In The Matter Of:

Gary Diederich, et al. v.
Dennis Carson, M.D., et al.

Edward R. McFadden, Jr., M.D.
May 2, 2001

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IN THE COURT OF COMMON PLEAS
LORAIN COUNTY, OHIO
GARY DIEDERICH, et al.
Plaintiff,
-vs- CASE NO. 98CV17126
DENNIS CARSON, M.D., et al.,
Defendants.

Deposition of EDWARD R. McFADDEN JR., M.D., taken as if upon cross-examination before Judith A. Gage, a Registered Merit and Certified Realtime Reporter and Notary Public within and for the State of Ohio, at the University Hospitals of Cleveland, 11000 Euclid Avenue, Cleveland, Ohio, at 9:00 a.m. on Wednesday, May 2, 2001, pursuant to notice and/or stipulations of counsel, on behalf of the Defendant in this cause.

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On behalf of the Defendant.

ALSO PRESENT:

Dennis Carson, M.D.

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EDWARD R. McFADDEN JR., M.D., of lawful age, called by the Defendant for the purpose of cross-examination, as provided by the Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

CROSS-EXAMINATION OF EDWARD R. McFADDEN JR., M.D.

BY MR. POLITO:

MR. POLITO: Let the record reflect that this is the discovery deposition of Dr. Edward McFadden, Junior. This deposition is taken pursuant to agreement of counsel, and Donna, can we get a waiver of any defect in notice or service of this deposition?

MS. TAYLOR: Of course.

MR. POLITO: And I assume that all objections to this deposition are preserved.

MSTAYLOR: Correct.

MR. POLITO: Okay.

Q: Dr. McFadden, my name is John Polito, I represent Dr. Carson, who is here with me today along with John Scott.

I'm going to be asking you a series of

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questions regarding your opinions in this case, okay?

A: Yes.

Q: You have been through this process before.

A: Yes.

Q: And I have read a number of your depositions so you know basically the ground rules, that in fact you cannot answer until I'm done asking my questions. Okay?

A: Witness nodding affirmatively.)Yes.

Q: And you have to verbalize all your answers, okay?

A: Yes.

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

A: Yes.

Q: But if you answer it I'm going to assume you understood it and rely on your answer. Fair enough?

A: Fair enough.

Q: Would you please state your full name for the record, please?

A: Edward Regis McFadden, Junior.

Q: And what is your home address, sir?

A: 2706 Landon, L-a-n-d-o-n Road, Shaker Heights.

Q: Are you married?

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A: Yes.
Q: What is your current office address?
A: It is the pulmonary division — pulmonary and critical care division, University Hospitals of Cleveland.
Q: What position do you hold here at UH?
A: I'm the director of the clinical research center at Case Western Reserve University and the head of the center here at University Hospitals.
I'm the director of the clinical research scholars program at Case Western Reserve University.
Q: You are no longer the director of the division of pulmonary and critical care medicine at UH?
A: No. I stepped down.
Q: And that was in the year 2000?
A: Yes.

(Thereupon, Defendant's Exhibit 1 was marked for purposes of identification.)

Q: Doctor, I'm going to hand you what's been marked for identification purposes as Defendant's Exhibit 1. Could you identify that for me?
A: It's a copy of my curriculum vitae.

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Q: Is that C.V. current?
A: I just need to look.
Q: Take your time.
A: Reasonably.
Q: Are there any additions, deletions, or corrections that you want to make to that C.V.?
A: There are more papers that would go on here, but this is reasonable.
Q: Doctor, as I said, I had an opportunity to review some of your depositions.
It's my understanding approximately 60 percent of your professional time is research, correct?
A: It depends on my activities. My activities are probably 50/50 patient care and research. My research is all patient care.
Q: But I'm talking about your research, doctor. How much of your professional time is spent in research? As I said, I have read your deposition, you testified previously it was 60 percent.
A: Yes, that's probably reasonable. It goes anywhere from one percent to a hundred percent the other day, depending on what time of year it is.

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Q: But on an average doctor, per year, approximately 60 percent of your time is spent in research. True?
A: Yes, probably.
Q: And about ten percent of your time is spent in administration.
A: Yes. Probably still about ten.
Q: Do you have any active patients currently, doctor?
A: Oh, yes.
Q: How many active patients do you have currently?
A: Oh, I don't know. Many hundreds.
Q: Do you have office hours, doctor?
A: Yes.
Q: Doctor, do you hold yourself out as an expert in any other field other than pulmonary and critical care medicine?
A: No.
Q: Have you ever practiced solely as an internist or a family practitioner?
A: I practiced as an internist routinely, actually.
Q: But internist with a specialty in pulmonology, correct?
A: No, I do general internal medicine. I take Care of patients with pulmonary disease in a

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consulting fashion, and I take care of their internal medicine problems and their families' internal medicine problems if they want me to, et cetera.
Q: What part of your pulmonary practice, doctor, is internal medicine?
A: That's hard to assess. If a patient — if I'm caring for a patient, for instance, who has asthma and has hypertension, I will treat the hypertension. If they have arthritis, I will treat the arthritis.
Q: Let me ask it this way, doctor. How many patients do you treat solely for internal medicine needs?
A: None. That's in my private office. I function as an internist in the hospital in my teaching rounds.
Q: You're board certified in what?
A: Pulmonary medicine and internal medicine.
Q: What percent of your clinical practice is office based?
A: All of my clinical practice. I have an active clinical practice that is outpatient, and I have inpatient responsibilities as well.
Q: That wasn't my question. How much of it is

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office versus how much is —
A: Most of it is office.
Q: Is there a Board certification in occupational medicine?
A: I don't know. I suppose so.
Q: Do you hold yourself out as an expert in the field of occupational medicine?
A: No.
Q: We're here today taking this deposition at the General Clinical Research Center. Is that correct?
A: That's right.
Q: What percentage of your practice is referred to you by other physicians?
A: The vast majority of it.
Q: When you say vast majority, 90 percent?
A: Oh, yeah.
Q: And would it be fair to say that the vast majority of the ones that are referred to you are for pulmonary problems?
A: Yes.
Q: Doctor, in your own practice, do you order x-rays?
A: Yes.
Q: Do you interpret them yourself?

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A: Yes.
Q: You're aware that other physicians in their practice order x-rays and rely on radiologists to interpret those films, correct?
A: Yes.
Q: That's entirely appropriate and within standards of care to do so?
A: Yes.
Q: I note that you have a lot of publications.
A: Yes.
Q: And a lot of them deal with the subject of asthma.
A: Yes. That's my particular research interest.
Q: Doctor, have you ever written on the subject of hard metal disease?
A: No.
Q: So in terms of publications that would deal with the subject matter of this case, those publications would deal solely with the diagnosis of asthma. Correct?
A: Yes.
Q: So I'm clear, have you ever written on the subject of occupational exposure to cobalt or tungsten?
A: Only in generic terms. I have written about

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occupational asthmas.
Q: Do you consider yourself an expert in hard metal disease?
A: No.
Q: If you had a patient — strike that.
You said that there were some additional publications that were not in your C.V.
Do they also deal with the subject of asthma?
A: Yes. I would assume so. I have not looked, but I mostly write about asthma.
Q: Have those been published?
A: I write about anywhere between two and ten papers a year depending upon what other activities I have, and I don't know what the last paper in here is.
This last paper is probably, it probably got published in 2000. This one got published this year and so there are two or three more that are in press, and then there are some I'm writing and there are chapters that are coming out and so forth.
Q: Could you provide me with just an updated one?
A: Sure.
Q: I appreciate that.
What journals do you subscribe to, doctor?

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A: Personally subscribe to?
Q: Yes.
A: I subscribe to the New England Journal of Medicine, American Journal of Medicine, Archives of Internal Medicine, Journal of — I can't remember its name any more, Journal of Allergy and Clinical Immunology, Journal of Applied Physiology, Journal of Allergies, and American Review of Respiratory Disease, whatever the name is, and I routinely read 15 others.
Q: Do you subscribe to any magazines devoted to internal medicine practitioners?
A: No.
Q: Do you subscribe to any occupational medicine journals?
A: No.
Q: What textbooks do you consider authoritative or reliable on the issue of asthma?
A: The journals, the textbooks you see in the room, I have chapters in all of them.
Q: Well, if you could tell me what those are?
A: Harrison's Principles of Internal Medicine, Allergy, The Lung, Asthma, Asthma and Rhinitis, Textbook of Respiratory Medicine, Office Practices Medicine, et cetera.

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Q: Is there an occupational medicine department here at UH?
A: Not here.
Q: How would you define standard of care, doctor?
A: How would I define standard of care? I suppose it would be care that appropriately evaluates the patient, treats the patient, according to published or community guidelines.
Q: You would agree, doctor, that the mere fact that a physician has a bad result does not necessarily mean he or she has committed medical malpractice?
A: Oh, yes. Sure.
Q: You agree two physicians can look at the same patient and reach a different diagnosis and treatment plan?
A: No, I don't agree with that.
Q: You don't agree with that?
A: Not at all. That's why we thoroughly examine patients and that's why we thoroughly evaluate them.
Q: Doctor, have you ever had a case where you worked up a patient one way, and the doctor that previously saw that patient worked him up a different way, and you both were within standards of care in how you worked them up?

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A: Oh, sure. Oh, sure. You can approach the problem in different ways, of course.
Q: So you don't have to — and doctor, isn't it true that two doctors can look at the same patient and one can come to the conclusion that I reach the diagnosis of X and another one can reach the diagnosis of Y, okay, and both still be within standards of care in reaching that diagnosis?
A: Yes, but that can only exist for a short period of time, because one of them will be right and one of them will be wrong, or they both will be wrong.
Q: Or both of them might be wrong or both of them might be right?
A: Not if there is one diagnosis.
Q: Not if there is one, but if there are multiple diagnoses both of them may be right. True?
A: Absolutely.
Q: Have you ever misdiagnosed a patient, doctor?
A: Yes.
Q: Did you feel you fell below standards of care in doing so?
A: No.
Q: Do you know anything about Dr. Carson's training, education, and experience?

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A: Nothing at all.
Q: You are not saying that Dr. Carson is an incompetent physician, are you?
A: Not at all.
Q: From what you know in this case, do you find him to be a reasonably competent physician?
A: I can't comment on that.
Q: Well, did you find him to be well educated and trained?
A: I don't know his training. I don't have his C.V.
Q: Did you ask for his C.V.?
A: No. The only thing I have of Dr. Carson's is his deposition.
Q: Based on what you saw in his deposition concerning his training —
A: I didn't see anything.
Q: Okay. And you never asked to see anything; true?
A: I just got his deposition two days ago.
Q: So up to two days ago, doctor, you had never reviewed Dr. Carson's deposition?
A: That's so.
Q: Where is your file on this case, doctor?
A: Right behind you.
Q: When were you first contacted?

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A: I don't know. I have it in writing, but I don't know. This is the information that I have, and this is my file.
While we're in a lull, I need to tell you that I have a patient who is deteriorating and that I may need to be called out.
MR. POLITO: Certainly.

(Thereupon, a discussion was had off the record.)

(Thereupon, Defendant's Exhibits 2 to 4 were marked for purposes of identification.)

Q: Doctor, if you could, and I didn't see it there, could you tell me when you were first contacted in this matter? And it may have been — I'm sorry.
A: May 4 I have a letter, but I may have an earlier E-Mail. I don't know. Do you want me to look?
Q: Sure.
A: I dropped this and I'm sorry, they are out of order. It looks like May.
Q: May of 2000?
A: Yes. May 4 I have a letter.

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Q: And you were contacted by Donna Taylor-Kolis?
A: Yes, I think so. Probably by phone, but I don't have a record of the phone call.
Q: What were you asked to do?
A: Review the records of the care of Gary Diederich. Well, that's not right here. Let me look at this.
Q: And you, when you received the records, you also received correspondence from Miss Kolis dated May 4, 2000?
A: Right. You have everything that I have.
Q: And that is marked as Exhibit 4?
A: Yes.
Q: Would it be fair to say before you even began reviewing the records you knew the end of the story?
A: Yes. Whatever is in there I knew.
Q: You knew before reviewing one record in this matter that the patient, Gary Diederich, had been diagnosed with hard metal disease; true?
A: Yes.
Q: Were you aware, doctor, that you are the second expert retained by Miss Kolis?
MS. TAYLOR: Object as to the relevance, but go ahead.

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A: Yes.
Q: Has anything been removed?
A: No.
Q: Do you have any type of notes, doctor, concerning your review?
A: No.
Q: Did you at any time?
A: No.
Q: Other than the summary that's put forth in Miss Kolis' letter of May 4, do you have any other summaries that were provided to you?
A: No. Everything I have is in my file.
Q: Doctor, what documents did you review prior to authoring your report of July 18, 2000?
A: This file.
Q: Well, would you tell me specifically what you had to review?
A: May I look through the file?
Q: Sure.
A: Some pulmonary function studies from Elyria Memorial Hospital in August of '92. Dennis Carson, attorney submission referral, Emergency Room, air sampling results —
Q: Wait a minute. You have to give me dates on these, doctor.

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keep making mistakes on people's names.
I have the deposition of Dr. Carson and I have the deposition of Dr. Mehta.
Q: Were you aware, doctor, that Dr. Roy Brauer from Johns Hopkins was Miss Kolis' first expert in this matter?
A: No.
Q: Have you ever had an opportunity to review Dr. Rrauer's deposition in this matter?
A: No.

Carson, M.D., attorney submissions, and it doesn't have a date. It just says 6/3/97 is the date.
Q: Okay. Is that the Tri-City Family records?
A: Yes, it is.
Q: Maybe we can do it this way, doctor, to help you out so we won't be here too long.
Why don't we look at your —
A: I have Dennis Carson, Tri-City Family Medicine — excuse me, I need to take this.

Q: You authored a report dated July 18, 2000?
A: Yes.
Q: Have you authored any other reports?
A: No.
Q: Do you have any drafts of that report?
A: No.

don't know what all these things are because they are broken up differently.
Q: Okay.
A: And I had Dennis Carson, Tri-City Family Medicine office chart. Dr. Dacha's office record, Elyria Memorial Hospital records, Cleveland Clinic

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categories.
Q: Tell me either from the letter — have you ever seen Dr. Arora's office records?
A: Dr. Arora's office records? I saw a note on Dr. Arora. Again, as I said, I'm bad on names. Arora. What did Arora do?
Q: He was the —
A: First pulmonary doctor or the last?
Q: First?
A: I saw that. I saw a referral letter. That's what I saw. No office records.
Q: How about Dr. Juliano?
A: No.
Q: How about Dr. Panuto?
A: No.
Q: When is the last record you saw from the Cleveland Clinic?
A: I don't know the date, but — the Last progress note in here is in '97, that I can —
Q: You did not see any records from the Bureau of Workers' Compensation?
A: No.
Q: You have seen chest x-rays, correct?
A: Yes.
Q: Did you bring those with you today?

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A: They are here.
Q: Would those have been the chest x-rays taken during the time the patient was under the care of Dr. Carson?
A: I don't know. The chest x-rays I have are virtually uninterpretable. They are so burned out you cannot even read the dates.
Q: Burned out meaning there are too many copies from copies?
A: I would suspect that's the case. I don't know. I don't think any reputable radiologist would pass those off as regular films. So they are not interpretable, what I have. I have never seen the original films.
Q: We'll talk about the chest films later.
Have you seen any videos or photographs in this case?
A: No.
Q: Have you seen any other films other than the ones taken during the time the patient was under the care of Dr. Carson?
A: No.
Q: Have you seen any records from Mr. Diederich's employer?
A: No.

