SUPERIOR COURT OF NEW JERSEY
LAW DIVISION: MIDDLESEX COUNTY
DOCKET NO. L-060148-87

JOHN PETERSON and SHIRLEY MAE PETERSON, Plaintiffs, vs. UNION CARBIDE CORPORATION, Defendants.	DEPOSITION UPON ORAL EXAMINATION OF: HENRY VELEZ

TRANSCRIPT of the deposition notes of HENRY VELEZ, witness called for oral examination in the above-entitled action, said deposition being conducted pursuant to the Rules Governing Civil Practice in the Superior Court of New Jersey, by and before MAUREEN RATTO, a Notary Public and Certified Shorthand Reporter of the State of New Jersey, License No. XI01165, at the offices of HENRY VELEZ, MD, 1903 Maple Avenue, Fair Law, New Jersey, on October 24, 1989, commencing at 12:00 p.m.

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H E N R Y V E L E Z, having been first duly sworn according to law by the Officer, testifies as follows:

DIRECT EXAMINATION BY MR. TUZZIO:

Q. Dr. Velez, my name is Michael Tuzzio and I represent Union Carbide in this action instituted by John Petersen and his wife. I'm here to take your deposition and that's because we received a report from the plaintiff's attorneys, a report drafted by you dated August 15, 1989 and you've been named as potential expert witness in this case. You've had your deposition taken before, I assume?

A. I have.

Q. And very briefly, if you don't understand a question that I ask please tell me and I'll try and rephrase it in a way to help you understand it.

You understand you're under oath and the court reporter's purpose here and only thing I ask is that you please keep your responses verbal and speak nice and loud so that it makes it easier on her.

Let me start off, do you have your CV with you?

A. No, I don't.

Q. Do you have a CV?

A. I may have one. The problem is we ran out of paper and we're waiting for a shipment of -- I may have one though.

Q. When you get an up-to-date CV could you please send it to the Levinson office and I'll ask that you send us a copy of that, please?

A. Sure.

Q. Not having the benefit of your CV I'll have to ask you some questions about your background. When did you go to undergrad?

A. I went to Brooklyn College in New York City.

Q. And what year you get out?

A. 1973.

Q. With what degree?

A. None. None.

Q. You attended Brooklyn College?

A. That's correct.

Q. And then you went to another college?

A. No. I went to medical school after that.

Q. Where did you go to medical school?

A. New York Medical College in Valhalla, New York.

Q. And what year did you graduate from there?

A. 1976.

Q. What did you do after graduation?

A. I spent a year at the Brookdale Hospital in Brooklyn, New York and I completed one year internship in medicine, internal medicine, to be specific.

Q. That would have taken you up to 1977?

A. That's correct. If you'd like I'll give you the whole.

Q. Run through the whole thing instead of me asking individual questions. That would be great.

A. I from there I went to, from 1977 until 1979 I went to the Mount Sinai Hospital, environmental sciences lab under direction of Dr. Selikoff where I spent two years in occupational and environmental diseases.

Thereafter, I did another year of internal medicine at the Veterans Hospital at Kingsbridge, affiliate of Mount Sinai and completed my second year of internal medicine.

Thereafter, I went to University Hospital at Stoneybrook where I completed -- from 1980 until 1982 where I completed two year fellowship in pulmonary diseases.

In 1982 I came out to Paterson, New Jersey,

joined a practice which did not work out and then from October until December of 1982 I did a little bit of private practice. In December of '82 I took a salaried position at the Barnert Hospital in Paterson. And was their director of ambulatory services to include emergency room, clinics and occupational health center. In April 1st, 1985 I entered private practice, originally at another location, 25-15 Fair Lawn Avenue, in Fair Lawn. And then we came here in May of 1987, at this present address, which is 1903 Maple Avenue.

I've been in private practice since then. I became board certified in internal medicine in 1983 and board certified in pulmonary in 1988.

Q. When you worked with Dr. Selikoff, what were your responsibilities?

A. I was a resident or fellow, depending on whatever you wanted to call me and I was responsible for participating in research projects, examining people, participating in an occupational health clinic that we had, reviewing literature, et cetera, et cetera. They were actual classes in epidemiology and occupational medicine.

Q. Was there a specific focus or field of the research Dr. Selikoff was doing at that time?

A. Well, he had his fingers into numerous things,

asbestos of course is what he is well known for.

Q. That is what I know him for and I wanted to ask about your involvement with that and whatever else he might have been doing at the time?

A. Right. Well, there were led studies going on of burners. Those are people who use gas torches to take apart steel structures and in this case it was the the defunct Westside Highway and they suffered from led toxicity. Policemen also had led exposure and couple of others.

There were some projects with respect to solvents and the big project with respect to polychlorinated biphenols, which had accidently entered the food chain in Michigan.

Q. What was your involvement with that particular project, your own?

A. I was involved in the planning and execution of the project.

Q. What would that mean, planning the projects or --

A. We would have meetings and we would discuss, you know, how to approach a project of this type.

Q. How was that particular project approached?

A. Well, it required travel to Michigan. It

required sampling, so we had to come up with a sampling method by which to randomly pick participants and then notify these participants and then deal with the fact that some would participate and some wouldn't. Then there was the planning as to what should be tested for, what should we do, what should we be looking at based upon the known toxicities of the PCB's.

Q. What were the alleged injuries that these people had suffered or what conditions?

A. Most of it really affected people, animals through the food chain and it inadvertently got mixed with cow feed instead of magnesium supplements which should have been added to the cow feed.

So the cows were suffering from a lot of spontaneous abortions. They were having hyperkeratosis, which is an exaggerated growth of their hooves, almost bizarre growth of the hooves. When they did give birth it was a process that occurred afterwards that the cow goes through and they weren't fairing very well with that. So there was a lot of maternal death. Failure to thrive and just plain wasting away of these cattle, depending on how much of the feed they ate.

