung in the advanced stages of emphysema and abnormal increase size of certain air spaces.

There is a loss of diffusion capacity which is devoted in the lung to exchange gases. There is restriction, which is the inability of the patient to get the normal amount of air into the lungs, and there's obstruction, which is abnormal ability to get air out.

Q As of the present time, Doctor, how many patients have you treated primarily or made the diagnosis of a hard metal disease?

A I don't know that I've ever had one. I may have. I might have missed the diagnosis.

Q How many patients have you treated with hard metal disease?

A I don't recall that I've had one.
Q So it's fair to state up to the present time, you've never diagnosed or treated a patient with hard metal disease, true?
A I think that's right.
Q So it's fair to say then when you started your review of this case to bring yourself up to date, you had to go to the medical literature to help you find out about hard metal disease, true?
A It's fair to say that. But I think it's also fair to say that my reading of the literature on hard metal disease was not to help me think through this management of the case; it was because I was curious to know something about hard melt disease on a case that I'm spending many hours thinking about. I wanted to learn something for myself.
Q Well, are you telling me, Doctor, that before reading that literature on hard metal disease, you could have told me what the signs and symptoms of that disease are?
A No, I could not.

Q You couldn't have told me what the pathophysiology of what hard metal disease is, true?

A Let me back up to the last question. I think before I read this literature, I would have recalled from my training -- certainly not my experience, but from my training -- that there was hard metal disease that occurs in the workplace and that certain signs and symptoms include coughing and shortness of breath.

What was the next question? I'm sorry.

Q My question is: Without reading the medical literature, do you know what the pathophysiology is of that disease process is?

A I think prior to reviewing that literature, I had lost that.

Q Do you agree, Doctor, that everyone exposed to those metals in the workplace contracts hard metal disease, true?

A That my understanding is that they all contract it?

Q No, that not all contract it.
A Correct, not all contract it.
Q Did you know that on your own, Doctor, or is that based on your reading?
A I knew that.
Q What percentage of those are exposed to disease in the workplace actually contract it?
A I believe it's a small percentage.
Q Do you know what that small percentage is?
A I think it's in the ballpark of 10 percent if it's looked for rigorously. Some patients have it, but it's so mild that they don't know it.
Q So about --
A I think it's also important to add in here that the percentage of patients who get it depends on the specific workplace and the measures used to prevent inhalation.
Q Doctor, what percentage of patients who wear a protective mask or equipment contract hard metal disease?

A I don't know that offhand, but I believe the masks are thought to be useful to substantially reduce the incidence of the disease.

Q What percentage of patients who are exposed to hard metals in the workplace contract a fibrotic reaction in the lung?

A Again, I don't know the percentage offhand, but I think it's a very low percentage, less than 10 percent.

Q Now, from my review of the literature, patients who are exposed to hard metals can develop a number of different conditions, true?

A Yes.

Q One is occupational asthma?

A Yes.

Q Another one is hypersensitivity pneumonitis?

A Yes.

Q And the third one is interstitial fibrosis?

A Yes. And the fourth one is sinusitis.

Q So one of the conditions that may develop

from exposure to hard metals in the workplace, such as cobalt and tungsten, is occupational asthma?

A Yes.

Q Let's talk about the signs and symptoms of hard metal disease. If you could tell me what those are?

A Coughing, dyspnea. I mentioned a moment ago sinusitis, The symptoms of that are mucous drainage, sometimes headache.

Q Anything else?

A You asked me about symptoms. I'm sorry, what I just mentioned are symptoms. The signs on clinical examination, there may be bronchi --

Q Let's stay with symptoms. I'll give you a chance to talk about signs because I want to go on.

So the symptoms you mentioned to me then were coughing, dyspnea, sinusitis, headache?

A Yes.

Q Is coughing a nonspecific symptom?

A It is about as nonspecific symptom as we

get.

Q How about dyspnea?

A That's really nonspecific.

Q Sinusitis?

A Sinusitis is a disease, but as a symptom, postnasal drip is nonspecific.

Q Headache?

A Definitely nonspecific.

Q So all these symptoms, coughing, dyspnea, postnasal drip, headaches, are nonspecific symptoms which could be symptoms of a host of different diseases, true?

A Agreed.

Q Let's now go into the signs of hard metal disease. Physical exam first, is that fine with you?

A Well, the term sign means -- doctors mean on physical examination.

Q Okay. On physical exam, what would you expect to see with hard metal disease?

A Well, the lungs sound may be quiet. There may be occasional abnormal sounds such as

what we call raucous. There may be some crackles or rales. On occasion, I understand from my reading, that there may be pharyngitis.

Q Anything else?

A In advanced cases there may be signs of Cora-pulmonale which is right ventricular failure causing swelling, edema to the extremities.

There may be cyanosis. There may be clubbing. There may be jugal suspension.

Q Based on your review of the records from 1992 up until the time he saw Mehta in 1997, were there any findings of crackles or rales found on any physical exam of this patient?

A I don't recall crackles or rales.

Q Was any there any persistent pharyngitis from 1992 through 1997?

A I'm not sure how we're defining persistent. There were a couple of visits to Dr. Carson's office where there was complaining of sore throat.

Q Sore throat. That was back in '93, I think, once, maybe twice. Other than those two

times, did you see any other evidence of pharyngitis during that period of time?

A I don't think any other times mentioned.

Q Okay. Let's talk about -- we've now gone through the signs; now let's talk tests to rule in or rule out this disease process.

What tests are available to you to rule in or rule out hard metal disease?

A Well, there are a number of laboratory tests that we do.

Q Okay.

A With respect to the ruling in or ruling out, I think the most important thing is a good history taken from the patient about where he works, what he's exposed to, whether there's exacerbation of the symptoms when he's in the workplace as opposed to away from it. And then, of course, to nail the diagnosis on a piece of tissue is very useful as was the case in Mr. Diederich.

Q Before we get to the biopsy, are there some other tests that may be useful in leading one

towards that disease process?

A Chest x-rays may show some increased interstitial markings or emphasize changes -- small lung fields in advanced cases when there's obvious restriction.

Pulmonary function tests will show combined obstructive and restrictive disease and some loss of diffusion capacity.

Q How about arterial blood gases?

A In advanced cases, there will be high toxemia.

Q Is it true with arterial blood gases you're going to see arterial desaturation in -- diffusing capacity?

A Blood gas doesn't measure diffusion capacity. I mention that in the context of pulmonary function tests.

Q Okay.

A Yes, there is some loss of diffusing capacity. And, yes, whenever you lose diffusion capacity, you have a strong tendency to desaturate with exercise.

Q Is this disease process exposure-based; the greater the exposure, the more likely the patient is going to get the disease?

A That's my understanding. I think importantly the more severe the disease is, the greater and longer the exposure.

Q So the more the exposure, the more serious the disease?

A Yes.

Q Is there a legal limit that an employee can be exposed to in a workplace of either cobalt or tungsten?

A I think there is, but I -- this is not my field. I'm not sure of it.

Q You would agree this is a very rare disease process?

A Yes.

Q One that you've never even seen in your own practice?

A One that I have never recognized in my own practice.

Q When in your opinion, Doctor, to a

reasonable degree of medical certainty, did Mr. Diederich first experience respiratory symptoms secondary to his hard metal disease?

A I think there are some notations in medical records well before Dr. Carson met the patient.

Q Okay.

A If you want me to, I can pick off a date or two from the comments on the records.

Q Sure.

A Actually, I think -- these notes I made in Exhibit 2. In November 14th, 1990 at the EMH -- I guess that's Elyria Medical Hospital --

Q Elyria Memorial.

A -- Memorial Hospital -- he complained of pain in his ribs while and, quote, hard to breathe. He was given a diagnosis of pleuritic chest pain.

Should I go on?

Q No. So is it fair to say at least the first mention of respiratory symptoms from your review was back about three years before

Dr. Carson even saw this patient?

A Yes.

Q I want to talk about -- switch gears and let's talk about asthma now, okay? What is asthma?

A It's a disease characterized by episodic dyspnea and wheezing. It's caused by inflammation in the airways. In addition to the dyspnea and wheezing, the patient frequently has a cough, mucous production.

The symptoms are frequently alleviated to some extent by inhalation of beta agonists and sometimes some other medications.

Q Let me back up for a second. On the signs with -- strike that.

The symptoms with hard metal disease, you mentioned cough as well?

A Yes.

Q Is that a dry cough or productive cough?

A I believe it's usually dry.

Q Now, let's go back and talk about the symptoms with asthma.

A Yes.
Q We got that cough again, right?
A Yes.
Q But cough here is normally with production, true?
A Frequently a productive --
Q We're talking about asthma now?
A Yes.
Q We also -- I think you mentioned dyspnea with this one as well?
A Yes.
Q And what else? Cough, dyspnea, wheezing, you mentioned?
A Yes.
Q Anything else with asthma?
A There are a lot of different symptoms. A patient complaining of sometimes tightness in the chest. Sometimes they awaken at night with shortness of breath.
Q Anything else?
A I think these are the cardinal.
Q When was the last time, Doctor, you

treated someone with asthma?

A Probably the last time I was the attending physician in ICU, which would have been January.

Q But it's fair to say, Doctor, when you saw that patient in the ICU, the diagnosis of asthma had already been made, true?

A Correct.

Q When was the last time you as a primary care physician made the diagnosis of asthma?

A It was probably about 1988.

Q Okay. Fair to say doctor, you don't need -- you mentioned five of the cardinal, as you described it, symptoms of asthma. You don't need all of these to make the diagnosis of asthma, true?

A True.

Q Okay. You don't need -- I think it's nocturnal awakening to make the -- if the patient doesn't have that, it doesn't mean he or she necessarily doesn't have asthma, true?

A Correct.

Q The fact that they don't have tightness of the chest doesn't necessarily mean that they don't have asthma, true?

A True.

Q Even wheezing, there will be times with episodic where a patient might have wheezed, but by the time they see the doctor, the wheezing is gone, true?

A True. On repeated visits to the doctor, the odds are increasing that the wheezes are there.

Q But the mere fact that wheezing isn't found on an exam doesn't either rule in or rule out asthma, true?

A True.

Q Let's talk about the signs now of asthma.

What are the signs?

A Well, the most important sign is when we listen to the chest, we hear wheezing. In this respect, there are wheezes and there are wheezes. But asthma patients have wheezes that are in spades.

Wheezes are whistling noises, and they are caused by some vibration in the small airways and there are pitches of wheezes. And a typical patient with asthma, most patients with asthma at some time have a symphony of wheeze -- whistles .in both sides.

Q Anything else other than wheezing?

A Frequently when they're dyspneic we see signs of hyperinflation. We listen to the lungs. It's apparent the diaphragms are lower than they ought to be and the patient has to breathe at a higher lung volume. Percussion of the chest is hyperresonant.

On examination it's apparent the patient is using accessory muscles to get air in and maybe some agitation. In severe exacerbations there may be cyanosis.

Q Can we agree, Doctor, then based on what you told me the signs -- strike that -- the symptoms of hard metal disease and asthma clinically overlap?

A There is some overlap, yes.

Q Let's talk about causes of asthma. There's a number of different causes, true?

A There are certainly a number of associations. This is great area of controversy and --

Q That it is. But at least from my review of the literature, there can be exercise-induced asthma?

A Yes.

Q There can be occupational asthma?

A Yes.

Q There can be respiratory infections that can cause asthma-like conditions?

A Yes.

Q What other ones are you familiar with?

A Some believe that allergies will precipitate asthma and then there's idiopathic asthma which has no apparent explanation.

Q One of the things from reading Dr. Mehta's deposition, another thing he describes in terms of a symptom for asthma is the postnasal

drip.

Is that also a symptom of asthma as well?