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Q: Have you seen any material safety data sheets?
A: I saw something from — I don't know where they are at in the records. I thought I saw some material safety data sheets, but they were just two short reports. I don't know where they are at.
Q: Have you seen any records regarding the exposure Mr. Diederich had to any particular chemicals?
A: The material I saw talked about tungsten, cobalt and nickel.
Q: Do you recall where you received that information from?
A: In this file.
Q: In what file?
A: In the file that I have here. I don't know specifically where I could find it, if you want me to look through it.
Q: Do you recall, was it from a medical record?
A: No, it wasn't a medical record. I can't remember the name of it. This is terrible.
Someone talks about it in their records. I think it's in the Cleveland Clinic records is where I saw it.
While I'm looking, you can ask me other questions.

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Q: Have you seen any affidavits of Gary Diederich?
A: No.
Q: You said you read the deposition of Dr. Carson for the first time within the past two days?
A: Yes. Couple days.
Q: Would the same thing be true with Dr. Mehta's deposition?
A: Yes.
Q: Have you ever seen the deposition of Gary Diederich?
A: No.
Q: Tonya Diederich?
A: No.
Q: As I said, I think, you have never seen the deposition of Dr. Brauer.
A: No.
Q: Have you ever seen the expert report of Dr. Brauer?
A: No.
Q: You have seen a report authored by Dr. Mehta?
A: I saw — Dr. Mehta is at the Cleveland Clinic? I read his deposition.
Q: I thought I saw in there a report authored by him on 9/25/98.
A: Yes, whatever I have in here. This is part of

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the stuff I got.
Q: Did you review the report of Dr. Cully?
A: No. Dr. Cully. I'm bad on names. Is he the expert—
Q: Right.
A: Yes, I reviewed that.
Q: When did you review that for the first time?
A: The day it came, so it would be whatever date that's on it, and then I reviewed it again last night.
Q: So you would have reviewed it sometime in September of 2000?
A: Yes, whenever it came.
Q: And you also reviewed the report of Dr. DeMarco?
A: Yes.
Q: Did you ever review the expert report of Dr. Rosenberg?
A: No.
Q: Do you know any of those experts, Cully, DeMarco or Rosenberg?
A: I know DeMarco and I know Rosenberg.
Q: And how do you know them?
A: Dr. DeMarco worked at Metro, or still works at Metro, and I have seen him from time to time, and Dr. Rosenberg worked at Mount Sinai and I have

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seen him.
Q: Is Dr. DeMarco a well-respected physician in this area?
A: In what area?
Q: Pulmonology.
A: Yes, he is well thought of.
Q: How about Dr. Rosenberg?
A: Yes. He is well thought of. I can't find this, but it's in here.
Q: Do you know any of Mr. Diederich's treating physicians?
A: Personally?
Q: Personally or professionally.
A: No. I know Dr. Mehta professionally. I know him to see him.
Q: Did you review any pleadings or affidavits in the case Mr. Diederich filed against his employer?
A: No.
MS. TAYLOR: Objection, just to relevancy, but go ahead.
A: No.
Q: Did you review any medical literature for this lawsuit?
A: No.
Q: Are you relying on any specific medical

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literature to support your opinions in this lawsuit?
A: No.
Q: Have you provided or been provided any medical literature?
A: No.
Q: Have you ever examined Mr. Diederich?
A: No.
Q: Have you ever requested to examine him?
A: No.
Q: Have you ever spoken with Mr. Diederich or any member of his family?
A: No.
Q: Do you know what his present medical condition is?
A: Only from the records.
Q: Now, the last record you had was from 1997.
A: Then I don't know anything more recent.
Q: So it is fair to say, doctor, you are not going to be rendering any opinions regarding his present medical condition; true?
A: Right.
Q: Or his prognosis. True?
A: I can talk about potential, but I can't talk about his current prognosis, no, without knowing

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more about it.
Q: So at the present time, doctor, you're not in a position to render any opinions regarding his prognosis. True?
A: I can talk statistically, but not specifically.
Q: Did you in your report in any way comment on his either present condition or future condition?
A: I don't think I did.
Q: Take your time and look.
A: Here it is. No. I just simply said that he has progressive pulmonary fibrosis.
Q: Have you spoken with any other physician about this matter?
A: No.
Q: Have you spoken to any of his treating physicians?
A: No.
Q: Have you spoken to any of his, to his employer or any of his supervisors?
A: No.
Q: Is there anything you have asked for that's not been provided?
A: No.
Q: When did, from your review of the records, did Mr. Diederich first see Dr. Carson?

MS. TAYLOR: You are allowed to use the records, doctor.

MR. POLITO: Oh, yes.

A: '93 is the first time. 3/16/93.

Q: What was his job position at that time?

A: What was whose job position?

Q: Mr. Diederich's.

A: A welder.

Q: How long had he held the position of welder prior to 1993?

A: I don't know. From the records it seems he welded seven, eight years or so, or perhaps longer, but I don't know from '93. I could read it in the first note, it talks about it. Dr. Arora's notes talk about him as a welder and that note is in '92, but I don't have the exact times.

Q: You said based on your review of Dr. Carson's initial note it appeared that he held that position for about seven or eight years?

A: No, I said reviewing the records it appears he held the position —

Q: I said in reviewing Dr. Carson's initial note —

A: If you are referring to the note of 3/16/93 —

Q: Yes.

A: The written note, it doesn't say.

Q: Where did you get the seven to eight years from, doctor?

A: Probably from the Cleveland Clinic because they take a more complete occupational history.

Q: Do you have any reason to disagree that Mr. Diederich began his welding career sometime in the mid 1980s?

A: No, I don't have any reason.

Q: So it would be fair to say that by the time he saw Dr. Carson in 1993, he had been working in that position for some seven or eight years?

A: Yes, that's probably more like it,

Q: And it would be fair to say by the time he saw Dr. Carson in 1993, he had been exposed to cobalt, tungsten and nickel for seven or eight years?

A: I don't know what he was welding. If he was doing the same job all of the time, dealing with heavy metals every day, then it would have been likely that he would have been exposed to it. If he changed jobs or if they changed things that he was welding, then it would have changed his exposure.

Q: As you sit here today, do you know what he did

from 1986 to 1993?

A: I do not.

Q: Do you know if he was being exposed to cobalt, tungsten and nickel on a daily basis from '86 to '93?

A: I do not.

Q: Did he wear any type of protective equipment such as a mask during those seven to eight years?

A: No. As best as I can determine, he did not.

Q: Do you know what quantity of exposure to cobalt, tungsten and nickel this man had prior to 1993?

A: No.

Q: When was Mr. Diederich first diagnosed with hard metal disease?

A: The physician that saw him for it sent him to the Cleveland Clinic.

Q: What year?

A: I don't know. I would have to look.

Q: Take your time.

A: The diagnosis looks like it was made in '97. I don't know precisely when he had his biopsy and that's what confirmed it.

Q: I think that was sometime during the summer of 1997.

A: Yes. I don't know what date, what month.

Q: Okay. Doctor, when in your opinion to a reasonable degree of medical probability did Mr. Diederich first contract hard metal disease?

A: Probably over the time that he was exposed to the metal.

Q: Okay. But when first, doctor?

A: I can't state that. It's a dose response phenomenon and there is a latent period associated with it.

Q: Do you have an opinion, doctor, to a reasonable degree of medical probability when he first contracted it?

A: My guess would be within years, within several years of his working with the tungsten and cobalt.

Q: Doctor, would it be fair to say that from the time he first began working as a welder until 1997, the disease progressively got worse?

A: Yes.

Q: Prior to Dr. Mehta, had Mr. Diederich ever told anyone he had been exposed to either cobalt or tungsten or nickel?

A: There is no note of it in his records.

Q: What is hard metal disease, doctor?

A: It's a pneumoconiosis that follows exposure to

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cobalt, tungsten, nickel, things that harden steel.
Q: What is the pathophysiology of it?
A: A couple forms. One form is it can present as a sensitivity or an irritability of the upper airways, lower airways. And another form of it is progressive pulmonary fibrosis with giant cell involvement.
Q: How many patients have you treated primarily with hard metal disease?
A: I have not treated anybody. I have made the diagnosis a couple times, but not treated anybody.
Q: And over what span have you been in the division of critical care and pulmonary medicine, either here or at Harvard?
A: *20* years or longer. *25* years.
Q: *So* in those *25* years in the specialty practice of pulmonary care and critical care you have made the diagnosis of hard metal disease on how many occasions?
A: Two.
Q: And on both occasions after making that diagnosis, you would have referred them to other specialists?

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A: I got to **see** them because of their other problems, and people wanted to know whether they had an occupatioiial asthma.
Q: Well, once the diagnosis was made —
A: Yes. I did not take care of that.
Q: You referred them out?
A: I referred them back to the doctor that sent them to me.
Q: Doctor, do you agree that not everyone exposed to tungsten, nickel and cobalt in their work environment contracts hard metal disease?
A: Yes.
Q: What percentage of them actually contract it?
A: Somewhere around ten or so. It is uncommon.
Q: I'm sorry.
A: I said around ten.
Q: What percentage of patients that wear protective masks or equipment contract hard metal disease?
A: Depends what they wear.
Q: Assume they wear a protective mask.
A: There are protective masks and then there are protective masks and then there are protective masks.
Q: Assume they are wearing a device that is going to protect them against such materials.

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A: If they do not inhale any of the metal fumes or any particulates they will not get a pneumoconiosis or irritability, but that is a mask that's a high level mask, or in some instances you even have to provide the patient's own air supply, depending on what they are working with.
Q: Have you ever acted as a consultant to any employer for work exposure — for exposure in the workplace?
A: Yes.
Q: What percentage of the patients who are exposed to hard metal contract a fibrotic reaction in the lung?
A: I can't give you precise numbers. My sense is like ten percent, but I can't give you precise numbers without looking it up.
Q: Ballpark?
A: Yes, ballpark.
Q: Ten percent?
A: Yes, that's my sense.
Q: Now, patients who are exposed to hard metal can develop a number of different conditions, true?
A: Yes.
Q: Occupational asthma?

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A: That's even more unusual, but it can happen. It has been reported.
Q: Hypersensitivity pneumonitis?
A: No. That requires an antigen.
Q: So if an expert testified that you could develop that from hard metal disease, you would disagree with him?
A: Yes, I would disagree with that.
Q: How about interstitial fibrosis?
A: Yes.
Q: How about sinusitis?
A: Sure.
Q: What are the symptoms of hard metal disease, doctor?
A: Breathlessness, upper and lower airway irritability, cough.
Q: With or without production?
A: If you cough hard enough you willproduce sputum. Usually it is a nonproductive cough or mildly productive cough.
Q: Anything else?
A: That's what I remember. Sinusitis, but I thought I mentioned that. If I didn't, then that's one of the things.
Q: When you say that's what I remember, what are you

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remembering this from, doctor?
A: From my training, from my reading.
Q: So it would be breathlessness; are you talking shortness of breath?
A: Yes.
Q: Cough?
A: Yes.
Q: And sinusitis.
A: No. What I said was upper and lower airway irritability, cough, breathlessness, and some of the people have sinusitis.
Q: Cough is a nonspecific symptom?
A: Yes.
Q: Shortness of breath is a nonspecific symptom?
A: Yes.
Q: Upper and lower airway irritability, nonspecific symptom?
A: Yes.
Q: And sinusitis is a nonspecific symptom?
A: No. Sinusitis is a specific symptom.
Q: Right. Other than sinusitis, the shortness of breath, the cough, the upper and lower airway irritability, those are all nonspecific symptoms which could be symptoms of a host of different diagnoses; true?

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A: Yes.
Q: What are the signs of hard metal disease?
A: Probably — depends upon when you are doing it, when you are examining the patient. Early on there would not be any signs. A little later, there will be airway irritability. If you take a big breath, you will cough. Once you start coughing, you will have paroxysms of cough. There will be limited respiratory excursion, and that's a function of the extent of fibrosis. Or there may be rales in someone's chest.
Q: Anything else?
A: If it's bad enough, and it would really have to be extensive, you could get cor pulmonale and all the other manifestations thereof.
Q: You said early on there may be no signs?
A: Yes.
Q: And then you said as it progresses, you may get on exam a cough when you —
A: When you take a deep breath. Well, when you examine someone you ask them to take a deep breath, and when you do that they will cough. And you may have limited respiratory excursion. Instead of being able to expand your lungs fully, if you put your hands on their chest they don't

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expand as much.
Q: Those signs, are those signs nonspecific?
A: Yes.
Q: So again, they could be signs of a host of different problems. True?
A: Yes.
Q: And you said another thing you might see along the line is rales.
A: Yes.
Q: From 1992 to 1997, did you see any evidence of rales on any exam conducted of Mr. Diederich?
A: No.
Q: Doctor, what tests would you order to rule out or rule in hard metal disease?
A: What tests would I order — would I want to know if I suspected someone had hard metal disease, is that what you are asking?
Q: Yes.
A: I would want to know there are exposures at work and probably look in their urine, see what metals were in there.
Q: Okay.
A: I would want chest x-ray, CAT scan, pulmonary function studies, arterial blood gas, measurements of oximetry.

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Q: Anything else?
A: Depending on the extent of fibrosis, I would then look for the physiologic and pathophysiologic manifestations of pulmonary fibrosis.
Q: What would you expect to see on a chest x-ray?
A: Depending on the extent of exposure, I would either see nothing or I would see increased interstitial markings. If there were extensive exposure I would see pulmonary fibrosis, honeycombing perhaps, enlarged left ventricle, pulmonary hypertension.
Q: From 1992 through 1997, doctor, did you prior to the x-ray taken — I take that back.
From 1992 until late 1996, was there any evidence on chest x-ray of evidence of hard metal disease?
A: There were changes on his chest x-ray that were intermittently described of interstitial fibrosis, mostly perihilar, that came and went, according to interpretation.
Q: Isn't it true that during the time period that Dr. Carson saw this patient and obtained x-rays, at various times there were markings seen on the lungs but on subsequent x-rays, those markings had cleared?

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A: I have not seen the films.
Q: Forget the films. I'm just talking about the reports given to him by the —
A: Yes, you could say that, but there is a problem with interpreting films like this. I only have the reports.
Q: And did anybody in any of those reports ever tell Dr. Carson that they were having trouble interpreting those films?
A: No.
Q: And you previously told me, doctor, that this physician has the right to rely on a radiologic interpretation.
A: I did. And I agree.
Q: And you would agree, doctor, with hard metal disease that once you develop interstitial fibrosis it is there permanently, correct?
A: Yes, unless there is a lot of inflammation and sometimes you can reverse it.
Q: You would expect in a subsequent x-ray if that is hard metal disease that that is not going to clear, true?
A: I could make it come and go, and I could make it come and go as a function of exposure and the intensity of the local exposure.