The problem was that these were dairy cows and therefore, the PBB's entered the diary chain there was

food products, milk, cheeses, that sort of stuff.

Q. Did you uncover any problems that humans were having as a result of this condition?

A. There was a lot of allegations. I know -- I'd have to look at the final report, which was a monograph on our findings. There was some liver toxicity found. We performed fat biopsy and found samples of PBB or stores of PBB in adipose tissue, fat tissues. But what I remember was that we didn't find too much.

Q. These were people who would have ingested these dairy products?

A. That's right, in the State of Michigan.

Q. What other projects did you work on with Dr. Selikoff?

A. Well, Dr. Selikoff was constantly involved in asbestos, so we worked with United Auto Workers, come out to Paterson where he originally started. He was part owner of a large building, which still stands. And we would examine members of the United Auto Workers -- sorry -- Insulators, they were Jersey-based. We'd examine them. They'd be X-rayed, interpret the X-rays, using the high or low criteria for interpretation.

Q. In your years with Dr. Selikoff, did you do any studies with regard to workers or any persons who were exposed to PBC?

A. No. That had occurred before I got there. You probably know that he -- the lab did do work -- was involved to some extent with the Niagra angiosarcomas, which were secondary to vinyl chloride.

Q. Was the angiosarcoma of the liver?

A. Yes.

Q. Did you do any work with Dr. Selikoff with regard to exposures to vinyl chloride monomer?

A. No. All that work had actually been work before I arrived. That work was done in just about two years -- the publications were two years before I arrived.

Q. There was no follow up during the time that you were there?

A. No. Work had been done and that was that.

Q. When you said you went into practice and then didn't work out, who did you go into practice with?

A. I actually worked for a Doctor named Jack Sall but I was actually working with someone you probably know, Susan Daum.

Q. When did you work for Dr. Daum?

A. From July of 1982 until about early October of 1982.

Q. Had you been in practice with anyone

else other than Dr. Sall or Daum since you've gone into private practice?

A. No. No one else.

Q. When you went into private practice as you say, was that in '85?

A. I resigned and entered private practice 4-1-85.

Q. And that's -- you've been in private practice on your own?

A. Yes.

Q. Do you have any associates now?

A. No, I don't.

Q. Have you ever had any associates or partners since you went into private practice in '85?

A. None.

Q. I asked you questions about whether or not the Selikoff group was doing any work with PBC or vinyl chloride monomer while you were there. And you said no. That work had already been done.

Have you personally been involved in any cases involving exposure to polyvinyl chloride, vinyl chloride monomer, at any time in your career?

A. I've seen a lot of cases from a factory nearby called Pantasote.

Q. Can you spell that for us?

A. P-A-N-T-A-S-O-T-E, Pantasote, where resins were

made, polyvinyl chloride, extruded, heated, et cetera, et cetera. I've seen a number of persons out of that factory for pulmonary and potential led complaints. I examined them for purposes of disability, worker's compensation?

Q. Do you have a file in which all those workers are in one place coming out of that plant?

A. Yes, I do.

Q. Well, --

A. Actually, I have a file for that particular law group.

Q. Which attorneys are you working for there?

A. The Wilentz people.

Q. These are all comp cases. Is that right?

A. That's correct.

(Whereupon, recess taken.)

Q. You were telling me about the compensation case.

A. That's right.

Q. What are some of the findings that you've been making with regard to these people in terms of their physical condition?

A. The basic findings are respiratory problems,

which are chronic bronchitis, small airways disease, emphysemia, and some have hypertension because there was -- there is also led exposure at that plant.

Q. That was I guess going to be my next question, other than exposure to the polyvinyl chloride, what other types of things have they been exposed to?

A. They had led. Specific ones are led. There were other resins, different formulations, which I couldn't help you with.

Q. Any asbestos over there?

A. Yes. There was some asbestos there. In the plant, it's, you know, one of those situations where there is a lot of asbestos insulation and people would come in and do repairs and whatever, while people were working. So there was bystander exposure and some of the maintenance people actually -- I picked up a couple of maintenance people who actually worked with asbestos removal and replacement and they had -- I diagnosed them as having asbestosis.

Q. Have you found any cancer over there?

A. I think there may have been one or two cancers, lung. I'm not sure. I'd have to look. There were quite a number of people that I examined.

Q. Any cancer of the larynx?

A. None to my knowledge.

Q. Before you considered the case of John Peterson had you ever diagnosed cancers of the larynx as a result of exposure to polyvinyl chloride or vinyl chloride monomer before?

A. No. I had never.

Q. In your practice, how would you describe your practice; occupational medicine, internal medicine? Is there a specialty you would prefer to categorize your practice as?

A. It's a diversified practice. I see people for routine internal medical problems. I do a lot of -- a lot of legal work, mainly plaintiff, some defendant work, for liability, actually. Pulmonary consultative work. I have a hospital practice. I'm on staff at several properties but I actually really work out of only one, Valley Hospital in Ridgewood. I do a lot of work for corporations. I do work for Fortunoffs, asbestos screening program.

Q. Consultant work?

A. Fee for service, usually per. In the case of Fortunoff, they had asbestos problems. We did base line. I see them once a year. And I basically set up a program to conform to the CFR for -- current federal regulations for asbestos screening program. I do a lot

of work -- have been doing it for number of years for Camdress McGee (ph) the big toxic waste people out of Boston. I do all their New York and New Jersey examinations. These people are exposed to everything.

A. They're young people, engineers.

Q. What would you -- I understand that you're board certified in pulmonary and internal medicine. Would you consider yourself a specialist in any particular field?

A. Of pulmonary medicine?

Q. Yes.

A. Yes. I've lectured twice in the local area on occupational lung diseases, with a flare towards occupational asthma because I tend to see a lot of that.

Q. That's the type of situation which you have described in those Wilentz cases a lot of chronic bronchitis?

A. Yeah. Ahum.

Q. Have you in your practice, whether it be treating or consulting or consulting for the purpose of litigation, been called upon to examine in the past persons who presented with cancer of the larynx, before John Peterson?