A A lot of patients with asthma don't have, but a lot of patients with asthma also have bronchitis, allergic bronchitis. And some patients with asthma have these problems in their nasal passages and sinuses; polyps or there may be some things like that.

Q And as opposed to hard metal disease, the percentage of the U.S. population having asthma is relatively high, true?

A True.

Q I think I quoted a figure to Dr. Mehta somewhere in the neighborhood of 5 to 8 percent. Is that high, low?

A I think that's -- I believe that.

Q One of the things, and I think you've described it, one of the things about asthma is it's an episodic disease, true?

A Yes.

Q A patient may come into his doctor's

office once or twice a year for asthma flare-ups, true?

A Maybe once or twice a year, maybe many more times, maybe not at all.

Q It is a disease, as I think Dr. DiMarco or Dr. Culley said in their reports, it's a disease characterized by periods of illness alternating with periods of good symptom control.

Do you agree with that?

A With most patients, yes.

Q When you were treating patients back in, I think you said in 1988, you probably saw patients in your own practice that would come in periodically with flare-ups of asthma?

A Yes.

Q You treat them, and they may come back once or twice for continued flare-ups, and then you may not see them for six months?

A Yes.

Q Are persistent chest x-ray abnormalities consistent with a diagnosis of asthma?

A They're not inconsistent, but they're not

typical of asthma. They're suggestive of something else.

Q If we saw persistent abnormalities on a chest x-ray, it would make you more to think of other disease processes, one might be hard metal disease?

A It would probably be the last I would think of, but yes.

Q The last you would think of because hard metal disease is so rare?

A Right.

Q At tests to rule in or rule out asthma, is there any ones that are helpful?

A Well, usually you don't need a test. Usually the symptoms are reported by the patient and the examination with the symphony of wheezes is sufficient to make the diagnosis.

Q Okay.

A On occasion we'd have a patient who had symptoms, but it's not a convincing picture, and so we will do a test or two.

Q But what you're telling me is usually

just based on the history and the physical exam, then that's usually enough to make the diagnosis of asthma?

A Usually.

Q Okay. And the treatment for asthma is what?

A There are a number of treatments. If there's a precipitating experience, then we'd recommend avoiding it if at all possible.

Q So if exercise brings on asthma in certain times of the year, you would tell them to avoid?

A People who exercise, need to exercise, and exercise-induced asthma is seldom terribly debilitating.

Q Got you.

A So we generally don't tell patients that. They know it's an option. Now, if a patient watching the workplace and wheezes, then --

Q How about a patient who mows the grass, does that sometimes bring on asthma?

A Some patients will have that experience.

With respect to medications, nowadays the -- one of the first-line drugs is inhaled corticosteroids.

Q How about back in 1993 and '94?

A Those were available.

Q Okay.

A At that time there was a growing -- growing position by specialists to use inhaled corticosteroids to -- as a first-line treatment for asthma.

Beta agonists have for years have been on the front line of treatment for asthma. Some patients will have beneficial response from inhaled cromolyn, sodium cromolyn. Some patients have gotten some benefit from theophylline, and that's waning in frequency of use.

Some patients require medication with systemic corticosteroids and then most recently there are inhaled lucotryine inhibitors.

Q So let me dot a couple drugs. Proventil was that a known --

A Beta agonist, yes.

Q -- appropriate for asthma?
A Yes.
Q Okay.
A Beclovent, which the patient was on, is an inhaled corticosteroid.
Q And if there's also some nasal symptoms along with the asthma-related, it would be appropriate to use something, Rhinocort?
A Yes.
Q How about Seldane? Appropriate?
A Yes.
Q Fair to say if we assume in this case that Mr. Diederich had asthma throughout his treatments with Dr. Diederich (sic), the manner in which he treated him for the asthma was appropriate and within standards of care?
A I would say the initial treatment for the first approximately a year was appropriate.
Q Okay. From my review of the records, Doctor, and you tell me if I'm wrong, from 1993 when -- from March 16th of 1993, that's the first date you saw him, correct?

A Yes.
Q And I'm going to take you only up to until the end of '96, okay?
A (Witness nods head.)
Q So from March of '93 through the end of '96, I counted that he saw this patient 11 times. Do you have any disagreement with that?
A I'll have to do an independent count.
Q Let's just quickly go through it, Doctor, and then we can back up. You got your notes there?
A Yes.
Q March of '93, March 16th?
A Correct.
Q That was a respiratory complaint, correct?
A Yes.
Q So we got one there. Then we'll kind of make our own little cheat-sheet here. March 16th of '93 was a respiratory complaint, true?
A Yes.
Q Okay. He next saw Dr. Carson on 7/30.

That was not a respiratory complaint, true?
A I believe you're right.
Q Okay. The next one was 8/6 and Dr. Carson testified that the August 6th visit was inadvertently put in his record, and that's of the wife?
A I have come to realize that.
Q Okay. He next saw him on 8/17. That's a respiratory complaint, true?
A Yes.
Q 8/31, that's nonrespiratory complaint, true?
A He has a sore throat.
Q But there was no complaints about any things to do with his lungs, true?
A There's nothing specifically referring to lungs, true.
Q 10/11 was respiratory complaint, true?
A Yes.
Q He didn't see him again then until 2/1 of '94 and that was a respiratory complaint, true?
A Yes.

Q 2/28/94 was respiratory complaint?
A Yes.
Q 6/6/94 was a respiratory complaint?
A Yes.
Q 6/16 was a respiratory complaint?
A Let's slow down just a little bit. I've recorded on my own notes that on June -- on 6/13 that Mrs. Diederich called to report that the patient was short of breath, coughing and --
Q I'm talking about office visits, Doctor.
A Okay. 6/16 is the next visit to Dr. Carson's office.
Q And that was a respiratory complaint?
A Yes.
Q Then he doesn't see him for over a year, true?
A That's consistent with my notes.
Q And that was on 7/31/95 and that was a respiratory complaint?
A Yes.
Q And then he didn't see him for, again, a little less than a year, and that was on 5/6/96?

A Yes.

Q Based on my review from March of '93 through the end of 1996 -- now, I'm talking about visits to this doctor, Dr. Carson (Indicating) -- he saw him on one, two, three, four, five, six, seven, eight, nine occasions for respiratory complaints.

Would that be a fair statement?

A If you count the number of visits I agreed to with respect to respiratory complaints is accurate, then, yes.

Q So in the space of three-and-a-half years plus, he only saw him on nine occasions for respiratory complaints, true?

A Yes.

Q Okay. Let's talk about Dr. Arora now. You would agree from your review of Dr. Arora's report that asthma was within his differential diagnosis?

A Yes.

Q And we know Dr. Arora's a pulmonary physician, true?

A Yes.
Q And matter of fact, his treatment of this patient was if he had asthma, true?
A Yes.
Q He gave the Prodrox inhaler, steroids, all for the treatment of asthma?
A Yes.
Q That was the pulmonologist treating him in 1992?
A Yes.
Q Was hard metal disease within his differential diagnosis?
A I don't think he mentioned it. And I have no way of knowing what he was thinking if he didn't mention it. He did mention, however, near the end of his report that there was a concern that there might be a relationship to his occupational experience.
Q Okay. What did he tell the patient at the end, Doctor, to do?
A Well, let's --
MS. TAYLOR-KOLIS: Go ahead.

BY MR. POLITO:

Q Go ahead. Down at the bottom, what did he tell him to do?

MS. TAYLOR-KOLIS: Well, I just object to that. We don't know what the letter said.

MR. POLITO: Let me -- strike that question. Poorly worded, and Donna is entirely correct.

BY MR. POLITO:

Q He told the patient to return, did he not, in three to four weeks to see if the regimen was working?

A He said I would like to see back in another three to four weeks to see how much improvement he gets from his return.

Q Did the patient ever return in three to four weeks to see how the regimen was working?

A I have no knowledge that he did.

Q Did the regimen work?

A I don't know what the immediate response to the regiment was. What I know is that he came back to see if an admission with Dr. Carson's

office --

Q That wasn't my question. My question is: Did he come back to see Arora, the pulmonologist?

A As you know, I have no knowledge that he came back to see Dr. Arora.

Q And you have no knowledge if the regimen placed on him by Dr. Arora worked or not, true?

A True.

Q Do you fault the patient, Doctor, for not returning as instructed by Dr. Arora?

MS. TAYLOR-KOLIS: I'm still going to object. There's no evidence either in the record or the testimony of the client's that this consult letter that said he'd like to see him was ever communicated to the patient.

MR. POLITO: He didn't deny though, Donna. He said he had no recollection and --

THE WITNESS: That's what I have no knowledge.

MS. TAYLOR-KOLIS: He's talking about what your client said.

MR. POLITO: No, he said -- he -- do you

have any reason to disagree that that's what Dr. Arora told him?

THE WITNESS: No.

BY MR. POLITO:

Q Okay. So do you fault the patient for not returning in three to four weeks as instructed in the report of Dr. Arora?

A I'd say a patient has a responsibility for his own care. If he received that instruction and if he had the wherewithal to come back, then, yes, I would lay some fault --

Q Okay. Furthermore, he advised Mr. Diederich to wear a protective mask while working, correct?

A Yes.

Q Did Mr. Diederich ever follow his advice?

A I have very little information on that other than there's a comment by Dr. Mehta, I think, who says that he doesn't wear a mask.

Q If we assume, Doctor, that what's in that report is that he was instructed by Dr. Arora to wear a mask while working, if we assume that to be

true, do you fault the patient for then not wearing a mask during -- in his workplace?

A I think the answer is, yes, the patient should certainly make an attempt to wear a mask in the workplace.

Q Could we agree, Doctor, that the fault doesn't fall on you as the doctor; the patient has some responsibility?

A Yes.

Q So if a patient is instructed to do certain things and chooses not to do those things, then they should be held accountable, true?

A If it's his decision not to follow the advice, then, yes, he bears some responsibility.

Q What in your opinion was Mr. Diederich's total lung capacity as of the visit to Dr. Arora?

A The total lung capacity was not measured or attempted to be measured. An attempt was made to do --

Q Let me ask it this way: What in your opinion to a reasonable degree of medical probability was his total lung capacity at the

time he saw Dr. Arora back in 1992?

A As I'm sure you know, the quality of that spirogram is not optimal, but it allows us to put a lower limit on certain lung functions, specifically the vital capacity, and I believe the value he generated was 56 percent of predicted. So I believe that was -- that's a lower limit we can put on that.

Now, the total lung capacity and the vital capacity frequently track -- they usually track each other. So if you want to me to put it in terms of TLC, I suspect the TLC was no lower than 56 percent.

Q Okay.

A It might have been possibly greater than, that.

Q But when we deal -- because then while we deal in probabilities, Doctor, it's more probable than not that his total lung capacity as of -- what's the date?

MS. TAYLOR-KOLIS: September.

MR. POLITO: September of 1992 was about

58 percent?

THE WITNESS: About -- if we can put that word about in there with an underline under it, I'll agree to a reasonable degree of medical probability.

BY MR. POLITO:

Q Because, as a matter of fact, in one of your reports you relied on that, you made mention that there's been -- the patient has gone from -- I believe you referred to that in your own report, true.

A Yes.

Q And nowhere in your report do you say that it was a faulty reading, do you?

A I have to go back and see what I wrote here.

Q Read it. Matter of fact, you made reference --

A There's no question that this is a limited study, but what it doesn't allow us to do is put a lower limit on certain values such as vital capacity, FED1.

And to the extent that TLC is related and correlates with vital capacity, then we can make a reasonable estimation of TLC -- or a reasonable estimation of the lower limit of TLC.

Q And that reasonable -- that reasonable figure to a reasonable degree of medical probability would be around 58 percent?

A As a lower level, yeah.