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The problem with — I don't know if you want to know this.
Q: Sure.
A: The problem with the sort of exposures is if you are doing the same exact job with a constant dust exposure or fume exposure, there is a dose response relationship.
If you are not doing the exact same job, then the dose response relationship changes as a function of what you are working with.
Now, I don't want to digress too far but if you gold miners in the Watersrand, for instance, if they are put at the face of the mine, that's a high gold load with a high silica load. So they can work at the face of the mine, and at the end of two years, they will have fibrosis. Two years, not 15. Et cetera.
So the company has learned that and they take them out at one year and ten months, send them back to their village and they die there.
Taking the same worker, putting him in, digging gold in different seams, gives them a different exposure, and that's part of the difficulty here.
Now, if you want to wear a personal monitor,

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and people are now doing things like this, if you wear a personal monitor and you do it throughout your job you can computer the dose response relationships.
The problem with some of the heavy metals is there is a hypersensitivity or a sensitivity phenomenon as well, and so exposure at one point in time can cause you symptoms that will last days, and you get exposed to it at a smaller dose at another time and you don't.
The next problem is that you can develop changes in your interstitium as a function of the irritability of your airways where you are depositing all this sort of stuff, and so the x-rays can look like you have too much fluid in them and that's the kind of thing that is being described in here, it is a perihilar interstitial process. Without me sitting there looking at all the films sequentially, I cannot make comments about what happened here or there or anything at all about sequences, and I'm not attempting to do that. I'm just saying that things can come and go simply on the basis of exposure, but the underlying process can keep going because it doesn't stop. It sets up an inflammatory process

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that is active for a long period of time.
Q: Well, do you know from 1986 through 1997 if Mr. Diederich's exposure to cobalt, tungsten and nickel changed in any manner?
A: I do not.
Q: If I were to represent to you, doctor, that his exposure to those products remained constant throughout that entire period of time, you would expect then once it appears on that chest x-ray, interstitial fibrosis, it is going to remain and get worse?
A: That would be my expectation.
Q: And based on the x-ray reports in this case, just the exact opposite occurred. In fact, markings would appear on chest x-rays and on subsequent x-rays would clear. That happened at least on two occasions with Dr. Carson.
A: That's what the report says.
Q: And he suspected pneumonia on both occasions, treated the patient with antibiotics and it cleared, Correct?
A: Yes.
Q: And that would be inconsistent with exposure to hard metal disease?
A: It would be inconsistent with progressive

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pulmonary fibrosis, not exposure to hard metal disease.
Q: It would be inconsistent with progressive fibrosis from hard metal disease.
A: Yes.
Q: Okay. You said also that you would order arterial blood gases if you suspected hard metal disease. Correct?
A: Hard metal disease is only one cause of pneumoconiosis and there is a standard workup for pneumoconiosis and there is just one cause of it. I can identify it by looking in the urine, looking for the metals, but there is nothing really terribly special about it except the irritability. Silicosis does not typically, that or coal miner's pneumoconiosis typically doesn't make you so irritable.
Q: What would you expect to see with that?
A: Hypoxia, enlarged alveolar arterial grading for oxygen, and maybe desatui-ation with exercise.
Q: Did you see any arterial blood gases in this case, doctor?
A: Later on I did.
Q: How about prior to?
A: No, I didn't.

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Q: Did you see any arterial blood gases from Elyria Memorial Hospital on this patient?
A: The only thing — I don't know where Elyria Memorial Hospital is, so if it is in here I read it, okay?
If you are going to ask me questions about specific parts of the records, and that's okay —
Q: Right.
A: Just tell me where to go in here, okay?
Q: I'm trying to find it, doctor.
A: That's fine, because it's not in here.
Q: So you don't —
A: I don't have it.
Q: So you don't know if there were any arterial blood gases done on Mr. Diederich, then, between the time period he saw Dr. Carson until he went over to Dr. Dacha?
A: I don't have anything from Elyria Memorial Hospital.
Q: The pulmonary function studies, what would you expect to see on those?
A: Initially nothing, and then I would expect to see a restrictive defect. I could see an airway obstruction as well, or a combination.
Q: And when you say early on, what do you mean,

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early on?
A: Well, I mean if I put him into an environment in which there were heavy metal fumes and I put you in there a week and tested your function before and after a week, there would not be anything unless you had some unusual sensitivity reaction.
If I kept you in the same environment for a period of time, like a year, then I would expect to see your total lung capacity fall and residual volume fall, and the diffusing capacity value.
Q: I think you answered this yes but you believe that this process is exposure based. The greater the exposure, the more likely you are going to get the disease?
A: Yes.
Q: Is there a legal limit that an employee can be exposed to?
A: I don't know that. I don't know what OSHA says.
Q: You would agree that this is a very rare disease process?
A: Yes, it's an unusual disease.
Q: Do me a favor. Wait until I'm done.
A: Excuse me?
Q: It's not for me. It's more for the court reporter.

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When in your opinion to a reasonable degree of medical certainty did Mr. Diederich first experience respiratory symptoms secondary to his hard metal disease?
A: **'92,'93,** whenever it was.
Q: Was that pre-Dr. Carson?
A: Yes. He had symptoms in **1992.** Dr. Carson saw him in **1993.**
Q: Were you aware of a record from back in **1990** at EMH where he was complaining of pleuritic chest pain?
A: No. All I have is what I have here.
Q: So at least from your review of the records, the earliest —
A: If there is another place, I'll look.
Q: Good.
A: Where am I supposed to look?
MS. TAYLOR: I'm assuming because you have highlighted everything you must have read all these things at some time.
THE WITNESS: Yes, I read everything in here.
MS. TAYLOR: Okay.
THE WITNESS: I can tell you that he was coughing.

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Q: My question is how long before, doctor —
A: When I read it? '92 is when I read it.
Q: Do you know if he had these complaints from '86 to '92?
A: I don't know and I can't read most of the stuff in here because it is all — here, he has pleuritic chest pain, and he had pleuritic chest pain — I can't read the date.
MS. TAYLOR: I think the date is where the tab is. It should tell you what the date is on that.
A: Okay. This is 1990.
Q: Okay. So?
A: Emergency Room. Pleuritic chest pain.
Q: So would it be fair to say, then, that at least three years prior to seeing Dr. Carson that he had some symptoms related to his hard metal disease?
A: I don't know that his pleuritic pain is related to his hard metal disease.
Q: So if another expert testified that he thought it was, would you have any reason to disagree with him?
A: For all I know, he could get hit with a bat playing ball or something. I don't have any

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information in here, and that's the problem. It states sharp continuous pain under his rib cage. Hard to breathe.
Q: Would you agree that giant cell pneumonitis is an extremely rare form of lung disease which claims approximately ten percent of the hard metal workers?
A: Yes, I thought I answered that. I agree.
Q: Let's talk about asthma. What is asthma?
A: It is a disease where there is inflammation in the airways, a process that causes reversible narrowing, and patients develop shortness of breath and wheezing and coughing intermittently, and it is interspersed with symptoms reappearing.
Q: They talk about the triad: Wheezing, shortness of breath and cough?
A: Yes.
Q: Rut you yourself have written that there are patients that you don't have to necessarily have all three?
A: Right.
Q: You may have a patient just with a cough and no wheezing found, true?
A: True.
Q: Same thing, you may have a patient with shortness

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of breath, no cough, no wheezing and be diagnosed with asthma, correct?
A: That is so. You have done your homework.
Q: You wrote enough on it, doctor.
A: But you probably don't want to go there.
Q: We'll get to it in a second.
A: Okay.
Q: Let's talk about — and you agree that it is an episodic disease?
A: Yes.
Q: That it waxes and wanes?
A: Yes.
Q: That a patient may come to see his doctor twice a year, I had asthma as a kid, you may have experiences where all of a sudden it flares up a couple times a year where you need to see your doctor?
A: Or it can be daily.
Q: Okay. So asthma then can either be daily —
A: Yes. We can make it simple. We can say that asthma can be episodic or it can be severe and persistent and it can phase anywhere from episodic all the way to severe and persistent.
Q: And you agree that the signs and symptoms with asthma are nonspecific signs and symptoms?

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A: Nonspecific in that they point to the lungs, yes, or the airways, sure. Not specific, I need to make sure —
Q: Fair enough.
A: I know where you want to go with this so I want to make sure that I don't mislead you.
Q: The symptoms of cough, wheezing, shortness of breath, are nonspecific symptoms which could be due to a host of diagnoses.
A: Right. They are not specifically unique to asthma. That's what you want to say.
Q: Right, and you would agree that the signs and symptoms of asthma overlap with the signs and symptoms of hard metal disease?
A: And heart failure.
Q: True?
A: Yes. Can overlap.
Q: Okay. Let's talk about —
A: But there are some unique features.
Q: Okay. What are those unique features?
A: The unique features of asthma is that people with asthma have increased airway activity.
Q: How do you test for that?
A: Methylcholine bronchial provocation.
Q: Would you agree that asthma is diagnosed solely

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by clinical criteria?
A: If you are going to quote my work, we can save a lot of time.
Q: I'm just asking you, doctor, do you agree with that comment?
A: Yes, I do agree. I wrote it. But I'm the ultimate authority on what I wrote, okay?
Q: I'm just asking you if you agree with —
A: We agree on that. That will save us some time.
Q: You agree that it is difficult to establish the diagnosis of asthma in the laboratory, for no single test is conclusive?
A: Yes. You need to do a multiple variety of tests. Sorry. I misunderstood what you were saying. I agree.
Q: You agree that no immunologic, physiologic or biochemical tests are specific for this illness of asthma?
A: Yes.
Q: Rather, asthma is suspected when characteristic patterns of signs, symptoms and physiologic abnormalities develop.
A: Yes.
Q: The usual history is that of episodic paroxysms —
A: Paroxvms.

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Q: — of dyspnea, coughing and wheezing that are interspersed with symptom-free periods.
A: Yes.
Q: Typically, the initial symptoms are intermittent and short lived, lasting from minutes to hours.
A: Yes.
Q: And then with time, however, they might become more frequent and severe.
A: Yes. That's what we just said.
Q: Complaints may last for a considerable period, but invariably the symptoms wax and wane.
A: Yes.
Q: The cough with asthma, is that productive or nonproductive?
A: Typically it is nonproductive and it is paroxysmal, and it wakes people up at night.
Q: But certainly, doctor, you don't have to have that symptom to make the diagnosis of asthma; true?
A: If you don't wake someone up at night with their symptoms, it is exceptionally unlikely that they have asthma.
Q: Have you ever written and said that, doctor?
A: Oh, yeah.
Q: Could you tell me in what article you said that,

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that you need the symptom of waking up at night to nuke the diagnosis?
A: I did not say that in an article. I said — I'm fairly careful with what I write and say, and I was fairly careful with what I just said. It is exceptionally unusual for people with asthma not to wake up at night. There are studies that show 90 percent of all patients wake up. It is the commonest manifestation of the disease. Nocturnal awakenings.
Q: When you — okay. We talked about the symptoms. What are the signs, then, of asthma?
A: Signs of asthma are, depending on the severity, the obstruction, but the signs are those of airway obstruction, so there can be wheezing, hyperinflation, low diaphragm, increased A/P diameter; in an acute attack people will be using their accessory muscles; paradoxical pulse, they can even have evidence of right ventricular failure — or right ventricular strain, not failure.
Q: And is it also true that you can have none of those and still have asthma?
A: You can be totally asymptomatic and have normal pulmonary mechanics and normal pulmonary

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function.
Q: What are the causes of asthma?
A: How far do you want me to go into this?
Q: Major causes.
A: The major causes of asthma are — let's distinguish something so that we can save some time. Do you want to talk about trigger or cause? If you want to talk about cause of disease, that's one discussion. If you want to talk about things that cause acute episodes of asthma is another discussion.
Q: Let's talk about both.
A: Okay. The causes of asthma are not known. It is thought to be genetic, and there is a series of genes that are related to — that are associated with various aspects of the asthmatic diagnosis.
Irrespective of the fundamental molecular biological causes, there is chronic inflammation of the airways. The chronic inflammation of the airways makes them more irritable to all kinds of stimuli.
Now, there can be a genetic factor that can predispose you to that. There can be some maternal issues, like maternal smoking can predispose you to that. ATP in a family can

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predispose you to that. A viral respiratory tract infection can turn on switches to predispose you to that.

They are sort of the major things that people think about causing the disease, Once the disease is established then there are triggers that can make you wheeze, and I'm going to say "wheeze" now as a shorthand for acute episodes of asthma or acute airway obstruction.

Q: Okay.

A: With a proviso that you can wheeze and you can be short of breath and you can cough in combination, or one of the three of them, okay? I'm just going to use wheeze for shorthand.

The things that can make that happen in order of frequency are viral respiratory tract infections, exercise, ATP, and that's exposure to an antigen, and there are a variety of antigens, and the antigens in the inner city are somewhat different than outside the inner city, but the viruses in the inner city are things like cockroach and dust mite, and outside the inner city there are things like molds and dusts and other sorts of environmental things, and they can fly in the air so one can get it, and animal

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dander.

And then the next commonest cause is emotional upset of one type or another, or emotional stress is a cause of a trigger. People, you can reproduce asthma attacks in people who have sensitivity, emotional sensitivity.

And then you get into things like exposure to cold air, strong smells, irritant vapors, upper respiratory tract infections. I'm missing some but I can't remember what. Yes. Sulfites, aspirin sensitivity, metabisulfite sensitivity. They are the commonest triggers.

Q: What percentage, I think you have written anywhere, what, 7 to 8 percent of the U.S. population —

A: No. That is probably high. 4 to 6 percent. But a lot of people, 14 million people. A lot of people.

Q: Do patients with asthma also have sinusitis?

A: Some do.

Q: Post nasal drip?

A: Yes. People with asthma have complained of post nasal drip, and people with post nasal drip don't complain of asthma. It is not causal. It is an

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associative phenomena.

Q: Okay. Let's talk about a chest x-ray with asthma. What would you expect to see on a chest x-ray with asthma?

A: Usually, if it is an acute attack, then hyperinflection. If it is when the person is asymptomatic, nothing. Sometimes you can see atelectasis in acute attacks.

Q: Do you agree that persistent chest x-ray abnormalities are not as consistent with the diagnosis of asthma?

A: Say that again.

Q: Persistent chest x-ray abnormalities are not consistent with the diagnosis of asthma.

A: Persistent chest x-ray abnormalities? Yes. Usually.

Q: What tests, doctor, then, do you order to rule in or rule out asthma?

A: There are two ways that one can rule in and rule out asthma. The easiest and the commonest is you get a history that's compatible with asthma and you give the patient the appropriate medications and see that their functional abnormalities go away. So you get a history —

Q: When you say history compatible —

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A: Episodes of cough, dypsnea or wheezing, or one of the three.

Q: Okay. And I'm sorry, I want to stay with that just for a second. I'll give you every opportunity to answer.

A: That's fine.

Q: You said you take a history compatible —

A: You get a history that's compatible.

Q: History of cough, dyspnea or wheezing, or any one of them.

A: Um-hmm.

Q: Okay? Is that a yes?

A: Yes. Sorry.

Q: Then what do you do once you have that?

A: Then you find out the circumstances under which it occurs. Its timing, does it awaken the person at night. And what are the events that produce the symptoms and what are the events that make the symptoms go away, or worsen the symptoms.