A. Yes. I've seen laryngeal cancer, sure.

Q. In those situations have you been asked to render any sort of opinion as to what might have caused the laryngeal cancer?

A. Some, yes. And those were asbestos related. Last one that I remember is a man who was coughing up blood and I performed a bronchoscopy.

Q. What is that?

A. A flexible -- it's a fiber optic scope which I passed through the nose into the trachea and into the lungs and while I suspected it, as soon as I was in the area of the larynx I saw a large bleeding tumor. So it was clear that this was coming from the larynx and not from the lung, and then I bowed out of the case and ear, nose and throat people came in and did what they had to do. But that was a laryngeal cancer.

In that case I just provided diagnostic expertise and nothing else.

Q. Do you remember if that was an exposure type case?

A. No. That was a straight forward call from a colleague. I have so and so in the hospital coughing up blood. As a pulmonologist, please evaluate.

Q. Some of your asbestos cases, do you mind if I use that term, asbestos cases?

A. That's fine with me.

Q. Some of your asbestos cases have been laryngeal cancer cases, is that what you told me?

A. There have been a couple. That's correct.

Q. Have you come to conclusion in those cases that the laryngeal cancer was as a result of exposure to asbestos?

A. That's correct.

Q. Do you know what those cases -- do you remember the names of those cases or at least the attorneys with whom you worked on those cases?

A. I really don't.

Q. Did you write reports on those cases?

A. Yes.

Q. Did you testify in those cases?

A. To date, I have not.

Q. Are they active cases?

A. I would assume so. A lot of them -- those are probably compensation cases and we don't know whether they're settled or not.

Q. You don't track them that way? You keep your reports and then someone might tell you the case is settled or someone might give you an occasional call and say this case is ongoing or you'll check in every now and then? Is that the way it works?

A. No. Because the firms that I work for pay me

in full for the report. So as far as I'm concerned it's over, it's finished unless I hear from them.

I don't know what your experience is in compensation but 99 out of 100 are settled one way or the other and so I've never been called in to testify on any of them. And I would figure with the normal lead time the '87 cases are -- anything before '87 or before has probably been settled, maybe some '88 stuff too.

Q. When you came to your conclusions on those other laryngeal cancer cases that the disability condition was as a result of exposure to asbestos, did you rely upon any learned treatises, text, prior studies linking cancer of the larynx to asbestos exposure?

A. Yes. There is a reasonable body of literature out there, which links the two.

Q. Is it as common as other types of cancer as a result of asbestos exposure?

A. No.

Q. Mostly you're talking about a mesothelioma situation, a lung situation, would that be the most common asbestos-induced cancer?

A. Well, lung cancer first as you know. I'm not really sure about the number of colon cancers, it's a

common cancer. How much of it is actually attributible to asbestos, I can't really say. I'd say it would be after primary lung cancer and mesothelioma or maybe equal to mesothelioma.

Q. Cancers of the larynx?

A. Yes.

Q. That is the question you're answering, right?

A. Cancer of the larynx is not that common a disease as is mesothelioma. Not that common a disease whereas primary lung cancer is a very common disease.

Q. And are there other cancers which would in frequency -- I hate to use these kinds of terms in cancer but -- frequency rank behind cancers of the larynx as a result of asbestos exposure, rarer types of cancer as a result of asbestos exposure, for lack of a better way to express it?

A. There have been reports about kidney, liver, and I think even pancreas, some -- you know.

Q. When you say there is a reasonable body of literature supporting relationship between asbestos and larynx cancer can you cite for me now some -- any of those articles?

A. Well, a lot of the work I remember of course comes from Selikoff work because that's what I

remember. A lot of work has been done on asbestos. And there are numerous contributors. As I said Selikoff stands out because of my association with him.

Q. Did you refer to any of those articles concerning the link between asbestos and cancer of the larynx incoming to your opinions in this case?

A. Well, I refer to a body of literature and what, in my opinion, which is based on what I've seen, what I've learned in training and what I've read.

Q. But again, in this case did you have any specific articles in mind when you came to your opinions in this case or did you do any medical literature research incoming to your opinions in this case?

A. Peterson, regarding?

Q. Yes.

A. Regarding asbestos?

Q. Yes.

A. No. That would have been knowledge that I have.

Q. In those other cancer of the larynx cases that you've been involved in and have categorized those also as asbestos cases, was there exposure to anything else other than asbestos?

A. Nothing specific that I can think of. But a lot of industrial exposures tend to be compounded, compound ones, a lot of different agents or group of agents, let's say.

Q. You can't identify all the agents or irritants but the industrial setting creates that, is that what you're telling me?

A. That's correct.

Q. But asbestos was something that was specifically identified in those other larynx cancer cases?

A. That's correct.

Q. You said that you do spend -- and I don't want to miscategorizes -- but you said that I think a substantial amount of your time spent with litigation now, I don't know if those were your terms. If not don't answer the question. Let me ask you a different way.

How much time do you spend in your practice with regard to litigation?

A. With respect to work which had some sort of legal application to it or other --

Q. Either comp or liability, is that what you're talking about?

A. That's correct. I can only break it down into

time or actually, what percentage of my total income.

Q. I'm not going to ask you for your total income. Can you break it down into a percentage?

A. That's what I was thinking about. Probably 20 to 25 percent, probably more towards the 25 percent.

Q. Of the litigation type cases either comp or liability, can you categorize how much of your time you spend on behalf of plaintiffs/petitioners as opposed to defendants/respondants?

A. Probably 98 percent of my time.

Q. For the plaintiff's and petitioners?

A. Let's say 95 percent.

MR. TUZZIO: Can we have this marked, notice to take deposition and produce documents and we'll mark it as D-1.

(Notice to take deposition and document request is received and marked D-1 for identification.)