Q Okay. So as of 1992, this man --

A Should I take a moment to read this now?

Q Sure.

MR. POLITO: I don't think in your first report. I -- strike that. Did you? I don't think Arora's records.

MS. TAYLOR-KOLIS: Well, because I didn't, so he certainly didn't have them.

THE WITNESS: I did comment in my first report and so that we can be straight on that, but -- and so I can explain why I didn't comment on that limitations of the study -- I said during that interval, referring to 1992 to 1997, Mr. Diederich's forced vital capacity

decreased from 2.25 to 1.81. And I didn't time it on a limitation there because the important thing is that the vital capacity is no lower than 2.85.

MR. POLITO: Okay.

THE WITNESS: So the minimal decrease we have is from 2.85 to 1.81, and that's -- that was the significance at that time.

BY MR. POLITO:

Q So it's fair to say --

A I'll stand by that because of the value --

Q You saw where Dr. Mehta said it was around 60 percent, if he had to give a figure in 1992 that it was around 60 percent?

I'm just trying to get your opinion within a reasonable degree of medical probability what this patient's total lung capacity was as of 1992.

A I think 60 percent in terms of the total lung capacity is a reasonable estimate.

Q So it's fair to say then from his

exposure to this and the reason why in your opinion it was abnormal was due to his exposure to cobalt and tungsten in retrospect?

A Yes.

Q So he certainly had a 40 percent reduction in his total lung capacity before even seeing my client, Dr. Carson?

A I have to reiterate that the 60 percent value is the lower limit.

Q Okay.

A I think it's not far off, but you have to underline "I think" because of the limitation of the study.

Q Well, then should you fault Dr. Arora for not repeating the study?

A I think Dr. Arora's plan is sensible to try some treatment, advise him to wear the face mask and see which way it goes.

Q Probably one of the things he would have done, if the patient would have come back to see him, was to do a repeat pulmonary function study?

A I think that's right.

Q And -- but the patient chose not to go back?

A The patient didn't come back. I don't know why.

Q Now, you say in your report that it did worsen then from 1992 until 1997, true?

A I believe it did, yeah.

Q In 1992 through 1997, I want to assume he never wore any type of protective mask as instructed by Dr. Arora.

MS. TAYLOR-KOLIS: I'm going to object, but go ahead and answer it.

THE WITNESS: Well, I know I'm not supposed to make assumptions that Dr. Mehta took a history and recorded that he didn't wear face mask, so let's go with that.

BY MR. POLITO:

Q Fine. So we'll make an assumption he gave that history to Dr. Mehta that he never wore a mask?

A Right.

Q So if Mr. Diederich had worn a protective

mask as instructed by Dr. Arora back in 1992 and then worn that from 1992 to 1997, we can agree to a reasonable degree of medical probabilty his lung condition would have not worsened as bad as it had, is that true?

A I think that's right. But here's where I'm not the expert, so you better get an occupational medicine expert on that one.

Q Well, are you telling me then you're not an expert on hard metal disease?

A I've told you that several times.

Q Okay. But looking at it -- you deal, Doctor, with diseases from workplace in your -- throughout your career, true?

A Would you say that again?

Q Diseases from workplace, asbestosis let's say, and you would you agree, Doctor, if you take the patient using -- or at least reduce the exposure via a protective mask, the condition usually doesn't worsen, true?

A Usually doesn't worsen as much, and perhaps can be prevented from worsening at all.

Q Okay. He first, as we note, saw Dr. Carson on March 16th of '93?

.A Yes.

Q And he gave a history of having asthma, true?

A It's recorded there patient has asthma per Dr. Arora.

Q Now, what I'm hearing you say -- I thought you said earlier that you believe that the treatment rendered by Dr. Carson from March of '93 through February of 1994 of Mr. Diederich was appropriate and within standards of care?

A Yes.

Q Okay. When he came in initially on March 16th of '93, he came in with a history of cough with production caused by activity, true? And use your notes; it's not a memory game.

A He came in with complaints of cough and upset stomach, upset stomach related to coughing to a certain extent as well as to meals.

Q And the diagnosis made by Dr. Carson was asthma on that date?

A Yes.
Q Okay. And the treatment given to him on that date was appropriate for the diagnosis of asthma?
A I agree.
Q Okay.
(Short break taken.)
(The record was read as requested.)
BY MR. POLITO:
Q Let's now go to July 30th of '93. We can agree there was no respiratory complaints voiced by the plaintiff on that date, true?
A On July 30th of '93?
Q Right. That was the problem related to the testicle.
A Oh, I'm sorry. Yes.
Q And then the 8/6/93, we now know that that was the wife's?
A Yes.
Q Okay. So let's now switch now to August 17th of '93.

A Yes.
Q Let me grab my notes from that. The main reason for the follow-up on that visit, Doctor, was for the problem with his testicle, true?
A Yes -- that's the initial complaint.
Q But during that, he gave a history of having his asthma acting up, he's having especially difficult time when he plays basketball?
A Yes.
Q And if we assume again it's at least a known causative factor to be exercise-induced asthma, true?
A Yes.
Q And so we would agree that, as you told us before, his treatment of the patient on that date was within the standards of care?
A Yes.
Q And his treatment for the asthma was appropriate?
A Yes.
Q Okay. We now go to August 31st of '93

and we talked about it that this was -- he came in with a sore throat?

A Yes.

Q And there were no respiratory complaints voiced by the patient on that date?

A No complaints that are directly related to his lungs.

Q Okay. The way Dr. Carson treated him was he got a throat culture on him, diagnosed him with pharyngitis and treated him with appropriate medications, true?

A Yes.

Q So his treatment on August 31st, '93 was appropriate and within the standards of care?

A Yes.

Q He now comes back on October 11th of '93, and on that date he has a complaint of a headache, mucous drainage and a cough and feeling weak and having some hot and cold spells?

A Yes.

Q This from review of the records -- strike that. The symptoms -- strike that.

Dr. Carson diagnosed him with bronchitis on that day?

A Yes.

Q What is bronchitis?

A It means inflammation of the bronchi.

Q What other signs and symptoms of that?

A Coughing, phlegm production, sometimes with fever, Chronic illness in the background, such as chronic bronchitis or emphysema, then there may be dyspnea as well.

Q Based on your review of that note from that date, 10/11/93, were the symptoms and signs consistent with bronchitis?

A Yes.

Q So his treatment of the patient on October 11th, 1993 was appropriate and within standards of care?

A Within a reasonable standard of care, yes.

Q Now, out of caution on that date, Dr.Diederich -- strike that -- Dr. Carson -- I knew at some point I would do that because I

always mismatch plaintiff and defendant.

Out of caution --

A We can't tell you guys apart either.

Q Yeah, good.

Out of caution, Dr. Carson ordered an x-ray on that date, did he not?

A He wrote await radiology interpretation of x-rays, so I say it as a yes.

Q And as you told us, Doctor, you had a chance to review those x-rays, did you not?

A Yes.

Q I want to hand you, Doctor, the October llth, '93 films and ask you to interpret them for me.

A We're going to have to hold these up against the light here.

MR. POLITO: Take whatever light you want, Doctor.

THE WITNESS: This is difficult for a couple reasons. One is we don't have an optimal view box. Another is because some of these films don't have an optimal exposure but

we'll will do the best we can.

MR. POLITO: Doctor, if you think there is more light over here, you get whatever light you need.

My question is what is your interpretation.

MS. TAYLOR-KOLIS: As a pulmonologist? Obviously -- radiologist, but as a pulmonologist --

MR. POLITO: Well, as a physician who regularly reads chest x-rays based on his previous testimony.

MS. TAYLOR-KOLIS: Okay.

THE WITNESS: Well, the heart shadow too is a little larger than I expect to see in a 28-year-old man. It may be large enough to say that it's cardiomegaly. It's right on the border there.

There is also some increased density beginning at the left hilum extending downward. Rather relatively well-defined linear density.

Well, actually, there are two streaks like this extending downward from the hilum.

BY MR. POLITO:

Q I'm sorry, you mean the left hilum?

A Downward from the left hilum behind the heart. In all probability, it's behind the heart.

Q Okay.

A And in the upper lung fields there is slight -- some extenuation of the lung markings.

Q Meaning what?

A Extenuation of the normal lung markings, which is nonspecific and if it was the only abnormality I've seen, I would say nothing more than slight increased lung markings in the upper lung field.

Q So if Dr. Brower after reviewing that x-ray were to write down his interpretations in his office note, what would you write down based on what the patient came in for and --

A Yeah. I would say the film is consistent with bronchitis or asthma, but that the streak extending from the left hilum is not typical for

asthma and should be followed up.

Q Do you see any fibrotic scarring on that x-ray?

A No. I don't see any markings that really represent fibrotic scarring.

Q I'm going to hand you, Doctor, what's been the -- interpretation of Dr. Higgins from 10/11/93.

Do you agree with that radiologic interpretation?

A Not only do I agree with it; I think my interpretation is virtually identical.

Q Okay. Is there any evidence then of interstitial lung disease on the 10/11/93 film?

A No.

Q Okay. He doesn't then come back to see Dr. Carson until February 1st of '94, true?

A Yes.

Q Is there any evidence you're aware of, Doctor, that the patient did not respond to the treatment given to him by Dr. Carson during the year 1993?

A I have no information here that says he did or not respond.

Q Okay. And you say in your report that as of the time of February 1994, I believe you use the term there had been six visits dealing with respiratory complaints. We now know that's incorrect, true?

A We know that the visit in August, I think 6th, was the wife's visit. So there are five.

Q Well, there were five visits, but you say five visits dealing with respiratory complaints. That's not true is it, Doctor?

A Well, let's count up again.

Q Okay, let's count.

A And we may have to argue over the definition of respiratory there. To me, the nose and the throat are part of the respiratory system. We like to say the nose is a part of the system we can reach with a finger.

If I include the visit for the sore throat, then I have one, two, three, four, five including February 1st.

Q Including February 1st?
A Yes.
Q But if we don't include it, Doctor, and there was all indication that the sole complaint he came in on the one date was for sore throat, there were no -- anything at all dealing -- there's no cough reported, nothing that deals with the lungs at all, true?
A Yes.
Q Okay. So bear with me. If we go -- because based on what you told me were the major symptoms of hard metal disease, pharyngeal is not one of the major symptoms, is it?
A I believe pharyngitis is one of the symptoms of a hard metal disease.
Q One of the cardinal symptoms of pharyngitis?
A I don't know if cardinal symptoms -- how I can tell you cardinal symptoms as part of a disease that I'm not sure I've ever seen.
Q Fair enough. So we're debating it's either the three or four times over a -- almost a

year period of time?

A I think you're debating four or five times.

Q No, I'm debating three or four.

MS. TAYLOR-KOLIS: He's excluding --

MR. POLITO: I'm excluding February 1st.

THE WITNESS: Oh, excluding February lst? Yes, three or four.

BY MR. POLITO:

Q Okay. On February lst, now, he comes in and he talks about -- cold symptoms times two days, getting worse, aching all over. He also talks about a severe cough due to asthma, so severe that the patient does vomit and this has been occurring for the past two years.

A We're talking about February lst?

Q Right.

A Yes.

Q Did you ever see that reported to any other physician prior to February 1st of '94 that he had coughed that much?

A So much that he vomited?

Q Yeah.
A I don't recall that he did.
Q Or that it was a chronic as opposed to an episodic cough?
A I'm sorry, would you say this last thing?
Q That it was a chronic versus an episodic cough?
A I don't think there is a recording in these notes that tells us much about the intervals between the visits --
Q Okay.
A -- except for the reason that patient is coming to the doctor shortly before the visit.
Q But one of the things we do know is he was not using his inhaler as instructed on his visit?
A Well, it says that his inhaler seems to be provoking coughing instead of curing it.
Q Okay. Now, on that date he did have decreased breath sounds in the left, true?
A Yes.
Q Which would make you suspicious for a

possible pneumonia?