So you want to know what brings it on, what makes it worse, what makes it go away, historically. As an example, the easiest thing to think about would be someone who has a cat and they get around the cat and they wheeze. You take the cat away, they don't wheeze. Or they

have a cat at their girlfriend's,they go to see the girlfriend, they are okay,they go home, they wheeze that night.They break up, and their wheezing goes away.

Q: Okay.

A: That'sthe easiest thing.

Q: So that'sone way you make the —

A: No.That's the clue that you begin to look.You now have the information and you then monitor lung function.You either look at peak flow or spirometry, or if you have someone whose airways are so irritable that you can'tperform spirometry, then you hear airway resistance, and you quantitate the abnormality and then you give a bronchodilator and see a pre-determined improvement in the airway obstruction.

So you measure lung function, see that the patient has airway obstruction, and then you reverse the airway obstruction.

If you measure lung function and the person is normal,then you need to prove that they have heightened airway reactivity.You do that by any number of tests, but the commonest two are methacholine and cold air,and you do a challenge and you induce a small asthma attack and

quantitate the size of it and then take it away, and that's how you would establish the diagnosis.

Q: So if I were to read Harrison's,Harrison's should tell me everything of what you just told me?

A: I don't know if it does or not.

Q: So if I'm reading Harrison's,you're not telling, then, the clinician reading Harrison'sthat it can be made on clinical grounds alone?

A: Right.I am not telling you that. I am not telling you that.

Q: You are not telling me that.

A: Right.

Q: So if someone were to read Harrison'sand get that,they would be mistaken,then?

A: I don't know. I don't remember all that'sin Harrison, so —

Q: I'mtalking about the Harrison text that you wrote on asthma.

A: It'sabove you if you want to look.

Q: I'mjust asking you because you wrote it.

A: I know,but I don'tremember every word of everything that I wrote, so what you need to tell me is if you are suggesting that I have not written that, that I need to read this —

Q: I'mjust saying —

A: But that'smy routine and that'swhat I teach. That'swhat I write about.

Q: Okay.But in terms of what you write in a textbook that you consider to be authoritative —

A: Yes.

Q: Harrison's,you're not telling the clinician that you can make the diagnosis of asthma on clinical grounds only,are you?

A: That is right. I'mnot telling you that you can.

Q: I think you said previously exercise is one of the trigger points.

A: Yes.

Q: How about people that mow grass.Is that also a trigger point at times?

A: Dependson howyoumowthe grassandwhetheryou have grass sensitivity.

If you are sensitive to the grass and you are mowing the grass on a riding mower,then it could be the grass.If you are pushing a mower, and you have pulmonary fibrosis and you are short of breath, you could think you have asthma but in point of fact you cannot cut the grass because you have pulmonary fibrosis.All of this is testable. I mean, it is not rocket science to

determine precisely what is causing a person's symptoms and their functional impairments.It takes 20 minutes.

Q: And with asthma,then, how do you treat them once you make the diagnosis?

A: You give them a bronchodilator,and depending upon the aggressiveness of their disease, you can give them an inhaled steroid.

Q: And if there is no response to this treatment, does that make you then think that maybe asthma is not the diagnosis?

A: Right.

Q: But if in fact there is a response, the patient doesn't come back for another six to eight months and then he has another flare-up, that would be consistent with asthma, would it not, doctor?

A: The response that you are looking for is not a response nine months away.The response that you are looking for in the treatment is taking the symptoms away within four or five days,a week max.

Q: I guess my question was inartful.You give the patient a treatment,and the patient responds to the treatment, and then nine months later comes back now with another acute event of similar

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symptoms.
That would be consistent with asthma, would it not?
A: Depends on the response to the treatment. I'm not trying to be argumentative or vague. In this particular instance —
Q: I'm not talking about this particular instance, doctor. I'm talking about generally. If in fact you treat the patient, there is a —
A: If I treated someone and they became asymptomatic and their functional defects went away and they don't come back and see me for nine months, I would think that they probably had asthma on the basis of what we just talked about, and their disease had been quiescent or they went to another doctor or moved away or something.
Q: You would expect a patient that had those symptoms and did not respond to that treatment, that continued to have these acute symptoms, would come back to see you or see some other physician?
A: Yes, or see someone, I would think, if their symptoms bothered them enough, Well, I have to modify that.
I'm only modifying that from the sense of

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clarity. It is a function of who you are treating, and again, I don't want to tell you more about alligators than you may want to hear.
If you do this in an inner city, for example, and the reason I say that is because I spend a lot of time taking care of people who are financially challenged and they have availability of care, then they will come back.
If they don't have availability of care, i.e. their doctors keep changing, they don't come back. If they have medicine and the medicine works, they take it. If they have medicine and it doesn't work they won't take it, or if they have medicine that might work but they can't afford to buy it, they don't buy it. You get into this.
Q: But we're here, let's talk about a patient who had the capability in terms of —
A: I would expect the scenario that you described.
Q: That in fact if there was no response to the treatment for the asthma, and the patient continued to have symptoms, you would expect that he would come back. Correct?
A: If he had asthma.
Q: Correct?

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A: Yes.
Q: Or if he continued to have symptoms.
A: I would expect that if he continued to have symptoms, they would want someone to take care of them.
Q: Right. Doctor, by the way, do you agree with this statement? Usually just based on the history and the physical exam, that's usually enough to make the diagnosis of asthma?
A: No. I always want something — I want quantification.
Q: So if an expert testified to that, you would disagree with that?
A: Well, I don't know the context that the expert testified. For all I know, you have my — you have a deposition of mine and you are sitting there reading from it — I don't know the context and so —
Q: I'm just asking you, if an expert testified that usually you can make the diagnosis of asthma based on the history and physical examination.
A: Usually you can. And usually you can go away with a good idea that the patient has the disease and you can verify that with appropriate testing.
Q: I know you don't agree with this. but let's

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assume that Mr. Diederich did have asthma during the time period that he treated with Dr. Carson, from '93 until '96. I know you take issue with that.
A: Yes.
Q: But let's assume hypothetically that they did have it.
Would you agree that the treatment rendered for asthma during that period of time was appropriate and within the standard of care?
A: Except for the Primatene mist. I don't understand the use of that.
Q: Other than that?
A: Yes, I think that's fine. He gave him inhaled steroids and bronchodilators. There were other things that could have been done since the symptoms didn't get better, the usual medicines.
Q: Okay. You had the opportunity to review the records from — Dr. Carson saw this man I believe for the first time in March of 1993?
A: Yes.
Q: And treated him up through 1997.
A: Yes. I'm not going to quarrel with things like that. Certainly.
Q: From 1993 through 1997, so we're now talking '93,

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'94,'95,'96,so almost four years, okay?
A: Okay.
Q: How many times during that four years did the patient have respiratory complaints?
A: Oh, I don't know. I would have to count.
Q: If I were to represent to you that during that period of time on eleven occasions from '93, March of '93until the end of '96,he had some respiratory complaints, would you have any reason to disagree with that?
A: No.
Q: I take that back. If I were to — see, you were too quick to agree with me.
A: I mean, I can sit here and count it or you can tell me.
Q: Let's go over it quickly so the record is clear. March 16,respiratory complaint.
A: Cough. Respiratory cough.
Q: Next one I believe is —
A: 7/30.
Q: I think 7/30 was for a testicular problem.
A: Yes.
Q: 8/6, there was — it was not him —
A: I have 8/17.
Q: Well, 8/17 is a respiratory.

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A: 8/6 is fatigue.
Q: But that is his wife, if you look?
A: Yes.
Q: That is not him?
A: Pharyngitis. That is his wife. The 17th is testicles. Asthma has been acting up.
Q: So we have 3/16, now 8/17.
A: Yes.
Q: Next one is 8/31?
A: He has a sore throat.
Q: On which date?
A: 8/31.
Q: Any respiratory complaints on that day?
A: We're not saying upper respiratory, we're just talking about lungs, airways?
Q: Yes.
A: No.
Q: 10/11.
A: Cough.
Q: Okay. So that's three times, then, in '93. Correct?
A: I really will agree with you. I didn't count this, but I'll accept what you say.
Q: Okay. Then if I tell you that from March of '93 until the end of '96on nine occasions he had

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respiratory complaints, you would have no reason to disagree with that?
A: No. Out of how many visits?We need a numerator and a denominator.
Q: Out of four, eight — eleven visits.
A: So 80 percent of the time he was there for respiratory complaints or whatever it is, **9** out of 11.
Q: Isn't it true, doctor, that a patient with asthma, who has asthma, that once the diagnosis is made with asthma it is not unusual to come back that many times over that period of time for acute onsets of asthma?
A: No, it's not unusual. It's just respiratory complaints are the predominant problem that he has.
Q: Okay. You had an opportunity to see Dr. Arora's report, correct?
A: Yes.
Q: Do you agree, doctor, that asthma was within Dr. Arora's differential diagnosis; true?
A: Yes.
Q: And Dr. Arora is a pulmonary care physician?
A: Yes.
Q: And as a matter of fact, his treatment of this

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patient was as if he had asthma, true?
A: Yes, that's what he did.
Q: He gave inhalers, steroids, all the treatment for asthma.
A: Right.
Q: Was hard metal disease within his differential diagnosis?
A: No. Nonspecific bronchitis related to his exposure to smoke at work.
Q: And he treated the patient, correct? At that time?
A: Yes, he gave him declaben.
Q: And what else?
A: Prednisone.
Q: And he told him to return in three to four weeks to see if the regimen is working?
MS. TAYLOR: I'm going to object because the letter doesn't say he told the patient that. This **is** a referral letter to a physician. If you want to ask him to assume that —
MR. POLITO: We'll play that game.
MS. TAYLOR: It's not a game.
Q: Assume he told him to return in three to four weeks if the regimen was not working.

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A: He says in here I would like to see him back in another three to four weeks.
Q: So you would think then if he wrote that, that he probably told the patient that.
A: I would think so. Or he wrote it to the doctor or whatever.
Q: Right. So — and I'm sorry, doctor, what was the comment that he wrote?
A: I would like to see him back in another three to four weeks to see how — I can't read it — how much improvement he gets from this routine.
On the other hand, if it is purely related to nonspecific irritants from whatever he is exposed to at work, this regimen may not be successful either.
Q: So based on a fair reading of that, doctor, he wanted to see the patient back in three to four weeks to see if the regimen was working, true?
A: That would be my guess.
Q: Did the patient ever return to see him?
A: I have no idea. I don't have the records.
Q: Did the regimen work?
A: I have no idea.
Q: If in fact he told him to return back in three to four weeks to see if the regimen was working and

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the patient did not return, do you fault the patient?
A: Do I fault the patient? Oh. Excuse me. He did come back 4/10/97. I thought it was stuck. Excuse me.
This is what I have.
Q: This is '97, doctor. We're talking '92.
A: Okay. I'm not —
Q: I know you're not.
A: It was stuck.
Q: Got it.
A: And I turned the page and I saw the red.
Q: My question is, doctor, does a — let me ask it this way. Does a patient have a responsibility to follow the directions given to him by his or her physician?
A: Sure.
Q: So if in fact Mr. Diederich was told to return —
A: The reason I'm laughing is because I think of someone I'm following.
Q: We can all think of patients.
A: I can think of doctors, too, but go ahead.
Q: Okay. But if a patient is told to return back in three to four weeks and does not return —
A: We're assuming he didn't return. I don't know

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that.
Q: I want you to assume hypothetically he did not return as instructed. Do you fault Mr. Diederich for failing to do so?
A: Do I fault Mr. Diederich? I mean, I would be concerned if I were the doctor and wonder why.
Q: I'm not concerned about the doctor.
A: I don't know what you want me to say.
Q: My question is if in fact he did not return as instructed —
A: It would be the patient's responsibility to return. Yes.
Q: Okay. He also, doctor, at that time advised Mr. Diederich to wear a protective mask while working, did he not?
A: Yes.
Q: Did Mr. Diederich follow that advice?
A: I have no idea, but that's a joke. That's a joke, protective mask, I mean, he would have to tell him what kind.
The idea of taking a mask from 3-M and putting it on your face or the idea of taking like the Chinese do in the movies that you see with the little paper mask or a little bit of [~sic] cloth and protecting you from industrial

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particles or fumes, you would need things like HEPA filters. I mean, you need big time protection.
Q: I don't care if you think it's a joke or not.
A: He advised him.
Q: My question is did he advise him.
A: He advised him and I know the advice at this level would not work and I don't know whether he did it or not, so that's fine.
Q: If in fact they did advise him to wear a mask and the patient did not follow that advice, do you fault the patient?
A: He may have asked for a mask — there are scenarios here that could be very difficult. One is that you go to work, you're in a smoking environment, you say I need a mask. You tell that to your supervisor and your supervisor says you need a new job.
Or you put a mask on, and the mask doesn't work so you take the mask off.
Or there is a lot of particulate — I'm not making this up. This is real —
Q: Do you know that happened in this case, doctor?
A: No, I don't know. But I know it routinely happens in other cases, that's why I said it's a

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joke. You asked me if I consulted. I do consult. These are some of the things that I have to deal with and these are some of the issues that need to be dealt with to insure that the problems that have been identified get clarified. That's the only reason. I do not know if this happened or not. I'm just telling you the possibilities.

Q: Doctor, my question very simply, and I move to strike your last answer as not in any way responding to my question, my question was did he follow Dr. Arora's advice?

A: I did not know. I said that before.

Q: If in fact he did not follow that advice, do you fault the patient?

A: In this instance, I did not fault the patient because I know the advice would not have worked.

Q: Okay. And did Mr. Diederich know that?

A: I don't know.

Q: And do you know —

A: I'm not being argumentative.

Q: Do you know what type of device he would have been given if in fact he would have asked for a mask at —

A: No. I don't. I don't know whether there were

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masks there. I don't know if they needed to. I mean, if they needed to wear masks. I don't know anything about his environment.

Q: Did you ever attempt to find out in this case, doctor?

A: No, I didn't.

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

A: Oh, it's hard to say. I would bet that it was low. My guess is 70, 60 percent, something like that, but I don't know.

Q: Do you have an opinion, doctor, to a reasonable degree of medical certainty as to Mr. Diederich's lung capacity in 1992, total lung capacity?

A: Total lung capacity?

Q: Yes.

A: My guess is that it was reduced some.

Q: What is normal, doctor?

A: Normal would be 80 to 120 percent. My sense is that it would be in the 70s or high 60s, perhaps.

Q: If in fact Dr. Mehta testified that it was 60 percent, would you have any reason to disagree with it?

A: No.

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Q: If Dr. Brauer testified it was 58 percent —

MS. TAYLOR: I object to anything Dr. Brauer testified to.

MR. POLITO: That's fine.

MSTAYLOR: But go ahead and answer.

A: I don't know who Dr. Brauer is.

Q: Would you have any reason to disagree with that?

A: No. I would be a little surprised that it was that low. I have a reason for that if you want to hear it.

Q: Sure.

A: I suspect that at that time his symptoms were airway. That's why he is coughing. And I suspect that they were symptoms of irritation.

I suspect that someone who has 50 percent of predicted total lung capacity doesn't have a lot of exercise capacity, and that interferes with your work.

I'm going to put it in a form that's readily apparent to you. If I take out your lung, you have 50 percent total lung capacity and you are happy as a bear, but you could not climb a mountain or ski, things like that, so anything that demands more activity, the less lung

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capacity you have, the more the symptoms are. So my guess is it's in the 70ish range.