Q. We've just had this marked as D-1, notice to take deposition and produce documents. I saw another copy on your desk when I walked in here before. Is that it? Why don't you work off that copy? When did you first see that for the first time?

A. It's dated October 16th by the Levinson firm sent to me. I saw it last weekend.

Q. Well, let me go through the specific requests. Deposition notice includes several requests for documents to be produced here. And number one and records of all communications between him, meaning Dr. Velez and attorneys for the plaintiffs including correspondence, memoranda, notes regarding telephone conversations and other oral conversations and the like. Did you produce documents here today which would be in response to that request?

A. That's correct. I have.

Q. Can I see what you have?

MR. TUZZIO: Did you take a look at them already?

MS. HOROWITZ: Yes.

(Whereupon, discussion is held off the record.)

Q. One of the things you produced is this letter of August 8, 1989 from Mr. Levinson to you with attachments as set forth in the letter occupational medical history from 1967, et cetera, occupational medical history from June 12, 1975 and 1978, personal history and medical history and X-ray report dated April 8, 1982 I have from Mount Sinai. And then again, letter speaks for itself.

Was this the first written contact you had

with the Levinson office with regard to this case? You can take a look at it. It looks to be the type of thing they might have sent you first, to get you rolling on this case. I don't know if that's --

A. That would be correct.

MR. TUZZIO: Can I have this marked, please, as D-2?

(Letter of 8-8-89 is received and marked D-2 for identification.)

MR. TUZZIO: We'll mark the letter and attachments as opposed to each individual one.

MS. HOROWITZ: All right.

MR. TUZZIO: D-2 is the August 8, 1989 letter from Alfred A. Levinson to Dr. Velez, with attachments as I just described.

Q. The personnel personal history attached to this letter, do you know who took this personal history?

A. No. I don't.

Q. You did not, obviously?

A. That's correct.

Q. The item four in Mr. Levinson's August 8 letter to you makes reference to an X-ray report dated April 8, 1985, in connection with this

Mount Sinai Hospital admission showing a chest problem and then say (rule out asbestosis). What did you understand that to mean? Take a look at it.

A. Is the question really what does that mean to me?

Q. What does that mean to you? We don't know what Mr. Levinson meant because he's not here. I guess a better way and there might be a third or fourth answer to this but I want to know if you read it as a request to you to rule out asbestosis in this case or that it was -- whether you read it is a reference back to what Mount Sinai did ruling out asbestosis?

A. I just look at it be aware there is a report in there where the issue of asbestos was entertained.

Q. And ruled out? And ruled out?

A. No. Ruled out in medical terms is not the past tense. It's, there are abnormalities, so then there is a differential diagnosis. So rule out means you still have to diagnose it.

Q. Did you understand that and again we don't know what Mr. Levinson meant. But when you under took to do your examination and consider this case, did you understand you were being asked to rule out asbestosis in this case?

A. I see people for pulmonary problems, obviously.

We do X-rays and pulmonary function tests. Now, he had a grossly positive X-ray, so whether that was there or not, I'm still making independent judgements, opinions, diagnosis, based on the information that I put together here in the office.

Q. Which was the grossly positive X-ray that he had and what was it grossly positive for?

A. It was grossly positive for pulmonary and pleural asbestosis. That's in my report.

Q. I understand. Was that X-ray you took here or was that the Mount Sinai X-ray you were talking about?

A. My X-ray. I always quote from my X-ray.

Q. Can I see that? Mr. Levinson goes on on the next paragraph to say that the personal history shows no connection with asbestos even in his military service and his only exposure was polyvinyl chloride and the monomer vinyl chloride.

When you looked at the personal history that was sent to you by the Levinson firm, did you confirm that at least in that personal history there was no mention of asbestos? If you want to look at it now you can. I haven't seen it yet.

A. There was no mention of asbestos. I remember that.

Q. Your report does talk about asbestos exposure?

A. That's correct.

Q. Did you take your own personal history from Mr. Petersen?

A. That's correct.

Q. And in that personal history I assume that at least some exposure to asbestos was revealed?

A. That's correct.

Q. Do you have copies of your notes? Would that be part of this file here from the history that you took of Mr. Petersen?

A. What I probably did in this case, normally we take notes. I use the supplied history as a guide and then I inquired further. So anything that is here in the occupational history set forth in the report is a combination of what was provided and what we were able to take from Mr. Petersen.

Q. Do you use a checklist type form that is similar to what Susan Daum uses for -- to inquire about potential exposures?

A. For the compensation cases, for one law firm we do. For the cases which I do for the Levinson firm and most of the -- actually all the occupational histories are initially taken by the nurse who works for me and

we follow a chronological order. When they graduated high school, and then all the way through and try our best not to have any gaps.

Q. What was the evidence that you obtained in this from Mr. Petersen that there was at least some asbestos exposure in his background? If you want to refer to your report, you may.

A. On page two of the report, in the continuation of the occupational history, about half way down I state --

Q. Brake lining situations?

A. Of importance is that when he first arrived at ATC and for the first five years or so and it goes on and on, that there was asbestos. There was exposure to asbestos containing brake pads.

Q. Okay.

A. And thereafter he did some boiler maintenance which required the use of the application of asbestos materials.

Q. When you met with Mr. Petersen and when your nurse gave you the history that she took and did you have any conversations with him about his potential or his past asbestos exposure, you personally?

A. Yeah. It's all there.

Q. No. I guess maybe you don't understand the question. You said your nurse took a history from him?

A. No. In this case since I already had the initial history and I had the X-ray in front of me, I went in and took the history of the rest.

Q. You had the history from the Levinson office. I'm just trying to get sequence of events. You took an X-ray of him. Then seeing the X-ray something led you to have a further conversation with Mr. Petersen, is that fair to say, something you saw in the X-ray?

A. Yes. X-ray was characteristic of asbestos exposure.

Q. So at that time you thought prudent to follow up on the history?

A. Well, the question there is to find out where he got it.

Q. Do you remember how that conversation transpired? Took place? What he said? How you were able to get out of him what obviously the Levinson firm didn't get out of him?