A There is a few things that can cause decreased breath sounds.

Q One of them being pneumonia?

A Pneumonia frequently causes -- it usually causes some different breath sounds, some crackles, some increased transmission of the airway noises. Decreased breath sound. I wouldn't put pneumonia top on my list.

Q What would you put at the top of your list?

A Pleural fusion, pleural thickening, hemalpyema, atelectasis.

Q One of the things you'd like to get though is a chest x-ray?

A Sure.

Q As a reasonably prudent physician on that date --

A Yes.

Q -- you would want to get a chest x-ray?

A Yes.

Q Okay. And he did get a chest x-ray on

that date, did he not?

A Yes.

Q I'm going to hand you what about -- strike that.

I'm going to hand you the two films from the February 1st of '94 and ask you if you could again interpret them for me.

A These films are substantially the same as the previous films except that the heart does not appear as enlarged.

The infiltrates from the left hilum don't show as prominently, but they are there. And the increased markings in the upper lung fields I noted on the previous films are there and perhaps slightly more apparent.

Q Is there any evidence of interstitial fibrosis on those films?

A There is no definite evidence of interstitial fibrosis.

Q In retrospect is there evidence of interstitial fibrosis?

A These are not good films to support that

diagnosis.

Q So if you were interpreting those films of/2/1/94, what would your interpretation be? What would you write down in your chart?

A I would say these films are consistent with asthma or bronchitis, the clinical diagnosis, but that persisting infiltrates starting from the left hilum remains unexplained.

It could -- noting that that's been there essentially unchanged for months, it's likely something that's been there and going nowhere. A scar perhaps.

The peculiar markings in the upper lung fields, having seen them twice now, are a little worrisome and are not explained by asthma. And a 28-year-old with bronchitis, I'm not satisfied that this is just acute bronchitis that we should treat and leave it alone and --

Q Based on --

A -- then it will go away.

Q Based on those upper markings?

A These markings in the upper lung field,

seeing them a second time are -- they catch my eye.

Q I'm going to hand you what is Dr. Martinez's interpretation from February 1st of '94, his radiology interpretation.

Do you agree with that?

A Except for the omission of the peculiar markings in the upper lung fields, I agree.

Q Which you saw on the previous films?

A Yeah. Let me add that when I look at the first -- the first time and having seen the previous films, those markings don't catch my eye enough to comment on them. Knowing that those markings are there on a subsequent film, it is important.

Q Normally does the radiologist compare films?

A Some do and some don't.

Q But at least as it was reported to Dr. Carson, there was no -- no comment made about these markings in the upper lung fields, true?

A Correct.

Q And you said that the fact that he had these markings, you wouldn't think that this is bronchitis?

A I wouldn't write that off to a simple case of acute bronchitis in a 28-year-old.

Q But based on this report as given to you by the radiologist, bronchitis certainly would be within your differential?

A That report is consistent with acute bronchitis.

Q And his treatment of the bronchitis on that date was appropriate?

A I'll agree to that.

Q Okay. He comes back in then on 2/28/94, correct?

A Yes.

Q At that time he's going to get a repeat chest x-ray because of this questionable infiltrate raised by the radiologist on the previous film?

A Yes.

Q He has a positive cough at that time with

production, true?
A Yes.
Q He has sinus drainage and congestion?
A Yes.
Q He has a headache with nausea and vomiting?
A Yes.
Q Chest tightness?
A Yes.
Q And no temperature or chills?
A Yes.
Q Okay. On that date it was a normal lung exam, true?
A Lungs were described as clear without wheezing, good air entry.
Q Could -- based on that reading of that previous chest x-ray, could someone assume that that was a small pneumonia?
A Are you referring to the --
Q 2/1/94.
A -- infiltrate extending from the left hilum?

Q Yeah.
A I think knowing that that same infiltrate is there on two films separated by several months, I wouldn't say it's just a small pneumonia. It's more likely something even less significant than that. It's more like a scar.
Q Okay. He gets a chest x-ray. Appropriate thing to do on that day just to see --
A Not unreasonable because the working diagnosis at that time was that he had some pneumonia.
Q And you would hope that with the antibiotics he had prescribed on February 1st of '94 the pneumonia would clear?
A Yes.
Q I'm going to hand you the x-rays for 2/28/94, and if you could tell me what your interpretation of those films are.
A These are unchanged from the examination four weeks previous.
Q You still see that left -- hilum infiltrate?

A Yes.
Q You still see those upper lung markings?
A Yes.
Q Certainly they have been there now three times?
A Yes.
Q Okay. And do you see any evidence of interstitial fibrosis?
A There's no good evidence of it.
Q Could those upper lung markings if they continue to persist be suggestive of interstitial fibrosis?
A I'll agree to suggestive, but I wouldn't put that at the top of my list of explanations for that.
Q Okay. But certainly you as a family doc would hope that the radiologist would at least comment to put you on notice there may be some abnormalities in the lungs, true?
A Yes.
Q As of this time, he's had two chest x-rays and no one is yet to comment on those upper

markings, true?

A They're for each of those x-rays.

Q Well, we're going to get to the third one. We haven't seen the report yet. But at least on the previous two, there's been no comment by the radiologist to Dr. Carson that there's been upper markings -- markings in the upper lung fields, true?

A In the first two x-ray reports you asked me to look at, that is correct.

Q Okay. I'm going to ask you now to look at the report of Dr. Higgins dated 2/28/94.

A (Witness complies.)

Q And I'm going to ask you if you agree with that interpretation.

A Well, this report says that previously identified small perihilar infiltrate has cleared in the interval since 2/1/94, and I don't agree with that.

Q Okay.

A And as in the previous reports, there is no comment about the abnormalities in the upper

lung fields.

Q So now we have three times where the radiologist failed to communicate to Dr. Carson that there were upper markings in the -- abnormal markings in the upper lung fields?

A Yes.

Q And what this suggests, Doctor, based on this radiology report, that the pneumonia he was thinking about had cleared with appropriate treatment?

A Yes.

Q That would be a reasonable interpretation?

A It would certainly be reasonable by Dr. Carson's holding that report.

Q So it's fair to say then his treatment as of February '94 on those two visits, February 1st and February 28th of '94, was within appropriate standards of care?

A Yes, I'll agree to that, but what's starting to bother me here is that this is a young man who keeps coming back to the doctor with

respiratory complaints and they -- it's not unreasonable that he was being treated as asthma,, but some of the complaints are atypical, some of the findings on the examination are atypical.

The x-ray is not entirely explained by asthma. So I'm starting to worry at this point that this is not just -- case of asthma.

Q What on the x-ray is not explained by asthma?

A It's that infiltrate at the left hilum and the upper lung field abnormalities. Now, I know the upper lung field abnormalities we can't hold Dr. Carson responsible for.

Q And as of February 28th we can't even hold him for the perihilar region because it would -- they said it went away?

A I'll agree to that.

Q So based on the chest x-ray, everything is going along fine. As of February 28th, '94 he's got a clean lung according to the radiologist, true?

A I'll agree. Let's take the x-ray

evidence off the table in relation to my thinking about the management. I still think at this point the light is starting to go on, at least in my mind in what I think about this case starting on 3/16/93, this is not a run-of-the-mill case of asthma.

Q But as of February 28th of '94, so I'm clear -- so from March 16th of '93 up and including February 28th, 1994, was his treatment and care of Mr. Diederich within reasonable appropriate standards of care?

A I'm going to agree to it.

Q Okay. Let's -- and is there any reason to believe, Doctor, from March of '93 through February of '94 that the patient was not responding at least to the medical management given to him by Dr. Carson?

A Well, he keeps coming back with cough, mucous.

Q You keep coming back. I mean, you're talking over a period of about a year coming back on -- what did we count -- five occasions?

A I think that's right.
Q Okay.
A From March 16th to February 1.
Q Okay. But during that period of time, he came in with differing things other than asthma. He came in with bronchitis as well?
A I think it's reasonable to think when he comes in at that time that he's got an acute bronchitis which combines with asthma making him uncomfortable.

It's sad that 28-year-olds who don't smoke apparently don't get that acute bronchitis unless they have influenza or something like this and 28-year-olds, 28-year-old men, generally don't keep visiting the doctor with complaints such as this.

Q But you don't --
A But in total, you know, as the repeated visits happen with similar complaints, it starts making a point in my mind.
Q Have you done any statistical analysis of 28-year-olds, how often they visit a doctor?

A No.

Q Okay. So really it's patient specific. Some patients may come to the doctor more often; other patients hate doctors and they don't want to -- they never see them, true?

A True.

Q So they go in a spectrum. So the fact that this patient came in five times over a period of a year as opposed to somebody coming in nothing should --

A That alone doesn't prove anything, but each patient has to be considered an individual. That's what you're saying. And after several visits, some alternative thoughts should be crossing the mind, either that this is not an easy to manage case of asthma or that perhaps there is something else going on.

Q Okay. Let's go to the next visit of 6/6/94. He comes in and complains of a chronic cough, coughing fits that lead to vomiting. He talks about symptoms are worse at work. At least this is the history reported to the nurse.

A Yes.
Q He talks about this chronic sinus drainage and then he has this pressure and headache in the back of the head.
A Yes, and he is losing weight.
Q Was he losing weight?
A Well, Dr. Carson records that the patient is also losing weight, and by our report, a total of nine pounds. I think I recorded some weights.
Q He was 170 in March of '93 and 152 at this point?
A That's sound like some weight loss.
Q Okay. If this is persistent, you would expect it to continue that way, true, Doctor?
If the weight loss is somehow related to this whole pendular thing, you would expect him to continue to go on a downward curve?
A I think that's the case, but it doesn't continue to nothingness obviously.
Q Right. What was his -- a year later when he saw him --
A It stabilized and then fluctuated up.

Q Matter of fact it was 165 July of '95 and 169 in '96?

A At this point Dr. Carson doesn't know what's going to happen with weights in the future and it's at this point that I think the patient -- sufficient concerns from experience on the medical record to say that the patient either has a tough case of asthma or some other respiratory complaint and probably should be referred to a specialist.

Q If Dr. Carson felt comfortable with handling a tough case of asthma, do you fault him for not referring?

A I think I need to know some more about experience and training in relation to that.

Q Fair enough. I agree with that. I mean -- so do you know what his experience and training was with asthma as of 1995, how many people he had treated with that condition?

A All I know is that he's trained in family medicine, which is a broad specialty, and by virtue of how broad it is, the training specific to respiratory disease cannot be as deep as a

specialist's.

Also that the experience is very broad, and so the number of patients with asthma is not as great as somebody who is an asthma physician, and the that family physicians generally manage the cases that are not terribly difficult because when they get more difficult, they frequently are referred to specialists.

Q But, Doctor, there are family doctors that handle the tough cases of asthma, are there not?

A I'm sure you're right.

Q You don't know what Dr. Carson's experience was with asthma and the number of asthma patients he had both easy and tough as of 1995, do you?

A No. Being provided some evidence such as that, I would be happy to reconsider my opinion.

Q As a matter of fact that was one of the things you said in the standard of care was what their experience was with that type of patient, true?

A Well, maybe we should go back and reread that. I said similar training and experience. I didn't say identical training and.experience. And importantly, we're talking about the same kinds of patients in this respect. Training has similarities and standards are no secret to people who don't work in offices, just as the standards of care that I try to uphold in the intensive care unit are no secret to Dr. Carson or anybody else, some of those standards.

Q May or may not agree with you on that, Doctor.

A Okay.

Q One of the things he did talk about though when he met with Dr. Carson, that the symptoms he was having was worse after meals.