Q: And that's a guess?

A: Yes, sure.

Q: Okay. So doctor, let me ask you again, if Dr. Mehta said to a reasonable degree of medical certainty —

A: I wouldn't be distressed —

Q: If Dr. Brauer said it was 58 percent —

MS. TAYLOR: Objection.

A: I wouldn't be distressed and here is the caveat. This is what I do for a living. I do this at a higher intensity and in more detail than anybody else in this state and indeed this part of the country, so my estimates are more precise because my measurements are more precise and my measurements are more frequent. That's fine. I don't care about 58 or 60 percent or 70 percent.

Q: And I would like to pick up, then.

So what you are telling me, then, is that you do nothing in your, when you do practice medicine, other than deal with patients with asthma and pulmonary diseases, correct?

A: No. I didn't say that. I said — what you should take from this, and this sounds immodest,

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is that I am a meticulous, careful, thorough individual who meticulously goes through each person's symptom complex in great detail to find out what they have.

Q: I guess my question was inartfully put.

For example, you on one day don't deal with a young kid coming in with a testicular problem and another day a woman coming in with a GYN problem?

A: No, we have already agreed that I see pulmonary people.

Q: That is my question, doctor. You in your practice see nothing but pulmonary people, correct?

A: No, I see cardiac people, and as I said before, I take care of whatever problems my patients have, so whatever that problem is I take care of it. But do I advertise myself as an internist? No. I don't want to misinform you, I do not except when I round, in which case if I'm in charge of a ward, I take care of all the problems.

Q: And doctor, if we assume that the figure of 60 percent at 1992, would it be fair to say that it's your opinion to a reasonable degree of medical certainty that this man's total lung capacity was decreased by his exposure to cobalt,

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tungsten and nickel?

A: Was decreased by his fibrosis, and that likely related to his exposure to the heavy metals.

Q: And again if we assume that the 60 percent was the number in 1992, you would agree that then he had a *40* percent reduction in his total lung capacity even before ever seeing my client. Correct?

A: Yes. I don't have a problem with that. You're asking me to assume it is 60. That's fine. You know, all of this is measurable and all of this was measurable. All he had to do was measure it and there would be no question as to what he had.

Q: I'm not even talking about — we're talking about pre Dr. Carson.

A: At any point in here conjecture would be — again, if appropriate measurements had been made and appropriate documentation had been done, then there would be no issues along these lines.

Q: Do you have any criticisms of Dr. Arora's care in this matter?

A: No. I mean, Dr. Arora as best as I can determine saw the person once, made a differential diagnosis, and it was not an inappropriate differential diagnosis.

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Q: If Mr. Diederich had worn the appropriate medical — strike that. The appropriate —

A: Say protection.

Q: Protection from 1992 up to 1997, okay, do you have an opinion to a reasonable degree of medical probability whether his total lung capacity would have decreased during that time?

A: My guess is that it would have, and I tell you why.

Most of the inflammatory phenomenon associated with pulmonary fibrosis tends to be ongoing. They can progress rapidly as a function of how much exposure you have or they can progress slowly.

The rate of decline in lung function is typically related to the total exposure that someone got in and the combination of time, exposure, products, so the answer is yes, I would have expected it.

So there are many diseases. You take people out of their environment and their disease will change a little bit, sometimes it will get a lot worse depending on how much exposure they had. Most of the time it stabilizes or gets a little worse.

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So I can't answer it as precisely as you would want me to, perhaps.

Q: I guess I don't understand your answer. Are you saying that if he had worn the appropriate equipment during that period of time, are you saying that his total lung capacity, I think at the time of '97, was somewhere in the neighborhood of *40* percent?

A: Yes.

Q: Okay. Do you believe that had he worn appropriate equipment during that period of time, '92 to '97, that it would have still been *40* percent?

A: No. I believe had he been removed from the environment in any form, protective equipment, or removed from the environment, new building, in any form, that there would not have been as much progression. That is what I believe.

Q: Let's assume in 1992 he was taken out of welder, he was told you should not do any welding.

A: And removed from the environment?

Q: What is your opinion to a reasonable degree of medical probability what his total lung capacity would have been in 1997?

A: I can't say. I would have guessed — I'm

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guessing, totally guessing.
If it started at 68 or 70 percent, my guess is it would have been 65, 60 percent.
Q: Assume it was 60 in '92.
A: Then I would assume it would have been 50 or 55 or something like that. But that's a total guess.
Q: Doctor, with hard metal disease, can it also progress even if you take the patient out of the — did there come a point that regardless of taking him out of that work environment that the disease is going to progress?
A: I can't answer that specifically. I can answer you generally in that there are a number of environmental exposures to which you can be removed and they will progress. There are a number of pneumoconioses that do that. So without looking this up specifically, I can't give you an answer.
Q: Would it be fair to say that you don't know if a seven to eight year exposure to cobalt, tungsten and nickel, and you take that particular patient out of that work environment, you don't know whether or not the disease process will progress or not. True?

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A: I don't know the rate at which it progresses.
Q: Doctor, is it your opinion that Dr. Carson deviated from acceptable standards of care during the entire time he treated this patient?
A: Yes.
Q: So if another expert said that for the first one or two years that he treated this patient it was within the standards of care, you would disagree with that?
A: My problem is that the man is being treated for a disease he doesn't have and a disease that he does have that is missed, and unfortunately, there are serious consequences of that. That's my difficulty with this.
It's not a question of anything other than that. It is, you know, yes, they are nonspecific symptoms, but headaches are nonspecific symptoms. And if you say you have high blood pressure and you have headaches and you miss someone's brain tumor because you did not look, too bad. You cannot do this. You need to make a differential diagnosis and then prove the points of the differential diagnosis, establish the diagnosis and treat appropriately. That's my concern. And that's my problem.

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Q: So my question is if an expert testified that Dr. Carson's treatment of this patient for the first several years was appropriate and within standards of care, you would disagree with that opinion?
A: Yes, probably.
Q: Tell me then, doctor, each and every way you believe that Dr. Carson deviated from standards of care in his treatment.
A: I told you. You want me to go through each of these to do this, or you want this generically?
Q: You tell me however way you feel comfortable in telling me.
A: Here is the way I feel comfortable about it.
The man came with a diagnosis of asthma. The diagnosis was accepted unquestionably and he was treated as though he had asthma.
The medications did not work and his symptoms persisted. The symptoms that he had, although that can be seen in asthma are not typical for asthma, and because they are not typical for asthma, the whole thing could have ended one way or the other with a simple test, and that test would have been measurement of airway reactivity.
Had the man had heightened airway reactivity

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he would have had the heightened airway reactivity and he would have had asthma and pulmonary fibrosis.
If he didn't have heightened airway reactivity, he doesn't have asthma. And that would have prompted a search for the appropriate diagnosis. Bang. There is nothing else there.
Q: Let's assume, doctor, that this measurement, this simple test you said would have been performed in March of 1993. What in your opinion would it have shown?
A: If it had shown heightened airway reactivity then the diagnosis is that. If it did not show heightened airway reactivity then the diagnosis is not asthma, and I cannot say what it would have shown because it was not done.
Q: So you have no opinion to a reasonable degree of medical probability what the test would have shown in March of '93?
A: I do. It would not show it.
Q: How do you know that?
A: The symptom complex is not the symptom complex of asthma. The man's behavior is not the behavior of someone with heightened airway reactivity.
Q: What is inconsistent with asthma?

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A: He doesn't complain of waking up at night. He doesn't give a typical work history if it is work related, and he doesn't give the typical symptom complex of episodes of breathlessness requiring acute medication that would get better and get worse. I don't hear any of this in there and I don't read anything about that in there, in the complaints that he says.

He says he gets short of breath when he plays basketball. If you had heart disease you would get short of breath if you played basketball. If you had pulmonary fibrosis you get short of breath. If you have asthma that is making you short of breath, you get short of breath after the basketball, not during the basketball.

And you can do the next one better, but invariably your symptom complexes will return until you pretreat.

Now, that is the typical sort of phenomenon. If you cut can grass and you have asthma and it is because you have a grass allergen, it is immediate contact, and it remains as long as you're cutting the grass. It is not being breathless. It is getting sick. It is getting to the point that you simply cannot breathe and

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you need to remove yourself from that environment or take medicine.

That is not the story here. That's the typical pattern.

Q: Did the patient get better with treatment?

A: No.

Q: How do you know that?

A: How his lung function progressively worsened and his symptoms remained.

Q: How do you know that during the periods of time that he did not see Dr. Carson, that he did not get better from the treatment?

A: Because he comes back with the same symptoms. His symptoms, the symptoms throughout this entire period are symptoms of cough and upper respiratory irritation. There is no time where the medication makes the symptoms go away, except perhaps initially, but there is no other time that one has the acute and abrupt onset of airway obstruction symptoms. It is not in here. Nowhere in this history does the man give you a history that is compatible with bronchial asthma other than he has a paroxysmal cough.

Q: He complained of a cough consistent with either asthma or hard metal disease, correct?

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A: But you are going to come through logic that is not going to work.

Q: Bear with me doctor, okay?

A: I'm not trying to be difficult.

Q: Okay.

A: I need to say — that's fine. You go ahead and ask the question.

Q: Okay. Cough consistent with both asthma and hard metal disease, correct?

A: Yes.

Q: He was short of breath at times consistent with both, correct?

A: Um-hmm.

Q: My question to you, doctor, is do you know how the patient did between March of '93 and August Of '93?

A: No, but I know how he did in the episodes that you are describing.

Q: Okay. So do you know if there was any response to the treatment given to him by Dr. Carson in March of '93?

A: Do I know if there was any immediate response?

Q: Yes.

A: No.

Q: Would that be important to you, doctor, to know

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whether or not there was any response or not?

A: I need to tell you how chronic cough works, okay? That's what I'm trying to get you to understand, all right? I spend almost half of my time seeing patients with chronic cough, and that's what you need to understand, how chronic cough works.

Chronic cough will present with five or six different differential diagnoses and it is not rocket science, okay? The cough of asthma is a paroxysmal cough that invariably wakes the patient up at night, and it almost never stays only as a cough. The paroxyms end in episodes of breathlessness and wheezing, and that's a history that just flows out of people.

If you just simply ask, tell me about your cough, they'll say "oh, I cough and I cough and I cough and sometimes it hurts my chest and I vomit and then I can't breathe and I wheeze." That's the typical story of cough-related asthma.

Q: Okay.

A: It is associated with heightened airway reactivity invariably. Invariably. If it is not, it is not the cough of asthma, so it is invariably associated with it and one can produce the cough in the laboratory or in any kind of

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place at all with simple maneuvers. And one can take the cough away instantaneously, note my word choice, instantly with a bronchodilator, and in the people in whom the bronchodilator is not sufficient to allow the cough to go away totally, the cough goes away with steroids. If you can not make it go away with oral steroids you are narrowing it and narrowing it and it becomes less and less and less likely that it is asthma and you get into things like collagen vascular disease, tumor, et cetera, or other kinds of causes. That is not the story that is in here. And because that is not the story that is in here, that's why I can't make the diagnosis of asthma.

Q: I understand you disagree, but my question is, doctor, do you know if that cough went away between March and August of 1993?

A: Oh, I would doubt that it did.

Q: Okay. You doubt. But do you have any evidence, doctor —

A: No, I do not.

Q: I want you to assume hypothetically it did go away during that period of time. Okay?

A: Sure.

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Q: Would that be consistent, then, with asthma?

A: It would be consistent with a lung tumor even. Sure it would be consistent with asthma, but it would be consistent with a whole bunch of other non specific things.

Q: You say throughout the years his symptoms persisted.

A: Nine out of eleven visits.

Q: Okay. Nine out of — but that was not my question, doctor. Those were episodic visits, were they not?

A: Right.

Q: Consistent, doctor, with the way this doctor saw the patient, consistent with asthma in the number of times seen over that period of time?

A: Is that consistent with asthma?

Q: Yes.

A: It would be unlikely in my own view.

Q: You have not in your own practice had a patient with asthma and seen them nine times for similar types of complaints over a three and a half year period of time?

A: The story of one that has asthma that comes in my office episodically is I sit there and I say it's been three months since you have been here, how

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many episodes of asthma have you had, and they say I've had 15, none, five, six. Tell me where that is in here.

That is not in here. There is no history of that.

Now, could it have been? Sure it was. Was it looked for? Absolutely not. It may have been, but it is not in here. And if it is not in here, I can't assume it was done.

It is a simple matter. You say how many asthma attacks have you had, have you been in the hospital, how is your cough, has it gotten worse, has it gotten better, do you have chest pain, do you still wake up at night short of breath, because then you need to adjust the medications, okay?

And I do that every time.

Q: I know you do it every time, doctor, and are you telling me that every —

A: I'm telling you that that is what everybody needs to do with every chronic illness.

Q: Okay. Doctor, do you see patients with asthma on a periodic basis twice a year?

A: Sure. Once a year sometimes.

Q: How about twice a year?

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A: Sure. Twice a year, sometimes three times a year, sometimes every week.

Q: For acute exacerbations of the asthma?

A: I see them both for acute exacerbations and for chronic follow-up. Sure.

Q: Any other ways you believe this physician departed from the standard of care?

A: Well, you know, other than treating the person for a disease he didn't have, and missing the disease he did have, no.

Q: Doctor, were the — I want to hand you the chest x-rays.

A: I don't have a view box.

Q: Here is 2/1, doctor.

A: Okay. Of what year?

Q: '94. Here is another one.

A: Is this the same day?

Q: It is.

A: Okay.

Q: I want you to interpret that chest x-ray for me, doctor.

A: Well, he has increased interstitial markings and if you want me to give you an ILOB reading, I would grade this as a one one.

Q: So you see interstitial marks?

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A: There is no question about it, but I could see how someone could throw this up and say this is normal, but there are increased interstitial markings.
Q: So how was it reported to Dr. Carson?
A: I don't know.
Q: Why don't you go in his records and tell me.
A: I will be happy to do that. But my confusion is I don't know — I don't have it all memorized.
Q: That's fine.
A: I don't know where the x-rays are.
MS. TAYLOR: These are the office records.
A: There is a set in here with x-rays.
MS. TAYLOR: But these are the ones he takes. The reports come back to his office, so it should be in his set of office notes.
A: Are you going to hand me them in order? I have 1/8/92.
Q: That was pre —
A: And there is a an upper GI series and then the next one I have is testicular sonogram, and then the next one I have is borderline enlargement and this is 11/11/93.