A. You know, part of let's say knowing this business if you want to call it that you have to know where exposures come from. And that's what makes the

difference between doctor trained in occupational medicine is awareness of exposures after seeing so many asbestos cases, you pretty much know where the exposures are and so just go through a checklist and say did you work with, did you work with, did you work with and so forth and so forth and try to jog the memory of the person.

Q. It's fair to say his X-ray was consistent or at least -- was indicated prior asbestos exposure based upon your experience in occupational medicine?

A. The work is characteristic.

(Whereupon, discussion is held off the record.)

Q. Based on your experience would it be fair to say that if you had no other history of exposure other than the asbestos exposure which you are able to draw out of this picture the Frake lining exposure and the I think there were some sort of insulation type exposure, that his X-rays would have been consistent with those exposures absent anything else? You can strike the question then.

The history that he gave you of asbestos exposure, was consistent with the X-ray findings that you made?

A. That's correct.

Q. And if there had been no other history of any other type of exposure, you would have been satisfied based on those X-rays and based on the history that he gave you of asbestos exposure that you had at least found some causal connection?

A. That's correct.

Q. If you can't answer this, let me know. Did he appear suprised when you -- I assume you informed him of your finding you thought he had asbestos related disease? Can you explain to me what his reaction was?

A. I really don't remember.

Q. Did you discuss that issue with the Levinson office before you committed it to writing?

A. At the time that I see the patient the report is dictated. And then I see it again when it's -- when the initial typing is done for proofing. I did contact the Levinson firm after seeing Mr. Petersen and stated to them that there was an exposure to asbestos and that there were objective findings which would support that diagnosis.

Q. Who did you speak to at the Levinson office about that?

A. Mr. Levinson.

Q. Do you remember what he told you when you told him that?

A. He was suprised.

Q. The -- in the cover letter it talks about occupational medical history. Are these the -- where would that be? I can't find that done in narrative form in the way the personal history is done. And again, we're referring to D-2.

A. It starts with F here.

Q. Did you rely upon the personal history and occupational medical history that was forwarded to you by the Levinson office in coming to your opinions in this case?

A. Yes and no. Everyone who comes in here gets a comprehensive history and physical examination, which is independent of anything that maybe supplied. Some of the things that I found probably all the things are fairly well corroborated with that history that's documented there by the Levinson firm.

But again, I would like to state that the -- it's my policy to perform an independent history. As a matter of fact we even give them a form which we have here and they fill out.

Q. That was the type of form that I had asked you about before, similar to what Dr. Daum uses?

A. Not for exposures. This is a standard personal history, family history, symptoms that they maybe having, social -- how much they smoked, allergies, immunizations, et cetera.

Q. I'll ask you about that in a second. We're still really talking about the first request to produce.

What do you remember other than the asbestos situation, what do you remember, if anything, finding out from the patient that was divergent or contrary to the personal history and medical history and occupational medical history given to you by the Levinson firm?

A. The only difference I think was the fact that I was able to document an asbestos exposure, whereas they were not able to.

Q. What else did you produce here today in response to our request number one? I think you gave me that file and I gave it back to you to refer to. What is that file?

A. This is my office medical record. It includes the history and all -- basically everything that pertains to Mr. Petersen that was generated in this office or came through this office.

MR. TUZZIO: Okay. Can I mark

the outside of the folder D-3 and then the individual items D-3a, b.

THE WITNESS: That's fine with me.

MR. TUZZIO: The folder itself and it was just described by the Doctor, we'll mark as D-3 and then I'll open up the folder and look at the things inside it and if necessary, we'll mark the individuals items D-3a, b or c.

(Vanilla folder is received and marked D-3 for identification.)

Q. Just so I know what's part of what, was the August 8, 1989 letter from Mr. Levinson and the attachments which was marked as D-2, was that part of your folder also?

A. That's correct.

Q. Okay. I'm looking at the check lists format we've been talking about, which is the family and personal health history. Do you remember who in your office took that? Would the handwriting help you?

A. No. They fill it out themselves.

Q. This was sent to him in advance?

A. Is it folded three ways?

Q. Yes. It looks like it was in an

envelope?

A. It's sent to him in advance. He comes back with it and it's edited by me.

Q. Did you rely on the information that was in here incoming to your conclusions in this case?

A. That's correct.

MR. TUZZIO: Would you mark this as D-3a?

(Medical history is received and marked D-3a for identification.)

Q. Obviously every -- and this is very comprehensive and every item in here is not of significance to your opinion in this case. But can you tell me which items were of significance, even to a minimal degree, incoming to your conclusions or opinions in this case?

A. The smoking history.

Q. What was the smoking history?

A. I have here that he started smoking at about age 16 or 17 he smoked less than one pack per day. He did inhale. And he discontinued the use of all tobacco products at age 38.

Q. What is or what was significant about his smoking history to you?

A. One would characterize it as a mild, mild or

moderate or significant, you know, severe smoking history and characterize it as mild.

Q. And what does that characterization of mild mean to you or how does it impact on your opinion in this case?

A. Well, there is a definite relationship between smoking and laryngeal cancer.

Q. Are you aware of any statistics or ratios, rates, percentages, with regard to that relationship?

A. No. Not really.

Q. Have you ever diagnosed anyone as having -- diagnosed anyone with laryngeal cancer as a as a result of cigarette smoking without any known exposure to any toxins, irritants, agents?

A. That last patient that I broncoscoped -- because I take occupational history on my hospital patients also. And I forgot what exactly he did. But the only risk factor in his case was smoking.

Q. If Mr. Petersen had not had a history of any occupational exposure, but presented with that history of smoking and the same condition, laryngeal cancer, would you have been able to find to a reasonable degree of medical probability there was a connection between the laryngeal cancer and the

smoking?