What significance did that have to you?

A That's a tough one. There are some patients who have some reflux from the stomach up through the esophagus leading to a little bit of coughing -- or actually some aspiration. Maybe

that's exacerbated after eating but usually that problem is when a patient is supine. I'm not sure what that means.

Q But one of the things that certainly you would want to think about is this reflux disease, true?

A Yes.

Q Matter of fact that's one of the things that Dr. Carson talked about on 6/6/94, did he not?

A Yes.

Q So one of the things -- he's trying to go through his differential and one of the things he's thinking about with this cough is that it might be secondary to reflux disease because at least the history that was reported to him was that it seems to be worse after eating?

A Yes.

Q Okay. And he gave him medications for reflux disease, did he not?

A Yes, he did.

Q Propulsive?

A Yes.
Q And he also thought, you know, maybe another thing that could be causing this is allergies, true?
A As he's previously considered that.
Q Right. And so he gives something that may be to treat possible allergies as well?
A We're reading the same record.
Q Okay. So it's a case where he's trying to determine what's causing this patient's symptoms?
A Yeah, I'll agree with that.
Q Okay.
A But my point is that after over a year of this, maybe it's time to reach out for some help.
Q But it would be within standards of care for a physician to at least first attempt to work it out himself?
A And he has for over a year.
Q Well, we're not talking about the same thing over a year, are we, Doctor?
A Well, we're talking about respiratory

symptoms which are not well explained up to this point.

Q We may beg to differ on that because one could at least explain a portion of the respiratory complaints he had, at least in October and February, due to a possible pneumonia, true, that eventually cleared because there was a left perihilar seen there in October, a left perihilar abnormality seen there in February lst, and by the time of the February 28th visit that had cleared?

A Yeah. I'm willing to take the x-rays off the table altogether. I don't think that's Dr. Carson's problem.

Q But he can't take them off the table. He has something that could explain this man's symptoms, true?

A Yeah, I'm going to stick with my position. I think in June of '94 there was enough difficulty in managing the respiratory symptoms in a 28-year-old guy. This is not an old person who has smoked for a long time. It's a young man who doesn't smoke and whose symptoms are not typical

of asthma, whose signs are not typical of asthma.

Q Let's talk about what symptoms he had. Cough?

A Yeah, that's typical but he -- did the patient ever come in and complain of wheezing? I don't think he ever did. Does the patient have wheezes? I think wheezes are noted once. In contrast, several times the lungs are auscultated and they are described as being quiet.

Q Did you read Dr. Mehta's deposition where he talks about wheezing? I think he made a comment that -- let me see how he said it. The fact that when the patient sees the doctor, the wheezing might not be there?

A Correct. And on a single visit I wouldn't fault anybody for saying this is probably asthma but after several visits --

Q But it wasn't always asthma on every visit, was it, Doctor? You had asthma involved in there. You had bronchitis involved in there. You had pneumonia involved in there.

A Well, that's what is assumed on those

diagnoses. That's the hypothesis, but after several visits I think some -- a light should be going on at this point. I think the standard of care is that the light must go on.

Q Okay. He treats in that and he comes -- he goes to the emergency room. You're aware of that?

A We're talking about the next year?

Q No, that is June of '94.

A Yes. June 13th, '94. There's a note to this effect.

Q What was the diagnosis made in the emergency room of this patient?

A May I have just a moment, please? My notes say that he received Proventil aerosol, which is a medication given for asthma. I didn't transcribe what the diagnosis was. Should we have a look at that and then I'll tell you what they say?

Q Feel free to.

MS. TAYLOR-KOLIS: You need to look in your records because we didn't get a complete

set of his records initially.

MR. POLITO: Our flight is leaving in five minutes, Doctor.

THE WITNESS: My meter is running. I should be looking under Elyria Medical?

MR. POLITO: Yeah -- no, Elyria Memorial Hospital, Doctor.

MS. TAYLOR-KOLIS: This first section is -- June of '96 hopefully.

THE WITNESS: I think we're close. June 13th of '94, right?

MS. TAYLOR-KOLIS: Right. I'm sorry, he said '96.

THE WITNESS: Importantly it says the lungs are absolutely clear without rales or rhonchi. I know you didn't ask me that, but it belongs here.

I'm not finding a diagnosis.

MR. POLITO: Well, I think he diagnosed an upper respiratory infection with bronchial spasm.

THE WITNESS: Okay. If you say so.

BY MR. POLITO:

Q I don't want you to agree with anything that -- not your choosing many times -- sometimes it's not. URI with bronchial spasm (Indicating).

A Okay.

Q So what he's being diagnosed with is an upper respiratory infection, true?

A That's what the doctor who saw him on this date said.

Q You disagree with that diagnosis by the ER doctor?

A With the benefit of hindsight I do, but I think with the benefit of knowing where the patient came from starting in March of '93, Dr. Carson might have also started to get his light a little brighter.

Q My question is, is do you disagree, was it the ER doctor who came up with the diagnosis of an upper respiratory infection with broncho spasm below standard of care for reaching that conclusion?

A With that ER doctor, no, I have no

argument with. the ER doctor having put it together and what he said --

Q One of the things they do raise is that the patient might have an enlarged heart, true?

A Yes.

Q And one of the things that Dr. Carson did at that time was because that possibility was raised, he referred him over to a cardiologist?

A I understand he had an echocardiogram.

Q Which was normal?

A Yes.

Q Is that an appropriate thing to do, Doctor?

A Not unreasonable considering the thought that his heart is enlarged.

Q He then follows up on the 16th with Dr. --

MS. TAYLOR-KOLIS: Carson.

MR. POLITO: -- Carson. Thank you. And now he's only having an occasional cough, correct?

THE WITNESS: Let's look directly at the

notes. Yes, the patient is occasionally coughing and has vomiting with coughing fits.

BY MR. POLITO:

Q I think at that time that's when he referred him over to have the echocardiogram done?

A He did refer him for the echocardiogram on this date.

Q What is your understanding as of this date what medications this patient was taking?

A Dr. Carson writes: In the meantime we will consider the same medicines and doses. Then we'd have to go back to previous notes to see --

Q Then we can assume they were either medications to treat him for his asthma, true?

A Yes.

Q Okay. Now, he doesn't see -- come back to see the patient -- the patient doesn't come back to see him for over a year, correct?

A Yes.

Q How did he do in that year interval?

A I have no information.

Q Did he continue to have cough during that

period of time?

A 'The next time he comes, I think he complains he has three years of coughing so --

Q To your knowledge did he ever contact Dr. Carson during that -- from June of '94 through July of '95?

A Not to my knowledge.

Q Certainly, Doctor, you would expect during that period of time if indeed he was getting worse, you would have expected him to call some doctor, true?

A Many patients would. And I guess I would expect this one to because he had come several times prior to this.

Q Right.

A Some patients, you know, get frustrated with how things are going and shrug their shoulders and say what's the point.

Q Okay.

A And then some patients have other problems in getting to doctors, you know, insurance problems and so on. I don't know what

the reason is.

Q But you don't know why Mr. Diederich didn't come back for over a year if indeed he was getting worse, do you?

A Correct. I don't know why.

Q Matter of fact, over the next two-and-a-half years, from June of '94 through December of '96, he only saw a doctor twice, true?

A From June of '94 he saw -- he saw Dr. Carson .in July of '95 and then in May of '96.

Q And then he went to the Mediclinic in December?

A I think he went there in August.

Q What did he go there in August for?

A Sinusitis.

Q Was he diagnosed with sinusitis at that time?

A The diagnosis given to him was sinusitis. I didn't record in my notes here that I'm referring to what he complained of.

Q But in terms of seeing this physician then from June of '94 through December of '96 he

saw him two-and-a-half year period of time twice?
A June of '94 to December of '96?
Q Yeah.
A Including December '96 or not?
Q Yeah.
A Dr. Carson saw him on June 16th, July 31st, May 6th and then December 9th.
Q He didn't see Dr. Carson on December 9th; he went to the Mediclinic.
A Correct. Thank you.
Q I'm talking about then from June 17th of '94, your birthday and mine -- we both have June 17th birthday; we wish it was '94 at this point -- but from June 17th of '94 up until December of '96, so two-and-a-half years --
A Yes.
Q -- he saw this physician twice?
A I thought I just had it three times.
Q No, I'm talking about the day after the visit, Doctor.
A Okay. So you want me to start counting after --

Q Right.
A -- after that last visit in '94?
Q Right.
A Correct.
Q And you have no idea of what his condition was during those two-and-a-half years, do you?
A I have no direct information telling me what his condition was.
Q You don't know if he responded to treatment during that period of time?
A I don't have any direct information.
Q You don't know what medications, if any, he took during that period of time, true?
A True.
Q You don't know if he indeed responded to the medications or didn't respond to the medications during that two-and-a-half year period of time?
A I have no direct information telling me that he responded or didn't respond because the only thing I have is what I see during the time

that he's seeing Dr. Carson frequently on these medications.

Q He then came back in July of '95 for this visit. Again, he's complaining of cough, some right rib pain, true?

A Yes.

Q He treats him as reactive airway disease. Are we talking one .in the same thing with asthma?

A We frequently use that term synonymous -- to be synonymous with asthma.

Q He again treats him as -- as if he has asthma, true?

A Yes.

Q Okay. And what he tells him is follow up will be dependent on response to above?

A Yes.

Q So what do you understand that to be?

A If you take these medications and you feel better, keep taking them and if they don't -- if you don't feel better, we'll get together again and see where it leads.

Q Does he come back?

A Next visit after 7/31/95 is 5/6/96.
Q So could Dr. Carson assume, based on the fact that he doesn't come back for a year, that he's responding to the treatment?
A If he has no other information available to him, then it's not an unreasonable conclusion. Of course, it's a simple thing if he was asked how are you doing and are these medications working, are you feeling better now than you did before you got these medications.
Q But you get a patient on medication and you tell him we'll follow up depending on if you respond to that, again, do you think it's the patient's responsibility, if he doesn't respond, to call Dr. Carson back and say these aren't helping at all?
A Yes.
Q He also gets a chest x-ray on 7/31/95, true?
A Yes.
Q Okay. I'm going to hand you those chest x-rays.

A One of things I've learned in a pulmonary fellowship is whenever you look at films, make a criticism of the films, that way if you make a mistake -- these films are -- the exposure is not good. They are -- we lose all the detail of the lung -- they are overexposed films.

And so I can't make any comment about those peculiar markings in the upper lung fields that I said about previous films.

The heart shadow is similar. It's borderline large. The quality, the exposure of this film allows us to see more vividly the peculiar infiltrate extending from the left hilum. You can see it here (Indicating).

Q Okay.

A That's as much as I can say about that film.

Q I mean, is this a film that you think that should have been redone or is it enough for --

A I guess that depends on the context.

Q If you're getting a chest x-ray as a

family doc and you're relying on the radiologist to give you a correct interpretation, I mean, is that x-ray good enough to give this doctor some clue as to what's going on?

A Well, I'm going to think really carefully about this one because at this point I think it's not reasonable to be going on a diagnosis of asthma or repeated episodes of bronchitis or even a combination of acute bronchitis and the background of asthma, and so I think it's important to get as much good information as you can.

As I commented earlier, I think this patient should have been seen by a specialist before this point. So I know I'm digressing. Yeah, I think that film is not very good.

Q So the radiologist should have had it repeated?

A It's a hard one to respond to. Can I see the radiologist's reports because I'd like to think where the comment was made, that this was a sub-optimal exposure, and if so, then I think the

responsibility by the referring physician is to say I need a better film than this, and there is no comment about sub-optimal exposure.

Q So what that radiologist is telling Dr. Carson that as of July 31st of '95 he has a clean chest x-ray, true?

A Yes.