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Q: Let's get the 11/11/93, then.
MS. TAYLOR: 10/11/93.
A: If I may, it would be better to do this if we had a view box.
MS. TAYLOR: Are these films better than the ones you have?
THE WITNESS: The films that you gave me, it look like they were taken in a coal mine.
I would be happy to do this with you, but I really need a view box to put the films up side by side and so forth.
Q: Do you have a view box here?
A: No, I don't.
Q: Are you telling me you cannot —
A: No, no. Come on. I said that I look at this without a view box and as I read it, I would have said that there are increased interstitial markings, and you didn't ask me if these are pathological. You said what do you see, and I told you that. And this could be the x-ray of a smoker, in which case it could be normal. This could be the x-ray of someone who has heart failure, et cetera.
And that is all I'm trying to say, that there are increased interstitial markings.
My expectation is that later on, along the line they are more definitive than they are here, and that is my expectation from reading this.
Q: Skip the 10/11/93, go right to the 2/1/94 x-ray. Do you agree with the interpretation of the radiologist?
A: In this film I have?
Q: Right.
A: Again, holding this up, okay, what I see is I see increased interstitial markings, and he says question small left perihilar and infrahilar infiltrate and clinical correlation is required, and as I hold that up I can see why he is saying that, okay, and that is what he is talking about there. Would I agree with it? Sure I would agree with it.
Q: So you agree with his report?
A: Yes. I mean, I could read that as his report, but you're asking me to read this with the knowledge that I have in my training, and I would tell you what I just said.
Q: Okay. So you would find increased interstitial markings on that?
A: Yes, I would comment increased interstitial markings. That's all.
Q: Do you believe the radiologist that interpreted these films should have commented on it?
A: This is very much local skill and local practice. Now, I appreciate that you are at the mercy of, your client is at the mercy of the radiologist there, and the analogy I use for this os if I want to learn about Canon law I'm not going to go ask my parish priest, okay, because he is not going to know about it.
Q: Well, my question is you have already told me that this physician has the right to rely on that radiologic interpretation and you are telling me that —
A: I'm telling you that he called it as he saw it, and I'm not quarreling with that. I'm saying in addition he has increased interstitial markings. That's all.
Q: Do you believe his interpretation —
A: Yes.
Q: — was within appropriate standards of care?
A: Whose?
Q: The radiologist.
A: I can't comment on that. I can only look at the film. I can say what he says is on the film is

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on the film.
Q: But he also didn't describe something else that you saw that's not in his report.
A: Yes. That's fine. If I would have read it with him he would have said no, you know, I think this is kilovoltage.
Q: So his failure to then describe interstitial markings in the February *1,1994* x-ray, you have no problems with?
A: No. Not in that one film.
Q: Okay. Let's go to the February *28*, then, *'94* films.
A: Okay. Yes. And he read this as nothing.
Q: Okay.
A: Now, I want to show you something.
There is a lot of difference in the kilovoltage here, okay? They are not the same techniques, and because they are not the same techniques they won't project the same way and there is a reason why if people are looking for pneumoconiosis. They do it in a standard fashion, okay?
There are standard techniques to find this, all right? What can I tell you? We are going to be at the limit of how the pictures are taken.

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If they are too light, you see all kind of markings. If there is too much kilovoltage, you don't *see* them the same, so you need to standardize this if you are going to make this sort of comparison.
Q: I'm asking you, do you agree with the —
A: He says there is nothing in here. And if I hold this up to a bright light and go further, if I had the other film I would say to myself I wonder if there is or is not. That's all I can do. I wonder.
And I would wonder about the bronchovesicular markings behind his heart.
Q: Do you agree with the interpretation rendered by the radiologist —
A: No evidence currently of active cardiopulmonary disease. Yes, I agree. Based on the film with its limits that I have described.
Q: Right. Okay.
What is the next x-ray, doctor?
A: I have a testicular scan. You don't want that. Cough for two years, *6/14/94*, chest.
This is *6/14/94*.
Q: Is that the one from EMH?
A: Yes.

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Q: And what were the findings there?
A: Change in heart size and configuration since previous studies in *1992*, and findings would suggest mitral valvular heart disease.
Q: Is that consistent with someone with hard metal disease?
A: I would have to see the film.
Q: The report is that he has some central pulmonary congestion. This radiologist, and I'm interpreting it, thinks that he has a big heart and I think he has mitral valve disease and that's why he has some central congestion. That's all I can say. I need to take this.

(Thereupon, a discussion was had off the record.)

Q: What's the next x-ray after that date, doctor?
A: *7/31/95*, PA lateral, two views of the chest reveal no active cardiopulmonary disease and no change.
Man, you cannot read this. I don't know whether this is a copy or whatever. This is so burned out you can not read the markings. I don't know if this is the film you looked at.

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I'm not — again, I'm trying to be as helpful as I possibly can. I know that is hard to believe but I am and I'm not trying to be vague.
If you put this up and you want me to read it, I can't read it because it is just burned out too much.
Now if it is a copy, that could be why, I don't know what the original was, et cetera, so that's all I can say.
Q: Okay.
A: I can't — whether I agree or not, it is too terrible to read.
Q: Let me ask you this. Is *7/31/95* consistent with a patient who has now had ten plus years of exposure to hard metals?
A: It is too burned out —
Q: I'm talking about the report, doctor.
A: The report? No. Can I make the point about the kilovoltage again?
Q: Sure, doctor.
A: Okay. The less kilovoltage used, the more the lung markings show up. The more that is used the less that show up. So you can make things come and go by just using different amounts of voltage. That's all I wanted to say.

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Q: 2/8/97, doctor. Here is 2/8/97.
A: Again, that can't be read. There are no interstitial markings in here. There is too much darkness to read it.
Q: Let me ask you to read the x-ray report of 2/8/97.
A: It says — you want me to read the whole thing?
Q: Just read it to yourself.
A: Yes.
Q: Do you interpret that finding to be that the x-ray found interstitial markings in 2/8/97?
A: Yes. There is scattered fibrotic scarring in both lungs which does not appear significantly changed. However, there also appears to be an infiltrate in the mid field lung study which was not there previously, suspicious of an area of pneumonia. He found some things that were not there before, and presumably had all the original films.
Q: So do you interpret that he found scarring on the previous film of 7/31/95? Is that the way you interpret it?
A: Yes. There is scattered fibrotic scarring in both lungs which does not appear significantly changed.

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Q: And you interpret it as unchanged from 7/31/95, is that correct?
A: If that's the one he compared it to.
Q: Is that the only one he is talking about?
A: The only one he put in his record. I'm not trying to be vague. A radiologist, if you are doing something in a chronic illness and you are serially following something, you put the films up and you look at the changes over time.
Did he do this? I don't know what he did. I can only tell you what he wrote.
Q: Doctor, in the 7/31/95 report, do they mention any evidence of scarring?
A: I don't know where the — you want me to go back and look? No. They do not.
Q: So if we assume that he was comparing it to the 7/31/95 report, and he found scarring on the 7/31 x-ray, he said it was unchanged from, what, two years earlier?
A: That's what he is saying.
Q: If in fact you would have gotten a report in July of '95 that said there was the scarring as described in February of '97, what would you have done in response?
A: I would have said, "Holy hell. What's going on?"

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Q: If in fact that same thing was reported to you back in '94, what would you have done?
A: The same. I would have said the same thing, what is going on. I would have gone and talked to the person, said hey, what is happening here. That's what I do routinely.
You asked me if I interpret my own films. Yes, if there is any I sit with a radiologist and say, "Tell me what is happening."
Q: So that is something based on the x-ray you would want to, on an abnormal x-ray you would have wanted to follow up on?
A: Scarring?
Q: Yes?
A: Sure.
Q: And once you have that scarring, doctor, as described in the February of '97 film that I believe says unchanged from July of '95, that is not going to go away, correct?
A: It would be unusual for it to go away.
Q: And if it did go away, doctor, if you got two x-rays that said scarring on one, I mean, or say interstitial markings on one, you treat the patient and it goes away, it makes you think of one thing, but if it remains constant it would

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make you think of another. True?
A: I'm sorry. I missed you. I'm sorry.
Q: Interstitial markings, you treat it, the interstitial markings go away. Could that be consistent with pneumonia?
A: Yes, but it's a certain kind of pneumonia.
Q: If in fact it doesn't go away after treatment and it continues to appear, is that something that you would want to investigate?
A: Depending on the patient's background and history. I'm not being vague again. Smokers will have things like that. People who work in a coal mine, you need to follow it.
Q: Was Mr. Diederich a smoker?
A: No.
Q: Did he work in a coal mine?
A: No. I thought you asked me generically. Sometimes you move back and forth between the generic and the specific and I'm just a simple country doctor and you are losing me.
Q: I'm not sure about that, doctor.
A: That you are losing me?
Q: No, that you are a simple —
A: You are losing me.
Q: Based on your review of the x-ray reports in this

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case, up until February of '97,were they consistent with the diagnosis of hard metal disease?

A: No. Does anybody have the original films? I'm not supposed to ask questions. Excuse me. I need to sort of ask how much longer we are going to be because I need to go take care of this patient.

MS. TAYLOR: We can take a break.

MR. POLITO: Why don'twe take a break.

(Thereupon, a recess was had.)

Q: Let'sgo back now to Dr. — let'sgo back to the initial visit with Dr. —

A: Arora?

Q: No, the initial visit with Dr. Carson.

A: I'mgoing to rely on you for this. Do you mind doing that? Is that okay?

MSTAYLOR: No, I don't mind. He doesn't mind either.

Q: What were the complaints when the patient came in on 3/16/93?

A: Cough and an upset stomach related to coughing.

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Q: And —

A: Burning.

Q: And what was his diagnosis on that date?

A: Gastritis with heart burn/asthma.

Q: Do you agree with that diagnosis based on the complaints?

A: Not on asthma.

Q: And what on that date was inconsistent with asthma?

A: There is nothing on this particular date that is specifically inconsistent with asthma. There is nothing on this particular date that is diagnostic of asthma.

Q: But the clinical symptoms on that day, are they consistent with asthma?

A: Cough is possible — if there is cough in asthma, people can throw up. Yes.

Q: The treatment that he rendered then on that date for asthma and gastritis, was it appropriate and within the standards of care?

A: Let'ssee. Gave him declaben, continuous declaben, changed Proventit to two puffs QID, use for physical activities, Tussalon pearls —

Q: Do me a favor.

A: Read it slowly?

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Q: Don't even read it. Read it to yourself —

A: I'm *sorry,* I apologize, and I read rapidly, so you need to tell me. Okay. No, that's fine. No. Nothing is inconsistent.

Q: And my question was was his treatment on that date appropriate for the asthma?

A: Yes. The answer is yes, if he had asthma.

Q: Let'sgo now to July 30 of '93.

A: Testicular pain.

Q: Did he — on that date, did he make any complaints to Dr. Carson of any respiratory complaints, any persistent cough, or that the cough, he had not responded to the treatment given to him on 3/16?

A: No.

Q: So based on your review of that note, there was no complaint similar to the one given to Dr. Carson on 3/16; true?

A: On 7/30.

Q: Correct. So when the patient returned four months later, he did not give any history of a persistent cough from March of '93 until July of '93, correct?

A: He did not on this visit.

Q: And he did not give any history that he did not

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respond to the treatment given to him in March, true?

A: He may not have been asked, but there is no history.

Q: And there was nothing reported by the patient that he was having continually — continued respiratory complaints, true?

A: That is so.

Q: And we now know the/8/6/93 was the wife, correct?

A: Yes.

Q: What'sthe next visit?

A: 8/17/93.

Q: And the main purpose of that visit was the follow-up problem for the testicle.

A: Yes.

Q: But during that time, he gave this history of it acted up, especially when he plays basketball.

A: Yes.

Q: Are you telling me that playing basketball cannot cause exercise-induced asthma?

A: I didn't tell you that.

Q: Okay. Can it?

A: Yes, it can. The story, however, is that when you play basketball, and immediately after or shortly thereafter, intense running, one begins

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to wheeze or cough.
Q: Other than playing basketball, did this man have a persistent cough from March up until August?
A: There is no record of it here.
Q: The only thing —
A: Yes. It says he has coughing.
Q: When playing basketball?
A: Reports if he uses Proventil inhaler he coughs.
Q: Coughs when using inhaler?
A: Coughs to the point of vomiting.
Q: Which I think you told me before is consistent with asthma, is it not?
A: No, that's not what I told you. I told you that people with asthma can have a cough that is paroxysmal and may make people vomit. I cannot tell him the Proventil inhaler will give him coughs that will make him vomit. The Proventil inhaler can make you cough, but the cough only lasts a few seconds because you have a bronchodilator that takes it away. To finish this, a powder inhaler can make people cough of all kinds. He is not a powder inhaler.
Q: But it would appear then that the only time he is coughing is when he uses the inhaler or is playing basketball at that time?

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A: That's all he talks about here.
Q: Okay. Do you believe that his treatment of the patient on that date was within standards of care?
A: I don't know why he got Primatene mist. That is sort of strange.
Q: You think that was —
A: I don't understand why one would switch from a specific beta-agonist to a nonspecific beta-agonist.
Q: So do you believe it was a departure from standard of care?
A: I don't know if it was malpractice, but it is strange.
Q: So my question is do you believe his treatment on that date was within standards of care?
A: If a medical student had done this, we would have had a sensitivity session, okay? And I would not have accepted it. I would not accept it from a resident. That's what I'm — all I can say on that. Would I pillar somebody because of this in practice? The answer is no.
Q: On August 31 he came in with a sore throat.
A: Yes.
Q: Were there any respiratory complaints voiced by

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the patient on that date?
A: No.
Q: The way he treated on that day, he got a throat culture on him, diagnosed him with pharyngitis and treated him with appropriate medication: true?
A: Treated him with Bactrim.
Q: So the treatment on August 31, was it appropriate and within the standards of care?
A: Sure.
Q: He now came back on October 11 of '93.
A: Yes.
Q: He had a complaint of a headache, mucus drainage and a cough, and feeling weak and having some hot and cold spells.
A: Yes.
Q: He was diagnosed with bronchitis on that day?
A: Yes.
Q: What is bronchitis?
A: Irritation of the bronchi.
Q: And what are the signs and symptoms of bronchitis?
A: Cough, sputum production, wheezing. Fever.
Q: Based on your review of the note from that date, 10/11/93, were the symptoms and signs consistent

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with bronchitis?
A: They are consistent with bronchitis. They are also consistent with his metal exposure. In fact, they all are.
Q: Was his treatment of this patient on 10/11/93 appropriate and within standard of care?
A: Now he is on Repetabs, yes. He gave him bioxin, give him an antibiotic, bronchodilators, and to use his declaben and Proventil inhaler.
It is a lot of Proventil. But again it is not a problem.
Q: So your answer to my question is yes?
A: I'm sorry?
Q: My question was —
A: Is there a problem? The answer is no.
Q: Out of caution on that day he ordered an x-ray, correct?
A: Yes.
Q: And let's just go to the x-ray interpretations, doctor. I'm not going to show you the films, but just go to the x-ray interpretations on that date.
A: 10/11/93. It is probable small — yes. I have it.
Q: And was the x-ray interpretation consistent with

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bronchitis?
A: No.
Q: In what ways?
A: There is no x-ray findings on bronchitis.
Q: So when you have bronchitis, you get a chest x-ray, you don't see anything.
A: Right. It is an inflammation of the bronchi, not an inflammation of the lung.
Q: So if an expert testified I would say that the film was consistent with bronchitis or asthma, you would disagree with that?
A: Oh, yes. There are no infiltrates in asthma, and no infiltrates in bronchitis.
Q: Do you see any fibrotic scarring reported on the 10/11/93 x-ray?
A: No.
Q: Is there any evidence —
A: Left perihilar infiltrates is all it says.
Q: Is there any evidence of interstitial lung disease on the 10/11/93?
A: Left perihilar infiltrate.
Q: So that would be —
A: Sure, that's consistent. To know whether it is scarring you have to see it more than once.
Q: Gotcha. Okay. He comes back then on February 1

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of '94.
A: Yes.
Q: Did he respond to the treatment given to him in October of '93?
A: Doesn't seem that he was asked.
Q: So you don't know one way or the other?
A: I do not.
It says he has severe cough due to asthma, and the note above.
Q: He has, comes in on that day and is now having cold symptoms times two days, getting worse?
A: Right.
Q: He also talks about the severe cough due to asthma.
A: Right.
Q: He was not using his inhaler as instructed on that visit, correct?
A: Because it was making him cough.
Q: He had decreased breath sounds on the left on that date?
A: Yes.
Q: Would that make you suspicious for a possible pneumonia?
A: It could.
Q: What would be — when you find decreased breath

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sounds as found on that date, what would be within your differential?
A: Usually that's airway obstruction, or it's sounds not being transmitted.
Q: Based on that finding, would you want to get a chest x-ray?
A: With his symptoms, I would not go one way or the other with this. But that's fine.
Q: Did he get a chest x-ray on that day?
A: 10/11/93. Yes, he got a chest x-ray.
Q: 2/1/94 we're talking about?
A: Chest x-ray in the office shows little change of that of 10/11/93, so he got a chest x-ray.
Q: And would you take a look at the formal report?
MS. TAYLOR: February 1.
A: Questionable small left perihilar and infrahilar infiltrate and clinical correlation is required.
Q: So in your opinion, is that evidence of interstitial fibrosis?
A: Without seeing the x-ray, I cannot say definitively, but it's compatible with it. And it is compatible with a pneumonia.
Q: So doctor, let's talk about the February 1, '94. Is his care and treatment of this patient on that date within standards of care?