A. That would have been -- the answer is no. That would be a tough one because the relative risk of lung cancers goes down very rapidly after the cessation of smoking and it's my understanding that the same occurs with laryngeal cancer. That Mr. Petersen had a 21 year hiatus, where he did not smoke. The -- some people say two years. This is data for lung cancer and some take it out to five years. But most people agree that once you've stopped smoking for five years the relative risk of developing a primary lung carcinoma is about that of the general population, or those people who do not smoke or who have never smoked, let me put it that way.

Q. Absent the history of exposure as presented by Mr. Petersen, would you have been able to even characterize the smoking as a possible cause of his laryngeal cancer?

A. Just looking at smoking, previous smoking?

Q. Yes.

A. In all fairness one would have to say it's possible, again, within the framework that I presented earlier.

Q. Are you able to say to a reasonable degree of medical probability that the smoking in and of itself was not the cause of his laryngeal cancer?

A. Based on the information given, it would be my, in this case, this particular case, Mr. Petersen, it would be my medical opinion that the smoking did not play a material -- did not play a material -- was not materially associated with his subsequent development of the laryngeal cancer.

Q. Do you have an opinion as to whether it played any role in this case, in his development of laryngeal cancer?

A. Based on the information that I've set forth here, and knowing that there is a -- that the risk goes to that of the general population who doesn't smoke, then one would have to say that if he developed laryngeal cancer, that he's basically at the same risk as the general population. One could theoretically say he used to smoke and et cetera, et cetera. But I think the reference point to the general population, where then say it's just laryngeal cancer, from other sources that we cannot identify.

Q. When you identify I think you used the time frame of five years after one stopped smoking, do you know the basis for that five years? Let me explain the question.

Are you saying if a person is going to get cancer after he stops smoking he'll get it in that five

years or are you saying that in that five year period there is some sort of healing process that makes one less likely to get cancer?

A. Both.

Q. I had a feeling that was going to be your answer. Can you explain that a little?

A. Well, the chronic irritation or the chronic presentation of a carcinogen to susceptible tissue occurs while the substance is present.

If you withdraw the substance, okay, these tissues that are affected are epithelial tissues. In other words, tissues that -- at the surface constantly regenerate, as matter of fact. Therefore, anything which may have been going on would revert back to normal tissue.

There is, of course, a point of no return. And we all know of this. I stopped smoking and I still got my cancer a year later. That's because that cancer had really started maybe two years before that or even three years before that. Dependent on the cancer, and the type of tissue and what we call doubling time, one cell becomes two abnormal cells, and two abnormal becomes four and eight and so forth and so forth.

It takes about, in the lung, more specifically, I think it takes somewhere between nine and ten

doublings before you even see a mass.

So if you figure the average doubling time is less say three to four months, you're looking at three to four years of a process already going on, even if you remove the causative agent.

Again, in all of our -- in all of our clinical experience things which tend to go on for a long time, patient comes in with sort of vague symptoms. You can't find anything and continue to go on without declaring themselves are usually have no -- will not declare themselves. If that's going to happen it's going to happen, basically.

Q. Is it fair to say that the lapse of time from when he stops smoking until the onset of his cancer is a factor in your conclusion that the smoking had little or nothing to do with his larynx cancer in this case?

A. That's correct.

Q. Because when you talk about that point of no return, once someone reaches that point of no returns, he or she will get that cancer within five years, is that what the literature says?

A. No. What I'm saying is that at the time that they stop smoking the, whatever, one cell was already underway. It might have been two cells. But there was

already malignancy or a premalignant condition. We know that there are tumors which have a potential for malignant transformation.

So while they may be benign at one point, their continued existence is toward malignancy. So whatever that biological process is, is independent of the time that you start smoking or not. It's either there or not there. If you stop smoking, and it's not there, then it's just going to get better. Nothing will happen. But if the process is already underway and you stop smoking it doesn't matter. Because a year later, two years later, three years later, you're going to see this. It will basically rear its ugly head.

(Whereupon, discussion is held off the record.)

Q. What else in the personal history, you just talked about smoking, was significant to you in coming to your opinion in this case? The personal history you took on that chart that you took, which we marked as D-3a?

A. Alcohol intake is minimal. He stated that he drinks, either two cans or two bottles of beer per week. And that he drinks hard liquor only socially. So one would say it's a minimal alcohol intake.

Q. What role or significance does

alcohol have in cases such as Mr. Petersen or other occupational exposure/cancer type cases?

A. That relationship is sort of interdefined very heavily with smoking. The question is whether alcohol by itself is carcinogenic or is it that people when they drink they smoke more.

A basic state of the art synopsis of it; I don't think you find people who drink heavily and don't smoke and who get laryngeal cancer. In my recollection of the literature is that the two are very closely intertwined. And therefore, the questionable etiology of alcohol by itself is not that clear.

Q. Is it something that -- is it a factor that a lot of these people who presented with occupational type diseases just more so than not happen to be people who do like to have a drink more than the average person?

A. I don't know. That would be sort of a bias. But that's probably more subject to our own personal biases. Do I have information that says blue color workers drink more than white color workers? I have no information. I think that it would be just -- my anecdotal response would be just as it is yours or anyone else's in this room.

Q. But alcohol in and of itself hasn't

been found to cause the types of cancers that these people with occupational exposure are presenting or has it? I don't know.

A. Well, --

Q. You mention alcohol a significant factor. And I want to know why it's even considered in a case like this?

A. Well, if you look at, pick up a standard text book which tends to be conservative by nature, it's a text book, you'll see alcohol and drinking as the basic etiologies, maybe by now asbestos has made it in, basic etiologies of laryngeal cancer. And then they'll go on to say the same thing I've already told you, that they're closely intertwined, bla,bla,bla and it's hard to pick it apart.