Q Find no abnormalities on the chest x-ray at all?

A That's how I would interpret that piece of paper.

Q Okay. Which is different from what your findings were?

A Well, I pointed out that there was that persistent opacity coming from the left hilum.

Q And he makes no comment of that?

A Correct.

Q Matter of fact, on the previous film there was no perihilar infiltrate found?

A The radiologist did not comment on it; I saw it.

Q I know you saw it, but he said that on

view that that had gone away, cleared in the interval?

A Uh-huh.

Q And you disagree with that?

A I disagree with that.

Q And you agree that there's no mention made in the July 31st, '95 about this perihilar infiltrate?

A I disagree with a reading that doesn't mention it.

Q So as of July of 1995, what Dr. Carson is left with is a chest x-ray that shows no abnormality, true?

A Agreed.

Q And you keep coming back, Doctor -- family docs who practice out there, do they treat patients with asthma over many, many years?

A Frequently do.

Q I had asthma as a kid and I remember going a couple times a year to the doc with episodic flare-ups of asthma. Not unusual, is it?

A Not unusual to have episodic flare-ups.

Q So it's not unusual for a patient to come to a doctor a couple times per year over many, many years for episodic flare-ups of asthma, true?

A A couple of times -- a couple means two?

Q Yeah.

A We are not talking about two during the key year from my point of view, or the year or a year and a few months starting February or March of '93. Also I think the analogy to your experience as a kid is not fair because --

Q Let me --

A -- medicine has evolved since then and we do have better availability for physicians and specialists and --

Q But, Doctor, isn't it true even as we sit here today, there are patients going to family doctors on a biyearly basis with flare-ups of asthma?

A Yes.

Q And that's not an unusual occurrence as of today?

A I agree.

Q And if we take this man out in terms of over the period of time from '93 to '96 -- so one, two, three, four years, '93, almost the entire of '93, '94, '95, '96, he had nine visits, possibly ten, for respiratory complaints?

A Yes. Well, I think I'm going to argue with you here on a couple of things. First, from my point of view, the critical interval in terms of the management and the opportunity to maybe have a different outcome is in that year and a few months starting in March of '93 as I said a moment ago.

And if you stretch out the interval beyond that and divide the number of visits by a longer interval, you come up with a lower quotient but that's not relevant to the malogram I see.

Q So we --

A Moreover, I disagree with the thought that you can look at a single visit and say was his management okay on a single visit. You have to look at the whole, the whole picture, the number of visits, the atypical presentation and so

on and so forth.

Q So what you told me, Doctor, is up until June of '94 you could buy that Dr. Carson's treatment of his patient was within acceptable standards of care, true?

A Yeah, I'm going to go to June of '94. In my earlier letter to Mrs. Kolis I said February of '94, but at that point I was thinking that that visit by Mrs. Diederich was Mr. Diederich's, and so if I take that out, then the experience part of February '94 is not as intense in total. So that's why I've just extended my number of months below.

Q What is your opinion, Doctor, to a reasonable degree of medical probability what this man's total lung capacity was in June of 1994?

MS. TAYLOR-KOLIS: If you have one.

THE WITNESS: Well, yeah. 1'11 -- I'm going to think out loud here, and I am not sure if I'm going to come to an answer that you will accept as a reasonable degree of medical probability.

If we take 60 percent total lung capacity in February of '92, right, when Dr. Arora saw him --

MR. POLITO: Right.

THE WITNESS: And we take about 40 percent when Dr. Mehta sees him in '97, and the only reasonable way to estimate what happened in between is to just -- is to say that it was a gradual and constant reduction, so with a little bit of arithmetic here, from February of '94 to the summer of '97 is approximately 7/97?

MS. TAYLOR-KOLIS: September of '92. I'm sorry --

MR. POLITO: September of 92.

THE WITNESS: September of '92. Thank you.

MS. TAYLOR-KOLIS: Sure.

THE WITNESS: '92. So let's add up the number of months. We have two months short of five years -- 58 months is a total experience to lose -- to go from 60 to 40 percent, and

60 percent of what I previously said is a lower number. That's TLC to '92. Now, up until what date did you want to make this estimation?

MR. POLITO: Up until the time it was diagnosed which you said was -- when was that? In June of '97 it was diagnosed?

MS. TAYLOR-KOLIS: Sorry to be correcting you. He already did that math, the 20 percent that you wanted --

MR. POLITO: Oh, I'm sorry, I wanted to go what it was then as of June of '94. I'm sorry.

MS. TAYLOR-KOLIS: Sorry. Just to be sure I've got it.

THE WITNESS: From 9/92 to 6/94 we have --

MS. TAYLOR-KOLIS: September '92.

THE WITNESS: Yes. September of '92 to 6/94 is 21 months. So I have 21 in my numerator and 58 in my denominator.

MS. TAYLOR-KOLIS: Use your calculator.

THE WITNESS: It's right here. We used to do this in our heads, right? I've calculated that he's lost about 7 percent of his TLC between Dr. Arora's evaluation and 6/94. So we're down to about 63 percent.

MR. REMINGER: 53 percent?

THE WITNESS: 53, yes.

BY MR. POLITO:

Q So that the record is clear, do you hold that opinion to a reasonable degree of probability?

A If I can put an approximately before that 53 percent, then I'll say yes to it. To a reasonable degree of medical certainty, it was approximately 53 percent.

Q Doctor, did you see in your review of the records that once someone -- when the x-rays were checked and went back and the fact that interstitial fibrosis was seen on these earlier films?

A Could you say that again? What?

Q Well, let's take it this way.

A The first notation I know of suggesting fibrosis on a chest film I think is when Dr. Dacha sees him in '97.

Q And take a look at your report because I think you made comment of it.

MS. TAYLOR-KOLIS: September, right?

MR. POLITO: Let me look at Dacha's records. You go to Dacha's records and look for the chest x-ray of March 26th, 1997.

THE WITNESS: (Witness complies.) You're talking about a plain film or a CRG --

MR. POLITO: No, I'm talking about a plain film, at least a -- you say a chest radiograph on January 8th, '92 was recorded as unremarkable. On March 26th, 1997 a chest x-ray showed --

THE WITNESS: I'm reading from that report, March 26th, 1997. It says interstitial disease is seen in the lungs with mild fibrotic changes present diffusely in both lungs.

BY MR. POLITO:

Q And what they talk about, there's been a progression of this process when compared to the previous film of 6/13/94, correct?

A Yes.

Q The way I interpreted that is this radiologist felt that there was fibrotic changes seen back in June of '94?

A Well, the radiologist explicitly says there has been progression of this process when compared with the previous exam of 6/13/94.

Q And when looking at the x-rays from June of '94, no one reported to this physician that there had been any fibrotic scarring, true?

A That is true.

Q And certainly, Doctor, if a radiologist in June of '94 had reported fibrotic scarring to Dr. Carson, that would put him on notice that we're dealing with something more than asthma, correct?

A Yes.

Q So your sole criticism then of Dr. Carson's care and treatment of this patient

was his failure to refer him to a specialist as of June of '94?

A I think that sums it up nicely.

Q And based on your synopsis that he continually progressively got worse over this period of time, from June of '94 until the pulmonary function study sometime in '97, you would have expected this patient to see Dr. Carson on more than two occasions, would you not?

A If there is no reason why he couldn't or didn't want to, then, yes, I would.

Q Certainly, Doctor --

A I think he did see a physician in another situation for a while. Didn't he go to a --

Q He went to Mediclinic in late December of '96 when he had -- I'm talking Dr. Carson as his PCP.

You would have expected, Doctor, if in fact he's getting worse, going from approximately 53 percent down to 40 percent, he's now -- you know, crossing over to even the 50 percent barrier, you would have expected him

over a two-and-a-half year period of time to see Dr. Carson on more than two occasions if he wasn't responding to treatment?

A I would expect him to seek medical care.

Q To your knowledge, from February -- from June of '94 until August of '96, other than the two visits to Dr. Carson, did he seek any care with anyone?

A Let me take a quick look at my notes here. Starting in June '94, if -- there's two visits. So there's a visit June 16th, '94, then July '95 to Dr. Carson, May '96 to Dr. Carson. On March of '96 using the Elyria Mediclinic. In December of '96 he's again in the Elyria Mediclinic and then in January '97 he sees Dr. Carson, and a follow-up to the Mediclinic again on January 28th, '97 to Dr. Carson. February --

Q Well listen to my question. You're going far beyond my question.

My question was: From February -- strike that. From June of '94 until August of

'96, if this man was getting progressively worse during that time and not responding to treatment, you would have expected him to see Dr. Carson on more than two occasions?

A I might be expected. On the other hand, patients as I mentioned earlier sometimes find reasons not to come back to the same doctor or to any doctor.

Q But, Doctor, one of the things he told him in June of '94, and I think he told him again in '95 and in '96, if the symptoms worsen instead of improving, come back and see me.

A Uh-huh.

Q And the patient has a responsibility to come back and see him, does he not?

A Yes.

Q So if the patient is specifically instructed that if with this treatment you don't get better, come back and see me, the responsibility is on the patient to do that, correct?

A Yes.

Q And if in fact he was getting worse and did not improve with the medical treatment from June of '94 through August of '96, you would fault the patient for not coming back to see him on a more regular basis, true?

A I don't think there is anybody else to fault other than the patient.

Q Do you know what medications he was taking from 19 -- June of 1994 through August of '96?

A Well, it's a long time and so I'm going to have to say I have little idea what he was taking other than what was recommended to him by Dr. Carson.

Q And you don't how often he took these medications, do you?

A Correct.

Q You don't know if he took them on a constant basis or on an episodic basis similar to those patients who take it for asthma?

A Correct.

Q By the way, were there arterial blood

gases obtained at Elyria Memorial Hospital?

A I don't remember offhand.

Q I'm going to represent to you that in June of '94 there were arterial blood gases done on the patient. Let's go back to those again. We're talking June of '94.

A At the hospital?

Q At the hospital on the ER visit,

A I'm not sure you're in the right section. You might be; I'm not sure that you are. Patient lab, outpatient -- it has to be -- I'm in the wrong section.

MR. POLITO: I think you are. Let me get the Elyria Memorial.

THE WITNESS: I think I've got the right section now. Can you remind me of the dates?

MR. POLITO: Yeah, 6/13/94 and keep going. There should be some ABGs done during that admission.

THE WITNESS: I've got it.

MR. POLITO: Okay.

THE WITNESS: On 6/13/94.

MR. POLITO: Was that a normal ABG?

THE WITNESS: Yes.

BY MR. POLITO:

Q No evidence of any -- at least on the arterial blood gases -- of any abnormalities, true, as of June of '94?

A Correct.

Q Did Mr. Diederich ever tell Dr. Carson that his condition was aggravated by his working conditions?

A I think there's one comment in June of '94.

Q I believe that was June of '94 but then when you read the subjective thing, the thing that he said that most aggravated it was eating, true? I'm going to get this --

A Well, let's look at it again. You asked me is there any comment about the work, and the answer is yes.

Q Other than that one occasion, did he ever tell him that it was aggravated by work?

A I don't recall any other occasion.

Q Okay. We know that the patient was eventually referred to Dr. Dacha, true?

A Yes.

Q But by that time the reason why he was referred, he had a persistent infiltrate, right? There was a chest x-ray obtained in December and they treated it with antibiotics and it didn't clear. They treat it with different antibiotics, didn't clear again and a referral was made over. Am I correct in your recollection of what took place?

A Your recollection is more explicit than mine. Let me refer to some notes. You're talking about the visit dated when?

Q Well, let me ask you: In your opinion, Doctor, what was causing this man's symptoms were hard metal disease as of June of '94 in retrospect, true?

A Yes.