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A: He gave him augmentin. He thought he had a pneumonia, treated him for pneumonia. I don't have any problems with that.
Q: Okay. He comes back on 2/28/94?
A: Yes.
Q: How was he doing? What complaints did he have on that day?
A: Continues to have a cough and some sinus drainage.
Q: And congestion?
A: Congestion? I don't see congestion.
Q: You just find sinus drainage?
A: Yes, that's all I see. Some sinus drainage with some nausea and vomiting that relates to drainage from the sinus, some chest tightness.
Q: Lung exam normal?
A: Yes.
Q: You would hope that if this was pneumonia that was seen on the February 1, 1994, that it would have cleared by February 28, correct?
A: Yes.
Q: Look at the chest x-ray interpretation.
A: The one here, or go to the chest x-ray interpretation?
Q: The 2/28/94.

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A: There is no evidence currently for active cardiopulmonary disease.
Q: So is that a clean x-ray, according to the report?
A: It says — yes, it says whatever was there cleared.
Q: And if in fact that was interstitial fibrosis seen on the February 1 x-ray, doctor, due to hard metal disease, you would have expected it not to clear on 2/28, true?
A: That would have been my expectation.
Q: Okay. Let's go — so looking at that February 28 film, would it be appropriate for Dr. Carson to assume that he had treated the patient for pneumonia and the pneumonia had cleared?
A: Yes.
Q: When is he next seen?
A: 2/28. He is scheduled for 5/21 and didn't show up and next seen on six something or other of '94. I can't read it. Whatever the date. 6/6.
Q: What are his complaints on that date?
A: Cough.
Q: And he talks about chronic sinus drainage, correct?
A: There are two sets of notes, a handwritten note

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and a typed note, and that occurs frequently and sometimes I read them both and sometimes I don't. So refer me to the one you want me to read and I will do that.
He says that — the reason I did this is because I can't read all the writing. Increased coughing fits in the handwritten note. Complains of continued cough and his cough is worse at work in the handwritten note.
Q: During the period of time that Dr. Carson treated this patient, did he lose weight?
A: Yes, overall he did.
Q: From where to where? Where did he start off?
A: I don't know the dates on that. The weights are in there. I didn't pay attention to that.
Q: I thought you made a comment on that on your report, that one of the things he did was lose weight, and I want you to take me from the first visit until the last visit in '96, and tell me what the differences in weights were.
A: I do not have that information in my head. If I said that, I picked it up from the Cleveland Clinic, I'm sure. Because I did not sit and go through all the weights.
Q: Why don't we do that, doctor.

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A: If going through the weights, to save time, says he didn't lose weight, I am perfectly happy to say he did not lose weight.
Q: The reason I ask that, doctor, is in your report you make a comment, you said persistent cough at work, progressive dyspnea, weight loss, and I just wanted to know where in that three-year period — I don't care about the Clinic records. I'm talking about —
A: Okay. I understand what you want.
Did I physically look at his weights? The answer is no. Did I accept the data from the Cleveland Clinic as to weight loss? That's where I got it and that's why I wrote it.
Q: I don't want you to do either, doctor. I want you to tell me, did he lose weight during the period of time that he was — and I'm talking about from the first time until the last time he saw him in '96. You don't have to go through each one. I'm talking about seeing him in March of '93. What did he weigh?
A: In March of '93 —
MS. TAYLOR: Go back this way.
A: The weight here is 170.
Q: And what was he in —

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A: Let me go through it. If you are going to make me do it, let me do it.
170 initially. 168.165. That's five pounds. 169.169.167.161.
Q: Now, where are you at, doctor, in '94?
A: 6/94. Down nine pounds, it says. 160. So that's down ten pounds, presumably.
Q: Okay.
A: 165. 169. 162. 160. 160. 160. So it is ten pounds so far. And there is not one here and that's all I have.
Q: So over the course of three and a half years, it waxed and waned for a period of time but total it was ten pounds?
A: He lost ten pounds, yes. So the comment in the notes was correct.
Q: I think we're on what date?
A: I don't know. I lost track.
Q: I think the last one was —
MS. TAYLOR: I think you just finished up 6/6/94. Am I correct about that?
THE WITNESS: I don't know.
Q: Do you have any problems with the care rendered by Dr. Carson to the patient on 6/6/94?

A: No.
Q: What's the next visit?
A: The 15th.
Q: Of June?
A: Yes. There are two dates. 6/15 and 6/13.
Q: And what were his complaints on that date?
A: Great deal of cough and difficulty breathing. Coughed up some blood.
Q: Was he also having some troubles with problems with reflux disease during that period of time?

tell you so we can lay this aside that people that have chronic cough with paroxyms frequently vomit, and it is not at all related to reflux or other things. It is a function of simply increasing the abdominal pressure, and it overcomes the sphincter and makes people vomit.
Q: He was seen in the Emergency Room at that time?
A: Right.
Q: In June.
A: Yes.
Q: What was he diagnosed with in the Emergency Room?
A: I would have to go to the Emergency Room.
Q: Why don't you do that.
MS. TAYLOR: The date is 6/13.

A: Yes. There is a note. This is May 16, '97. Coughing up blood.
Q: And what was the ultimate diagnosis?
A: He states that Dr. Carson thinks he might have asthma.
Q: I'm talking about the diagnosis of the emergency room, doctor.
A: He doesn't say.
Q: And how was he treated?
A: He was given Proventil and he was given a chest x-ray.
Q: Was the —
A: Wait a minute. There is another sheet. Wait a minute here.
Suggest mitral heart disease with some central pulmonary congestion. That's what this says. I don't see a diagnosis in a traditional sense like he has. This might not be the same day because the date is not on it.
Here is 6/13, but I'm not sure that's the date. That's the only thing I have. This is the lab.
Q: What type of test? Did they get an arterial blood gas on him on that day?
A: I don't know. Yes. Here it is.

Q: Was that normal?
A: His PO2 — yes, it's okay.
Q: So the arterial blood gas done in June of *1994* was normal?
A: Yes.
Q: And not consistent with hard metal disease, was it, doctor?
A: It's not consistent with extensive pulmonary fibrosis.
Q: And he was treated with Proventil, which would be

A: Yes. It's a bronchodilator, commonly used inappropriately. Here is his 20 pound weight loss.
Q: What was his weight on that date?
A: I don't have his weight. It just says in the note he had a 20 pound weight loss.
Q: At that time there was some suggestion raised about some sort of heart problem. Correct?
A: Yes.
Q: And Dr. Carson referred the patient over to a cardiologist, correct?
A: Yes.
Q: And an echocardiogram was done?
A: Yes.

Q: Which was normal?
A: Yes.
Q: Appropriate thing to do?
A: Sure. The man didn't have any signs or symptoms of heart disease, didn't have any signs or symptoms of valvular heart disease. There is nothing about the history that suggests he has valvular heart disease, but if someone said he had valvular heart disease and you want to rule it out, that's the way to do it.
Q: When did you next see the patient, then?
A: 6/16, coughing up blood. On 6/15/65, occasionally coughing up blood —
Q: That is his birthday?
A: Sorry, that screws me up all the time. 6/16. 6/13, and then 6/16.
Q: Of what year?
A: *'94*.
Q: I think we've already talked about this 6/15. That was the post ER visit. Correct?
A: Okay.
Q: Was his treatment on that day appropriate within standards of care?
A: This is when he got scheduled for the echocardiogram. Yes.

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Q: When did he next see Dr. Carson?
A: 6/20 is the next note. Coughing spells.
Q: 6/20 of what year?
A: 6/20/94 and then 7/31 of 95. That's the next note that I have.
Q: So he did not see Dr. Carson for over a year?
A: That's what it looks like. 13 months.
Q: How did he do in the interim?
A: I have no idea.
Q: Did he continue to cough during that time?
A: It says coughing spells for three years.
Q: Do you know how often those coughing spells were?
A: No. There is no history or description of his cough throughout this entire record.

through July of '95?
A: I don't have a clue.
Q: Now, what were his complaints in July of '95?
A: Coughing spells on and off for the last three

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(Thereupon, a discussion was had off the record.)

A: We were on 7/31/95.
Q: Do you believe the care and treatment of the patient on 7/31/95 was appropriate and within standards of care?
A: He now has had cough for three years. There has been no attempt to find out why he has the cough. He has been treated for asthma and now the note says possibly asthma and there has been no attempt to determine whether or not he has asthma. And now, in my — and my sense is no, it is not appropriate, and the reason is he's had symptoms for three years, he has a chronic cough by anybody's definition, and the etiology of the chronic cough is not known, and more importantly there has been no attempt to find out what the cough could be attributed to.
Q: Can you have a chronic cough with asthma, doctor?

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A: It is unusual to have a chronic cough with asthma. Most asthmatics have cough as part of an exacerbation, and that's not the story I'm getting here.
Q: My question is can you have a chronic cough with asthma?
A: It is rare to have a chronic cough with asthma. It is not rare to have episodes of cough with asthma. But it is rare to have a cough with asthma as the diagnosis and not get better. You can still have it for three years.
Q: Do you know if the patient did get better during that period of time when he took his medications or treatments?

every minute of every day? No, I think not, but there is no description so I can't be sure.
Q: Do you know how often that occurred during that period of time?

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not quantitated historically, so I don't know. The only people who have cough constantly are people who have irritations constantly. And typically, that's something like heart disease.
Q: He obtained a chest x-ray on that date, correct?
A: Yes.
Q: And what was the finding of the chest x-ray?
A: Oh, I lost the place. Go ahead. '95.
MS. TAYLOR: July 31.
A: Two views of the chest reveal no active cardiopulmonary disease and no change from 2/28/94.
Q: Normal chest x-ray?
A: Yes. Normal chest x-ray.
Q: But from your reading of that next chest x-ray in '97, when they compare it to the '95 chest x-ray, that apparently was not read correctly, true?
A: There is a difference. This is the film that someone compares later, and one gets the distinct impression that there were changes in '95.
Q: And changes, if they had been reported to you,

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you would have acted upon. Correct?
A: I would have acted on this long before that.
Q: That wasn't my question, doctor.
A: I understand.
Q: My question was if in July of '95 those changes would have been reported to you you would have acted on them, correct?
A: Yes.
Q: So what Dr. Carson was left with was a chest x-ray in July of 1995 which showed no abnormalities. True?
A: Yes. And a person coughing for three years.
Q: When is he next seen?
A: 5/6/96 is the next note I have.
Q: What were his complaints?
A: Presents with a history of asthma and difficulty breathing, wheezing, vomiting when using Proventil inhaler.
Q: Now —
A: And then the typed note.
Q: And so he had gone for how long between visits?
A: Whatever the distance is between 6/16/94 to — I'm looking at it wrong. 7/31/95 to 5/6/96.
Q: So fair to say then, doctor, from July of '95 through — I'm sorry. June of '94 through —

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when was the visit?
A: 5/6/96. 12/29/96.
Q: Those two years, he was only seen twice in those two years, correct?
A: I have a note on 7/31/95, 5/6/96, and that's it. That's all I have.
Q: So over a two year period of time, this patient only saw Dr. Carson twice. Correct?
A: Yes.
Q: Would you have expected that if he was getting worse that he would have seen Dr. Carson more often during that period of time?
A: I can't — I don't know what's in his head. He may have been bitterly discouraged.
Q: I'm just telling you — I'm not —
A: I don't. I can't answer your question.
Q: Would you expect a reasonable patient if he was getting worse during that period of time to come [is] back?
A: Yes, I guess so.
Q: Okay. And what were — I'm sorry. What were his complaints?
A: Evaluation of asthma and allergies. Difficulty breathing.
Q: Do you know how he did in that almost year period

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of time?
A: There is no query to find out how he did.
Q: And what was Dr. Carson's diagnosis?
A: Acute exacerbation of asthma and allergies.
Q: And how was he treated?
A: Gave him Depomedrol in the hip, Celdane, and presumably a prescription or something for AeroBid inhaler and Proventil.
Q: Was his treatment on that day appropriate and within standards of care?
A: For an acute exacerbation, if it really is an acute exacerbation, he didn't get enough medicine.
If by acute exacerbation, now I'm guessing and you're going to have to ask your client about, he meant something had gotten worse and he gave him Depomedrol, that probably would be okay.
Did he commit malpractice? The answer is no.
Q: And then I think the next visit, he goes to the Med clinic when he has the chest x-ray that eventually won't clear and then ultimately is shipped over to Dr. Dacha, correct? Is that your understanding?
A: Yes, that's my understanding.
Q: I want to ask you, doctor, do you have an opinion

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to a reasonable degree of medical probability what this man's total lung capacity was in 1994?
A: You asked me that before.
Q: No. I asked you '93.
A: I don't have — I can only guess and my guess is less than 70. But I don't know how much less.
Q: Do you have an opinion to a reasonable degree of medical probability what his total lung capacity was in 1995?
A: No. I can't plot it out because I don't know his continued exposure, and I don't know the activity of his disease process.
Q: Do you have an opinion, doctor, to a reasonable degree of medical probability what his total lung capacity was in 1996?
A: No. Same answer. I can't plot it out.
Q: Fair enough. He went and saw Dr., I think Dacha in —
MSTAYLOR: March of 1997.
Q: 1997, correct?
A: Yes. You have Dr. Dacha's notes in here.
Excuse me. Are we finished with what we have so I can let go of that?
Q: Right.
A: Are we finished with the x-rays so I can let go?