Q. Closely intertwined with smoking?

A. Right.

Q. What else in that chart was significant to you in coming to your conclusions in this case?

A. That's basically it.

Q. Also part of your file which is marked as D-3 is a copy of your report. I'll probably mark another copy of that so I won't mark that now. This is the -- I have a yellow form which is your

physical examination. Then there are right after that come the results of the pulmonary function testing. Is that what that is?

A. That's correct.

Q. What came first your physical examination or the pulmonary function testing?

A. Usually I have everything in front of me, X-ray and pulmonary function test.

Q. Before you see him?

A. That's correct.

Q. Okay. So that just to keep things in proper sequence, you and I should probably talk about the pulmonary functioning testing before we get to the examination. Who did the pulmonary function testing?

A. Does that -- probably says KH somewhere. No. This is more sophisticated pulmonary function testing done by a colleague.

Q. Why don't you -- can you separate all the documents which pertain to, specifically to the pulmonary function testing and I'll try and keep those all in one place and as one exhibit.

A. Spirometry, pulmonary function testing was done in this office and that was done by the nurse, who is certified to administer a pulmonary function testing. She's got her certificate hanging up in there. The

spirometry is done in this office. They both have my name on it.

MR. TUZZIO: Why don't you mark these as D-3b-i and ii.

(Pulmonary testing reports are received and marked D-3bi and D-3bii for identification.)

Q. Can you explain a little bit about what spirometry testing is?

A. Simple spirometry is what I perform here. It measures the force vital capacity which is the major portion of the total lung capacity. It does not measure the residual volume, that amount of air which remains in the lung no matter how hard you push, squeeze, et cetera, et cetera. Combination of residual volume and forced vital capacity gives you total lung capacity.

Decreases in the force vital capacity is suggestive of restrictive lung disease. The equipment also then looks at that total volume force vital capacity and measures how much of it is exhaled -- how much of it has been exhaled at one half second, one second and three seconds.

It takes that information and gives you a flow volume curve. In other words, flow plotted against

volume. And there are basically time honored standards as to what would be considered obstructed or as the name applies, restricts to air flow once it's in the lung and to what is not obstructed. And in addition, there is measurement of small airways parameters.

Obstructive component is divided into large airways and small airways. The FEV1/FVC is generally -- well, it is the time honored standard for obstruction in general. And generally refers more to the mechanical condition of the large airways. Those are airways greater than two millimeters in diameter. Airways less than two millimeters in diameter, arbitrary by convention, whatever you want to -- however you want to say it, are considered the small airways.

Therefore, the parameters beginning with the FEF 25-75 percent and going down, for the most part reflect small airways function.

These are the obstruction of the small airways. These are the parameters which we measure with simple spirometry in the office.

Q. What were the results of the spirometry in this case?

A. The spirometry revealed obstruction of the small and large airways. And they find in

characteristic of chronic obstructive pulmonay disease.

Q. The obstruction in both the small and large airways, is that something that's consistent with cancers of the larynx or his larynx condition in and of itself?

A. No. Persons who have significant obstruction of the upper airway have difficulty -- I have to get this right. On inspiration the pressure goes negative. So tissue pressure becomes positive. So these people have difficulty on inspiration. They have a characteristic curve.

Q. We say these people, who do you mean?

A. People who have significant obstruction of the upper airways. But we're talking about the intrathoracic portion. That portion -- actually, the larynx is out of the thorax. On expiration -- right -- on expiration, due to positive pressure coming out, they are going to have -- their curves are going to flatten out. They're going to get to a certain point and then their flow is going to be limited by the physical characteristics of this tumor or whatever it may be that's obstructing the air flow out.

He had no problems producing a normal peek expiratory flow. He has no limitation. None of these findings or -- there is no evidence that there is

larynx, but he doesn't have a tumor also, is playing any part in any of these findings here.

Q. Would you expect, if all pulmonary factors were equal, that someone with his larynx condition would have a different spirometry finding than someone without his larynx condition?

A. No. Because the -- when you have upper airway obstruction, whether it be within the throax or out of the thorax, you're talking about people with significant encroachment on the lumins of the trachea.

I'm talking about really big, maybe ten percent of the area, 20 percent is left. And that's why these people have these problems. Kids who get streptococcal sore throats and epiglottis, so they wind up that way because the epiglottal is so swollen that it just, in essence, chokes them. But people with laryngeal tumors, they're diagnosed before they get to that position. So it can happen. But generally doesn't happen.

Q. Is it fair to say you concluded in this case his spirometry findings were pulmonary as opposed to larynx related?

A. That's correct.

Q. What was this significance of those findings to you as practitioner?

A. It shows obstruction, obstruction of the airways and as I stated before, consistent with obstructive pulmonay disease.

Q. Did these findings in and of themselves at least lead you to look for things such asbestos as a possible cause of these obstruction?

A. Well, asbestos really characteristically is a restrictive disease. The small airway abnormality seen in asbestos tend to be decreased or be super normal. So there is limited -- by themselves, their diagnostic -- diagnostically it's limited. You have to look at the whole picture.

Q. Can you tell me about the rest of the pulmonary testing done for Mr. Petersen?

A. Dr. Barisch is a -- also a chest specialist, like myself.

Q. Can I ask you a little bit about Dr. Barisch before you go into that? How long have you worked with him?

A. I've known him for several years. I started sending patients to him a year and a half, two years ago, for further -- more sophisticated pulmonary function testing. He happens to have that equipment in his office.

Q. What type of physician is he?

A. He's a board certified chest, same as I am.

Q. He just has more equipment?

A. Yeah. He's got another $80,000 worth of toys.

Q. What did Dr. Barisch do to inform Mr. Petersen?

A. Not really much. These are performed by a technician who is certified in the administration of these tests. And then Dr. Barisch basically supervises and then interprets the pulmonary function tests and ensures they're valid testing, testing is going according to protocols that he has set forth and these numbers are valid, basically. He provides me with a report.

Q. If I can ask you this question, given the fact Mr. Petersen was presented with the larynx condition and the letter from Levinson indicated no asbestos exposure, why your concentration on the pulmonary testing?