Q So certainly as of March of '97 what was causing this patient's problems was not asthma, bronchial asthma, true?

A I agree with that.

Q Okay. And we know the reason why Dr. Carson referred him over to a pulmonologist was a persistent infiltrate seen on chest x-rays?

A That is recorded in Dr. Carson's assessment on March -- on February 25th, 1997, and at that point he refers the patient to Dr. Dacha.

Q And we have Dr. Dacha's records, and what was his assessment as of March of '97 when the pulmonologist, the one you said you should have referred him over to, what does he come up with as a conclusion of as of March of '97? Maybe I should help you.

A Dr. Dacha ordered an x-ray that we previously mentioned and it shows interstitial lung disease. Dr. Dacha ordered pulmonary function tests which show severe restriction and loss of diffusion capacity.

Q My question was: As of March of '97, when he had a chance to review this patient, he came up with persistent lung infiltrate because we knew that from the chest x-rays, right?

A Right.
Q But what was his other diagnosis?
A Diagnosis number 2 there is bronchial asthma.
Q And you disagreed that he had bronchial asthma in March of '97, did you not?
A I disagree that he had it. I don't disagree with that thought being put on the paper on that first visit, and importantly, Dr. Dacha followed up on diagnosis number 1. It's possible also at that point that he's got both.
Q So all along he may have had bronchial asthma?
A He might have.
Q But what clued him in to work this patient up was not bronchial asthma, was it? What clued him in to work this patient up with it was a persistent infiltrate that in retrospect had been there all the way back in June of '94?
A I think you're right.
Q Did Dr. --
A I'm not sure that you're following my

point here. I have never contended that Dr. Carson should have thought of the hard metal disease or should have had a longer differential diagnosis than asthma, although -- let me take that back.

I think starting in 1994 other thoughts should have been crossing his mind and I think they did, actually he said bronchitis.

My contention is that he just should have been referred to a specialist so that the problems can be better sorted out, either better treatment for asthma or a different diagnosis.

Q But what led Dr. Dacha, the pulmonologist, to work this patient up further was a persistent infiltrate that had been there since 1994?

A Now, whether it's just the infiltrate or the pulmonary function tests or a combination of those, I don't know. There is a lot of evidence when Dacha sees the patient that this is not just asthma.

Q Correct. And the major evidence was an

infiltrate that had been there since June of '94, true, the fibrotic scarring seen on x-rays that dated back to June of '94?

A Whether Dr. Dacha's infiltrates are the same as the ones that I mentioned, I don't know.

Q Well, he gets a chest x-ray in March of '97, true?

A Yes.

Q That shows progression of fibrotic scarring since June of '94?

A Yes.

Q So my thing is, there's been fibrotic scarring on chest x-rays since June of '94, true?

A That's a reasonable way to put it together.

Q And based on that, he now has hard evidence and he works the patient up for that, true?

A Yeah.

Q Doctor, I want you to assume that this patient had worn the protective mask throughout those years as instructed to by Dr. Arora -- and

you now told us that would have been about 53 percent in June of '94 -- if he had worn a protective mask from 1992 through 1994, what to a reasonable degree of medical probability his lung capacity has been?

A I'm going to have to qualify this in the same way I did before. I'm not the occupational lung disease expert and I'm not sure whether this particular problem can be substantially prevented by wearing a mask.

Q Can we agree, Doctor, to a reasonable degree of medical probability it would have been better than 53 percent?

A Yes.

Q Can we also agree that if he had worn the mask as instructed back in 1992 that as of 1997 when it was 40 percent, to a reasonable degree of medical probability if he had worn the mask, it would have been better than 40 percent?

A I'm bothered by the reasonable degree of medical probability thing because as I've said now two or three times, I'm not an expert. I don't

know if an expert should be reasonably certain.

I'm very tentative on this. I just don't know -- I don't really know the size of these particles and whether masks that are offered in the workplace can keep these particles out. I'm sorry I can't be more helpful.

Q So what you're telling me then is that to even render -- strike that.

Based on your experience though with occupational diseases, okay -- you've had experience with occupational diseases?

A Yes.

Q Isn't it true by decreasing the exposure, and based on your reading in this, by decreasing the exposure via the use of protective masks and equipment, it decreases the likelihood of the severity of the disease?

A Yes.

Q To a probability?

A Yes.

Q So taking that hypothesis over into this realm, it's more probable than not that his lung

condition would not have been worse in 1997 if he had worn the protective mask as instructed back in 1992 by Arora?

A Can you restate that?

(Short break taken.)

BY MR. POLITO:

Q It's more probable than not, carrying that -- what we just discussed on -- that had this patient worn a mask from 1992 to 1997 that his lung function would have been improved?

A I think that's right.

Q Okay. Doctor, have you told me now each and every way that Dr. Carson deviated from acceptable standards of care in this patient?

A Yes.

Q Doctor, how many medical malpractice cases have you reviewed?

A I don't keep a count, but **I** can give you an estimation. In the last ten years I've reviewed one or two per year on average.

Q How does it break down plaintiff versus defendant?

A I think 60 percent are plaintiffs.
Q If I were coming to you as an attorney and saying, Doctor, I have this hard metal case, I want you to serve as my expert in this case; do you feel comfortable with serving as an expert?
A No.
Q If I came to you saying to you Doctor, I have this severe asthma --
A If I can interrupt you.
Q Right.
A Did you ask me am I comfortable saying I am expert in hard metal disease?
Q Yeah.
A No.
Q Asking the same question in terms of asthma, and I want you to -- I got a severe asthma case, would you feel comfortable with serving as an expert in that case?
A Yes.
Q You said that some with some hesitation. Why?
A I think for the same reasons that I

offered to Ms. Kolis when she first asked me to consider the case, which is that I don't spend any time in the last many years in an ambulatory setting; but with that caveat, Ms. Kolis asked me to look at this case and when I reviewed it, I was comfortable in commenting on this specific problem --

Q You agree --

A -- as an expert.

Q Doctor, you would agree though there are thousands and thousands of physicians all over this country who deal with asthma in an ambulatory care center on a regular basis over the past ten years, true?

A Yes.

Q In a much better position than you to comment on a case like this?

A Well, there are some things that are difficult, and in those more difficult things, I'll agree to that, and there are some things that are just a no-brainer, and you don't need to be a specialist to make a comment on this particular

problem.

Q How many depositions have you given in medical malpractice cases?

A I think maybe five.

Q Have any of those involved a case involving either asthma or hard metal disease?

A Definitely not hard metal disease.

Q How about asthrna?

A No.

Q Have you ever testified at trial?

A Once.

Q What kind of case?

A It was an elderly woman who was in an intensive care unit and was on a ventilator and she died.

Q And were you testifying on behalf of the plaintiff or the defendant in that case?

A I was for the plaintiff in that case.

Q Where was that case?

A It was in Ohio.

Q Youngstown?

A No. It was a small town called Warren.

Q You remember the patient's name?
A Helen O'Connor. The only reason I remember something that far back is it's the first malpractice thing I ever did.
Q Okay. What are your fees for review, Doctor?
A For today?
Q No. Reviewing records as you did for -- what are your fees to review records?
A $250 an hour.
Q And for deposition testimony?
A Same thing.
Q And for trial testimony?
A I don't know. It's ten or twelve years since I did a trial, and then it took a few years off my life, I'll probably raise my rate. I hope I can work that out if it comes to that.
Q Have you ever been retained by a service to review a case or a service that advertises itself to attorneys?
A No.
Q Ever been sued in medical malpractice?

A Not that I know of. I would probably know that.

MS. TAYLOR-KOLIS: You would probably know that.

MR. POLITO: Yeah. Why don't we take a few minute break. Let me look through your notes. If there's something I can't read or want to comment on, we'll go back and we're almost done.

(Short break taken.)

BY MR. POLITO:

Q The August of '96 note from the Mediclinic, was there any reporting that this man had any type of chronic cough during that period of time?

A I'm going to have to take a minute to stare at this because the handwriting is really tough.

I can't decipher all of it. Maybe with a little help we can get it all. You want to look at it together or just want me to do the best I can?

Q Do the best you can.
A I can't see any comment here about chronic cough. There's no comment either that he has it or he does not have it.
Q Is it fair to say, Doctor, from your review of the records that the cough this patient had throughout the years he treated with Dr. Carson was always a productive cough?
A I'm not sure about all the years, but frequently it's not usually productive. If we go over every comment about cough, maybe I'll read all those.
Q But certainly more times than not it was a productive cough as opposed --
A I think that's right.
Q Doctor, are you going to comment on this man's present medical condition?
A Am I going to comment?
Q Yes.
A No.
Q Or what future treatment, if any, he's going to need?

MS. TAYLOR-KOLIS: I can state for the record I've not asked him to do so. That's going to be Dr. Mehta's role.

BY MR. POLITO:

Q What is a granuloma, Doctor?

A It's an inflammatory response to something that gets in there and doesn't belong there, different kinds of inflammation. It's a relatively chronic inflammatory response.

Q Is a granuloma a benign type condition?

A Yes, almost always benign.

Q If he had been referred over to a pulmonary specialist, is that who he should have been referred to in June of '94?

A I think so, yes.

Q What would that pulmonary specialist have done?

A I think he would have done the same thing that Dr. Dacha did three years later. He would have looked carefully at the films --

Q I want you to assume though what Dacha had at that point in June of '94 was a clean chest

x-ray.

A Why should I assume that?

Q I'm just asking you to assume it. That's what we have to assume because that's what was reported in June of '94.

A Well, a pulmonary physician generally does not accept radiographic -- the report. A pulmonary physician will look at the x-rays.

Q Just for purposes of this question --

A Okay.

Q -- assume hypothetically in June of '94 he had gotten an x-ray and it was normal.

A Okay.

Q This is Dacha. What would the work-up have been?

A The pulmonary function tests would have been repeated.

Q Okay.

A And they would have shown substantial impairment as they did in 1992.

Q Okay. Anything else other than that? You certainly wouldn't have done a biopsy with a

normal chest x-ray, would you?

A Not likely.

MR. POLITO: Let's put these together so we have them all in one. With your permission, Doctor, what I'd like to do is hand these over to the court reporter, the originals.

THE WITNESS: Sure.

MR. POLITO: I'm going to ask her to have copies made of everything, return the originals to you and a copy to myself, and if Donna wants one or whatever, we can make one copy and then make copies from that or whatever.

Do you, Donna, have any problem with it?

MS. TAYLOR-KOLIS: I don't if the Doctor doesn't. My only concern, which is not a major one -- I don't know the court reporter, but I'm sure trustworthy -- I customarily would prefer to have my physician retain control of his own originals, copy them, and

provide them.

If you are uncomfortable -- you tell me what you want to do, Doctor.

THE WITNESS: I prefer to keep the records and a bottle of sun screen than the court reporter.

MR. POLITO: Let's go through them, Doctor, so we can get them in order. Here is 1.

(Discussion off the record.)

MR. POLITO: Exhibit 1 is your CV, true?

(Deposition Exhibit Number 1 was marked for identification.)

THE WITNESS: Which you're welcome to keep.

MR. POLITO: I don't, but so she doesn't get screwed up, I'm going to give you -- okay, Exhibit 2 are your notes and records. Clear is, one, two, three, four -- ten pages of notes.

(Deposition Exhibit Number 2 was marked for identification.)

(Deposition Exhibit Number 3 was marked for identification.)

(Deposition Exhibit Number 4 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Three is your record of September 23rd of 1998, true?

THE WITNESS: Yes.

MR. POLITO: With some handwriting on it that I assume -- on the first page, which I assume is yours.

THE WITNESS: Yes.

MR. POLITO: Four is for your second report.

THE WITNESS: I trust you here.

MR. POLITO: No. No -- but this will help the court reporter.