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If not I'll mark it.
Q: Just mark it.
A: Excuse me. I have to go back.
Q: Before we get to that, doctor, if a patient is instructed when giving treatment that if you don't get any better with this treatment, to come back, does the patient have some responsibility then to come back?
A: Most assuredly.
Q: And from *'94* through *'96*, do you know what medications he was taking during that period of time?
A: In a general sense. Maybe you can go back and specifically look, but he looked like he was taking a big antagonist and an inhaled steroid.
Q: Do you know if he was taking them on a daily basis?
A: I do not.
Q: So you don't know if he was taking them on a constant basis or episodic period basis during that period?
A: My bet would be that he was not having them very often because they made him cough.
Q: Other than one occasion, I think in the notes, did Mr. Diederich ever tell Dr. Carson that his

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condition was aggravated by his working conditions?
A: No, but I don't think it was ever asked. There are no notes saying it was ever asked.
Q: My question was other than that one, did you ever see him reporting that geez, when I go to work, this is the thing?
A: That's right. I do not see that.
Q: By the time he saw Dr. Dacha, he had the knowledge that there was a chest x-ray that showed an infiltrate that did not clear with antibiotics, correct?
A: Yes.
Q: So he knew that there was a persistent infiltrate by the time he saw him, correct?
A: That's my understanding.
Q: So certainly by March of *'97*, in your opinion, this patient did not have bronchial asthma. True?
A: He did not have bronchial asthma.
Q: And the reason that Dr. Carson referred him over to the pulmonologist was his persistent infiltrate, correct?
MS. TAYLOR: Let me object, form of the question as to who actually made the

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referral, but other than that, answer it.
A: I don't know why. He referred him.
Q: Look in the February 25, *'97* assessment of Dr. Carson.
MS. TAYLOR: Last notes.
A: I can tell you his plan.
Q: Yes.
A: He is waiting the reading of an x-ray. Puts him on Accolate. If this, presumably his chest x-ray or pneumonia is not behaving, he will get some help and then referred to pulmonologist, either Dr. Dacha or Dr. Ramadue; after his visit with the pulmonologist, the follow-up will be after the visit. And then I have called, asked patient if he needed referral for Great West.
Q: So it appears the reason that he was being referred to Dr. Dacha was the persistent infiltrate, correct?
A: Yes. Seems that way.
MR. POLITO: I didn't know I had to go through that charade, Donna.
Q: Now, you have Dacha's records there, correct?
A: I have, yes. I have CT of the sinuses of the thorax —
Q: I want his visit of March of *'97*.

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A: Goahead.
MS. TAYLOR: I'm looking because I remember that I didn't know if I had the visit note or not.
MR. POLITO: If you don't I'll pull it.
MS. TAYLOR: Will you do that? The first set I got didn't have office notes, it had all the specials. You know what I mean? Scans, stuff like that. Without an actual office note.
THE WITNESS: Can we go off the record?

(Thereupon, a discussion was had off the record.)

Q: Now, he knew at that time, doctor, that there was a persistent lung infiltrate seen on the chest x-ray, true?
A: Who is "he".
Q: Dr. Dacha.
A: Yes. I'm seeing this for the first time.
Q: Okay. Take your time. Read it.
A: Okay.

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Q: In March of '97,the doctor sees him, examines the patient, correct?
A: Yes.
Q: And he knows of these persistent infiltrates and what is his number one diagnosis?
A: Persistent lung infiltrate.
Q: What is number two diagnosis?
A: Bronchial asthma.
Q: Do you agree with that, doctor?
A: No.
Q: So a pulmonologist referred to by Dr. Carson sees him in March of '97and after taking a physical exam and history he reaches the diagnosis of bronchial asthma, true?
A: The patient tells him —
Q: Wait a minute, doctor.
A: You have to wait. I have been very patient. And you need to understand some things about diagnosis. We're not going to get adversarial, but you need to understand some things about diagnosis.
He could say he was from Mars, and if he doesn't have anything to support it, he can say it doesn't mean anything. The fact that the patient says I have been treated for bronchial

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asthma, the guy says you have bronchial asthma, that's fine. That is not his primary reason for being there and that's not what he sat there and thought through.
Now, I cannot speak for this gentleman. I can only say that's what he wrote down, but he has no evidence to support it. No one does.
Q: I know that's how you believe, doctor, but he doesn't say bronchial asthma by history, does he?
A: No. He just says bronchial asthma. He also doesn't say persistent left lung infiltrate by history.
Q: Okay, but here he says bronchial asthma is his number two diagnosis, correct?
A: Just like persistent left lung infiltrate is his number one, without the qualification of by history.
Q: Doctor, do you agree that all along he may have had bronchial asthma?
A: I cannot say that he had bronchial asthma without the appropriate testing, and there is none, and none of the pulmonary function studies that were eventually done are compatible with bronchial asthma.
Q: My question is then are you telling me then —

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A: I'm telling you that.
Q: — that it is your opinion that he never had bronchial asthma?
A: That's my opinion.
Q: So you don't believe that he might have had bronchial asthma all along?
A: I'm telling you that his condition is not compatible with bronchial asthma. That's what I have been saying.
Q: I understand that, but —
A: That's —
Q: But my question is —
A: That's considered, my opinion is considered and the evidence that supports my opinion is that his pulmonary functions don't look like the pulmonary function of bronchial asthma. His symptom complex is not the symptom complex of bronchial asthma and the symptomatic manifestation of his illness is not that of bronchial asthma. And his failure to respond to standard treatment is not the typical phenomenon of bronchial asthma, so there is nothing to support the diagnosis and there is a lot against it.
Q: So you gave me a long winded answer, doctor, and my question is is it possible that he had

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bronchial asthma during that period of time?
A: There is no evidence that demonstrates that he had bronchial asthma during that time.
Q: So your answer is no?
A: My answer is no.
Q: Now, there was a chest x-ray obtained, I believe in March of '97.
A: If you say so.
MS. TAYLOR: Just to make this easier, Dr. Dacha ordered another one. I bet you it is in here. Don't look in there for it.
Q: And I think it refers back to a chest x-ray done back in June of 1994.
MS. TAYLOR: Was this done at EMH Regional Medical,John?
MR. POLITO: I think it was.
A: Okay. I don't know where we were.
MS. TAYLOR: You are saying another x-ray, right?
Q: Maybe it was the x-ray, or maybe he is commenting about the x-ray.
A: I think he was commenting about an x-ray. That's that. He talks about it in there. I don't know whether he got an x-ray.

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Q: Doctor, I want you to assume that this patient had worn a protective mask during these years as instructed to by Dr. Arora, okay?
A: Okay.
Q: Had he worn this protective mask from 1992 up until 1996, do you have an opinion to a reasonable degree of medical probability whether or not his lung capacity would have been —
A: You asked me this.
Q: — improved in 1997?
A: You asked me this and we agreed that if he was removed from the environment by whatever means, mask, for example, or any other way, that it would have been likely that the extent of his disease would be less and the progression would have been less, depending upon how much he had.
Q: Doctor, have you now told me each and every way you believe Dr. Carson deviated from acceptable standards of care with this patient?
A: Yes.
Q: Doctor, how many medical malpractice cases have you reviewed?
A: Oh, I usually review things like death because I'm interested in asthma and death and I can't answer it because I don't do it all that often,

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maybe a couple times a year, and I don't do it every year and I have not been doing it for a long time, so it is not many. It is not hundreds. I don't know.
Q: Do you have any ballpark figure of the number you have done?
A: No, I don't keep records. I don't usually do this, actually.
Q: By the way, has your practice changed in any way over the past —
A: Hundred years?
Q: No. The past eight to ten years.
A: Has it changed? I don't know what you mean.
Q: I mean, in terms of the percent —
A: Do I see more patients than I used to? Yes. A lot more, actually.
Q: What are your fees, doctor, for review?
A: I charge $500. Recently I increased it to $550 an hour.
Q: And how about for deposition testimony?
A: Same.
Q: And how about for trial testimony?
A: The same.
Q: Have you ever testified in a case involving hard metal disease?

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A: No.
Q: Ever reviewed a case?
A: Not that I remember. Usually I'm involved in death.
Q: How does it break down, doctor, plaintiff versus defendant?
A: I don't know. I do both, but I can't tell you. My sense is probably — I don't know the difference, the plaintiff is the —
MS. TAYLOR: The plaintiff is the patient.
THE WITNESS: Okay. I would guess mostly for the patient but I also do it for the doctor. But I don't keep records so I don't know.
Q: How many depositions have you given in medical malpractice cases?
A: I don't know. For many, many years I didn't do anything like that. Maybe two a year, something like that, for the last six, seven years, if that.
Q: Have you ever received a case from a service?
A: A service?
Q: Somebody that advertises.
A: Oh, no. No.

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Q: What percentage of your time is devoted to medicolegal matters?
A: One tenth of one 100 thousandth of a percent. Very small.
MR. POLITO: Give me a few minutes, doctor. I might be done.
A: I do things like, the kind of stuff I have gotten involved in is people die from a drug of asthma and I get involved on one side or the other, or there has been an industrial accident, things like that.
Q: Doctor, I am going to hand you what is marked for identification purposes as Defendant's Exhibit 2. Can you identify that for me?
A: That's a bill. That's an invoice for consultation that I sent.
Q: What is Airway Research, Inc.?
A: That's a corporation that I use when I need to do research. So the stuff I need to do here, I put it in there.
Q: Is this your company?
A: Yes, it's my company.
Q: This was as of July of 2000. Do you know what additional monies you have billed since that time?

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A: I have not. There is no other bill.

(Thereupon, a discussion was had off the record.)

Q: I hand you what is marked for identification purposes as Defendant's Exhibit 3. Could you tell me what that is?

A: It is the deposition transcripts — it is a letter from Ms. Taylor-Kolis asking me to review the transcripts of Dennis Carson and Dr. Mehta.

Q: What's the date of this letter?

A: April 25.

Q: Of what year?

A: 2001.

(Thereupon, a discussion was had off the record.)

Q: Doctor, you never practiced as a family practitioner, true?

A: No.

Q: Are you familiar with the standards of care as they relate to family practitioners?

A: I'm not familiar with any documents that states

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them, but the standards of care for medicine are pretty much the same throughout.

Q: You're telling me it's the same standard of care for a pulmonologist as a family practitioner?

A: I'm telling you the standard of care is first do no harm.

Q: I understand that that's a generic sense.

A: That's what I'm talking about, generic.

Q: My question is are you familiar —

A: No. Specifics, the answer is no.

Q: So the record is clear, then, are you familiar with the standards of care as they relate to family practitioners?

A: I'm not familiar with any written document, and the answer is no, I have not investigated that.

Q: I asked you authoritative textbooks on asthma. Could you cite to me any authoritative textbooks on hard metal disease?

A: I would imagine occupational texts would have it. I would imagine that industrial texts and most pulmonary texts would have a paragraph or two about it. But I can't give you — I didn't look it up so I can't give you specifics.

Q: Do you subscribe to any occupational medicine — journals?

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A: No. I told you no, but I have textbooks.

Q: You believe Mr. Diederich has permanent damage to his lungs, correct?

A: I fear that, yes.

Q: You would agree that in 1992, doctor, he had permanent damage to his lung if we assume he only had 60 percent of total lung capacity, true?

A: I can't necessarily agree with that. The reason I can't agree is that sometimes there is a significant inflammatory component, and if you either remove people from the environment or treat them, they can improve. Anything, how much he had or anything like that would be absolute conjecture on my part.

Q: So is it fair to say, then, doctor, you don't know in 1992 whether or not Mr. Diederich had permanent damage to his lungs?

A: My guess would be that he would have some permanent changes. The extent of those changes, I don't know.

Q: Okay. It's my understanding then, doctor, you have never seen the original chest x-rays?

A: No, I have not.

Q: And you would like to see them, correct?

A: Oh, yeah. Sure.

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Q: Do you have any criticisms of Mr. Diederich's employer?

MS. TAYLOR: I object. He is not performing that function.

A: I don't know who his employer is.

Q: You don't?

A: I know he was a welder. I don't know who the people were that he worked for.

Q: If you assume that this man worked at his place of employment from 1985 through 1997 and was never given a mask to wear, do you have any criticisms of the employer?

A: I don't know the OSHA standards, and without knowing that, I can't criticize. So I don't know what the allowable levels were and I don't know how they were monitored.

Q: You told me you consulted with businesses. Forget the OSHA standards. If you have a man doing welding, being exposed to cobalt, tungsten and nickel on a daily basis, would it be your recommendation to that employer that the employee be —

A: In hindsight, sure.

Q: Hindsight is also 20/20, correct?

A: Sure, but I mean, if you ask me to take the

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problem on prospectively I can tell you what I will do. But the rest is conjecture.

Q: Of the ten percent, you said, of the patients who do develop hard metal disease from exposure to these metals, do you know what percentage of those wore masks and did not wear masks?

A: No, I don't have that information.

Q: So would it be fair to say, then, you could put a hundred people, line a hundred people up exposed to those metals and 90 percent of them will not develop hard metal disease and the other ten percent will?

A: That's simplistic. And I need to explain a little bit about dose response relationships. I don't want to waste your time.

There is an objective reality, and that is how much someone gets over what period of time and that's a dose response relationship.

And then there is the host susceptibility, and host susceptibility varies as a function of dose, so there may be individual dose response relationships.

The data that exist are aggregate data that mean things, so some would be very, very sensitive, and some will be insensitive.

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And then there are modifying factors. My expectation is, although I don't have hard data, is anything that would interfere with mucociliary transport clearances, smoking, any ongoing lung disease of any type would accelerate those sorts of developments, so that's how I have to answer this.

So it's not just simply putting a hundred people in and seeing what happens. If you did that, and you made the dose high enough, you would probably make a hundred. If you — the exact threshold at which disease occurs for this, I don't know, and I don't that anybody knows it. But I have not looked it up.

Q: Okay. So I guess — maybe it is because you don't know, but are you telling me that the studies don't look at all comers?

A: They look at all comers, but they do it epidemiologically or statistically. They are retrospective and there are a few. You would not be allowed nowadays to put people in an environment where you are going to get hurt and say I'm going to put you in here and see what happens to you. You are not allowed to do those experiments any more.

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MS. TAYLOR: Thank God.

THE WITNESS: They never should have been allowed to do those experiments.

(Thereupon, a discussion was had off the record.)

Q: Doctor, if you are going to render any additional opinions in this case that we have not talked about today, will you please let me know?

A: Of course.

MR. POLITO: That's all I have.

THE WITNESS: Thank you.

MS. TAYLOR: Thanks. We'll read.

EDWARD R. McFADDEN JR., M.D.

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CERTIFICATE

The State of Ohio,) SS:
County of Cuyahoga.)

I, Judith A. Gage, a Notary Public within and for the State of Ohio, authorized to administer oaths and to take and certify depositions, do hereby certify that the above-named EDWARD R. McFADDEN JR., M.D., was by me, before the giving of his deposition first duly sworn to testify the truth, the whole truth, and nothing but the truth; that the deposition as above-set forth was reduced to writing by me by means of stenotypy, and was later transcribed into typewriting under my direction; that this is a true record of the testimony given by the witness, and was subscribed by said witness in my presence; that said deposition was taken at the aforementioned time, date and place, pursuant to notice or stipulations of counsel; that I am not a relative or employee or attorney of any of the parties, or a relative or employee of such attorney or financially interested in this action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office, at Cleveland, Ohio, this ____ day of _____, A.D. 2000.

Judith A. Gage, Notary Public, State of Ohio
1750 Midland Building, Cleveland, Ohio 44115
My commission expires March 23, 2005

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