MR. REMINGER: It's really -- it's also for the parties to follow later.

MR. POLITO: Exhibit 4 is your second report dated August 5th of '99?

THE WITNESS: Yes.

MR. POLITO: Five is -- this is probably correspondence. This is why we do this, Doctor, because we've already --

MS. TAYLOR-KOLIS: Messed up all your papers.

MR. POLITO: Exhibit 5 is a letter from Donna dated July 31st, 1998.

(Deposition Exhibit Number 5 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Six is a letter from Donna to you dated August 19th, '98?

(Deposition Exhibit Number 6 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Seven is a letter from Donna to you dated April lst, 1999?

(Deposition Exhibit Number 7 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Eight is a letter from Donna to you dated July 26th, 1999?

(Deposition Exhibit Number 8 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Nine is a letter from Donna to yourself dated August 2nd, 1999?

(Deposition Exhibit Number 9 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: With some handwriting at the bottom that I assume are yours?

THE WITNESS: Yes.

MR. POLITO: Ten is also handwriting of you -- some handwritings of yours on there?

(Deposition Exhibit Number 10 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: It's a letter to Donna dated 3/2/2000?

THE WITNESS: Yes.

MR. POLITO: And 11 is a letter from Donna dated March 9th, 2000?

(Deposition Exhibit Number 11 was marked

for identification.)

THE WITNESS: Yes.

MR. POLITO: Twelve is the binder with a lot of little stickies that are yours?

(Deposition Exhibit Number 12 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: And handwriting and underlining on the actual records are all yours?

THE WITNESS: Yes.

MR. POLITO: So anything in addition beyond the records in terms of handwriting are all yours?

THE WITNESS: Correct.

MR. POLITO: Thirteen, no stickies, but some handwriting on both sides?

(Deposition Exhibit Number 13 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: And that's all yours. Any additional handwritings besides what the

records are, are yours?

THE WITNESS: Yes.

MR. POLITO: Fourteen is Dr. Arora's report dated 9/8/92 and all the handwriting, additional handwriting is yours?

(Deposition Exhibit Number 14 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Fifteen is Dr. Mehta's deposition of 2/23/2000. Then, again, any additional handwriting is yours?

(Deposition Exhibit Number 15 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Sixteen is Dr. Carson's deposition dated 7/14/99.

(Deposition Exhibit Number 16 was marked for identification.)

THE WITNESS: Uh-huh.

MR. POLITO: And any additional handwriting is yours?

THE WITNESS: Yes.

MR. POLITO: Seventeen is Dr. Culley's report dated November 22nd, 1999.

(Deposition Exhibit Number 17 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: Correct?

THE WITNESS: Yes.

MR. POLITO: That handwriting is yours?

THE WITNESS: Yes.

MR. POLITO: Culley is C-U-L-L-E-Y. DiMarco, Capital D-I-M-A-R-C-0, report of November 25th, '99, correct?

THE WITNESS: Yes.

MR. POLITO: That's 18?

(Deposition Exhibit Number 18 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: And any of the writing is yours?

THE WITNESS: Yes.

MR. POLITO: Nineteen is Chapter 73 of Hard Metal Disease; it's medical literature?

(Deposition Exhibit Number 19 was marked for identification.)

THE WITNESS: Yes.

MR. POLITO: And the handwriting on it is yours?

THE WITNESS: Yes.

MR. POLITO: Twenty is called Metals and Metalloids?

THE WITNESS: Yes.

MR. POLITO: And, again, there is circling and some underlining and that's all yours?

THE WITNESS: Yes.

(Deposition Exhibit Number 20 was marked for identification.)

MR. POLITO: Twenty-one is from the Journal of Allergy and Clinical Immunology. And, again, if there's any handwriting or underwriting, it's yours?

THE WITNESS: No.

MR. POLITO: No?

THE WITNESS: There is some handwriting

where my colleagues --

(Deposition Exhibit Number 21 was marked for identification.)

MR. POLITO: Don't be so quick. This is 21; that's 22. That's a different --

THE WITNESS: I think it's the same article.

MR. POLITO: Well, then you just skipped -- you went 434 to 480.

THE WITNESS: That's right, I did.

MR. POLITO: Okay, well, at least 21 is a portion of it. It's all in your handwriting, right?

THE WITNESS: Right.

MR. POLITO: And then 22 apparently is a continuation of 21 and there's handwriting, but at least on the first page it is not yours.

And then finally -- no, 23 is guideline -- general guidelines for referral to an asthma specialist?

(Deposition Exhibit Number 22 was marked

for identification.)

(Deposition Exhibit Number 23 was marked for identification.)

THE WITNESS: Right.

MR. POLITO: And the handwriting, the only thing that you put an arrow to are signs and symptoms are atypical and there are problems in differential diagnosis?

THE WITNESS: That is the only thing I've written on there, yeah.

MR. POLITO: Out of the guidelines, which of the guidelines do you feel were met in this case?

THE WITNESS: Can we go back to the previous version of this which was available at the time of the case?

MR. POLITO: Okay.

THE WITNESS: And we'll look at the same corresponding page and you'll see where I ticked off a couple of things there.

MR. POLITO: Which ones?

THE WITNESS: Well, the ones that you see

I've underlined here. One says signs and symptoms are atypical or there are problems in differential diagnosis. For example, chronic bronchitis, which is asthma in adults, and so on.

And then another entry that says patient is not responding optimally throughout the therapy, and finally, patient requires guidance on environmental control consideration, immunotherapy and so on.

BY MR. POLITO:

Q Let's talk about the first one, signs and symptoms that are atypical. What signs and symptoms did he have that were atypical for asthma?

A The -- with respect to signs that's atypical is the fact that on only one occasion were wheezes reported. On several occasions the lungs were described as having quiet lung sounds and on another occasion there is some asymmetry in the lung sounds.

Q Anything else under the signs and

symptoms that are atypical? Are there problems in differential diagnosis that serve as the basis of your opinion that there should have been a referral?

A I would say there are problems with differential diagnosis on a patient that doesn't respond optimally. Doesn't mean the initial diagnosis is wrong, but other diagnoses should be considered.

Q What's the basis that this patient didn't respond, at least in the immediate sense, to the treatment being given to him?

A The fact that he keeps coming back at times when he doesn't have appointments but rather for discomfort, and he keeps coming back to the physician on unscheduled times. I mean, it's sub-optimally -- response.

Q But you'll agree, as we talked about before, it's not unusual for patients with asthma to come back on an episodic basis such as this patient did?

A Agreed. But it's two different things,

isn't it?

Q You may say it one way --

A You ask me what's sub-optimal. The next thought was it's not unusual for a patient to come back --

Q Well, I'm just saying that you said that he came back on several occasions. What I'm saying is family docs treat patients with asthma all the time that come in on a frequent basis with episodic flare-ups. They're given treatment, they respond, and then several months later they come back again.

That occurs often in a family practitioner's office, doesn't it?

A We have been over this ground before. I don't think the outcome of the discussion will be any different.

Q You disagree with what I just said?

A I think I disagree with an interpretation or a spin you're trying to put on it which is that when a patient comes back frequently with -- for unscheduled visits, I think you would have me say

that that is not sub-optimal treatments, and I'm saying it is sub-optimal -- sub-optimal response.

Q Well, okay. What do you mean by frequently? You keep using that term. I want to make sure --

A We've already been through the numbers before. Starting in March of '93 until June of '94, he has, I think, seven or eight visits.

Q Okay.

A I define that as frequent.

Q Would you define June of '94 through December of '97 as frequent visits?

A No.

MS. TAYLOR-KOLIS: Did you want to ask him about the environmental --

MR. POLITO: Oh, yes.

THE WITNESS: Ask your question.

BY MR. POLITO:

Q You underlined it; what significance does it have?

A Well, there's the one comment I think in June of '94 that the patient's symptoms are worse

in the workplace.

Q At the same time he was telling him that it was worse after eating?

A So what?

Q Okay.

A It's worse in the workplace.

Q Did he ever record that at any other time other that one occasion?

A I don't recall that he did.

Q Okay. And we had talked about earlier, it's not unusual what's known as occupational asthma, correct?

A Agreed.

Q So certainly, Doctor, if in fact this was all the time due to his occupation, you would have expected this patient to have reported it to this physician?

A If a new history were taken, I think it would have come out --

Q Did you ever see that he ever reported it other than that one occasion to this doctor?

A No. Neither do I find that he asked the

question.

Q You don't think that this doctor asked him, for example, when -- what exacerbated it because we know one time it was exacerbated by basketball, true, another time by mowing the lawn?

Do you have any reason to disagree that this physician didn't ask him what brought this on?

A The only reason I have is that it's not recorded.

Q But we do see on at least several occasions him giving an inciting event, true?

A Yes.

Q So do you have -- if this doctor were to testify that on each of the occasions I would have asked him what brings it on, do you have any reason to disagree with him?

A You're asking me to assume that because he reported once that basketball brought it on that he asked all the other questions?

Q No. What I'm asking you is what brings on this cough, what are things that bring it on,

and do you have any reason to think that he didn't ask those questions?

A The only reason I have is that it's not recorded and to expect that those questions are recorded is not unreasonable. Most of the things we write on the medical record are negative.

Q But do you record all pertinent negatives?

A Not all pertinent negatives, but important pertinent negatives.

Q You wouldn't want me to go to your chart and find out that you recorded all of the negatives, that I can pretty much go to your chart and see what the inciting event was on every time?

A Is this about me --

Q Yeah -- no, I'm just asking you because you're testifying that this physician may or may not have done it, and I just want to know that this failure to record it, is that a deviation from standard of care?

A No, it's a not deviation of standard of care. The problem we're going to have here is a

problem that you guys have made; namely, if it's not charted, it's not done.

Q Certainly it's not me that makes that rule. I don't agree with that rule because it happens all the time, but I think my brother on the other side may say that that's a good rule, but you don't agree with that philosophy, do you, that if it's not charted, it's not done?

A No.

MR. POLITO: Twenty-four is a hard metal and cobalt from asthma due to metals and metal and salts?

(Deposition Exhibit Number 24 was marked for identification.)

THE WITNESS: Correct.

MR. POLITO: Anything else, guys?

MR. REMINGER: No.

MR. POLITO: Doctor, I have no further questions. Thank you for your time.

MS. TAYLOR-KOLIS: Okay. We'll be reading.

MR. POLITO: I figured you would and you

can have a waiver of the seven day.

MS. TAYLOR-KOLIS: Okay. Thanks.

MR. POLITO: Just put that on there. See, in Ohio they're supposed to read it within seven days. I'm waiving that requirement so -- I'm waiving the requirement that this deponent has seven days. I would ask that you review it on an expeditious basis.

MS. TAYLOR-KOLIS: Within 30 days. Is that acceptable to you?

MR. POLITO: That's fine.

(Examination concluded at 6:00 p.m.)

DEPOSITION OF ROY G. BROWER, M.D.
CONDUCTED ON WEDNESDAY, APRIL 19, 2000

I, _____, do hereby acknowledge that I have read and examined the foregoing transcript, and the same is a true, correct and complete transcription of the testimony given by me and any corrections appear on the attached Errata Sheet signed by me.

_____

Roy G. Brower, M.D.

_____

(DATE)

CERTIFICATE OF SHORTHAND REPORTER – NOTARY PUBLIC

I, MARTHA L. LEES, the officer before whom the foregoing proceedings were taken, do hereby certify that the foregoing transcript is a true and correct record of the proceedings; that said proceedings were taken by me stenographically and thereafter reduced to typewriting under my supervision; and that I am neither counsel nor related to, nor employed by any of the parties to this case and have no interest, financial or otherwise, in its outcome.

/s/
Martha L. Lees
Notary Public in and for
the State of Maryland

My commission expires: August 2001