A. Because I had said I had his X-ray already.

Q. Oh, this was all after you had done your own X-ray or the Mount Sinai X-ray.

A. I saw Mr. Petersen on August 11th and then I referred him to Dr. Barisch, who saw him on August 24.

Q. And by the time he was seen by Dr. Barisch had you already had the conversation with Mr.

Petersen in which he discussed the possibility of asbestos exposure in his past?

A. That's correct.

Q. So that's when you thought it prudent to follow up with Dr. Barisch, more concentration on pulmonary asbestosis?

A. Yes. Then and there. In other words, when he leaves the office, it's all done already. In other words, he has the referral. He's been given instructions to call Dr. Barisch's office for appointment. We have printed forms which I just check off and he takes care of it from there. I wait for the report after that.

Q. Why did you do the spirometry in this case? I assume this was done on August 11?

A. We do it basically as a screen.

Q. And in this case spirometry led you to certain conclusions or suspicions concerning the asbestos history?

A. No. It was the X-ray.

Q. And the X-ray?

A. It was really the X-ray.

Q. Really the X-ray?

A. Right. In other words, as we discussed before, all this is available to me when I go to examine the

patient. I looked at the X-ray and then I just knew I had to find out -- I knew he had asbestos exposure, even though there was none that was put forth.

Q. Do you have the X-rays here?

A. Yes. I do.

Q. Can I take a look at those and show me on the shadowbox exactly what in those X-rays led you to think there might have been asbestos exposure?

A. Sure.

(Whereupon, discussion is held off the record.)

Q. I've asked you, Doctor, to let me take a look at those X-rays of Mr. Petersen and you have a shadowbox in here and you have one X-ray up there. When you get settled if you can just show me the abnormalities that you found.

A. The X-ray up there is Mr. Petersen's. It's a standard PA view X-ray entered from the back, chest is against the plaque or -- against the X-ray film, cassette holder. This is a normal X-ray for your own comparison. Regarding the pleura, these are the diaphrams here.

Q. Can you describe where they are, left side, right side?

A. This is the right side. Diaphragm is the

interface between the chest cavity and abdominal cavity.

Q. Where are they on the picture because we're not going to have the benefit as we --

A. There is a marker that says L. This is the left side and this is the right side. This is the right diaphragm and left diaphragm.

Q. Towards the lower left side?

A. It's lower right side. And what you see here are these white streaks right along the diaphragm. If you look here they're not there.

Q. When you say here you mean on the normal X-ray?

A. Right. Not on the normal X-ray. That's correct.

Q. What you are looking at is calcification or calcium on the diaphragm and that's because there are pleural plaques there. There are one, two, actually three plaques. If you look at the left very faintly there is one there. But this one here is easy to see.

Q. This one you mean the white streak?

A. That's right. So you have bilateral calcified pleural plaques.

Q. Bilateral is for both sides, for lay

people?

A. Both sides, ahum. If you look now along the chest wall and it's much clearer to see if you look at the normal, the chest wall ends inside of the rib and then it's contracted against normal lung tissue. Do you see that? This is normal lung tissue comes to this crisscross of ribs.

You can see it's real clear to see, you can discern the ribs but there is another line in there, another shadow, do you see that?

Q. You are talking about a shadow which makes it difficult to see the other side of the ribs where they are easily crisscrossed in the normal.

A. Right. In other words, this shadow actually extends up to here, is not seen here. And that's pleural thickening along the chest -- along the right chest wall. The one on the left is a little harder -- a little -- you can see a thickened process, a little harder to see, but it's over here, and extends up to about here on the left. And that's, again, continued pleural thickening on the left. That pretty much described the lining of the lung or the pleura.

If you look at the normal X-ray here, you'll notice that the outer third of the lung can be separated into three straight lines and in contrast to

the inner thirds and middle thirds is basically devoid of any plaques.

If you look here there is nothing there. If you look finely you see some fine stipling but in contrast to say here, there is nothing here. If you look at Mr. Petersen's, there is abundance of shadows that continue out pretty much to the end of the chest wall. In here you can see them. In here you can see them. In addition --

Q. What are those shadows indicative of?

A. Scarring of the lung or pulmonary asbestosis. If you also look here, you'll notice there is a pattern that tend to follow the -- they tend to eminate -- this is the right interlobar (ph) artery and they tend to -- like a tree, just go out from that. These here are in essence not contiguous with any structure, normal bronchovascular structure. This is characteristic of scarring of the lungs. Those are the two differences.

Q. Just again, because the transcript will read one way and then you've been able to as you're explaining to us we've had the benefit to see what you're talking about.

Can you just sum up the three or four different abnormalities that you had that you found on the X-rays?

A. The basic abnormalities on Mr. Petersen's X-rays are number one, there is a relative darkness of these lung fields in contrast to the normal X-ray. In addition there is a relative flattening of these diaphrams in contrast to these diaphrams.

You can see have almost a half circle and these tend to be flatter. These findings are consistent with chronic obstructive pulmonay disease.

With respect to asbestos, there are bilateral calcified pleural plaques on the diaphragm and there is bilateral chest wall plaques, non-calcified.

In addition, pulmonary parenchyma has increased interstitial markings, which is consistent with scarring of the lungs or pulmonary asbestosis. If you want to go off the record?

(Whereupon, discussion is held off the record.)

Q. There is a way of grading or rating asbestos-related cases?

A. That's correct.

Q. And can you explain that rating system to me?

A. The pleura is rated by width of the plaque and length of the plaque in relationship to the chest wall. Calcifications are rated in with respect to the actual

total linear distance of the calcification. The parenchyma is graded by the volume of little streaks, if you want to call it that. Beginning with 0-0, which is normal and all the way up to 3-3, which is the most abnormal.

Q. What is Mr. Petersen --

A. I think I gave him 1-1 or 1-0.

Q. Does that 1-1 or 1-0 translate into something that you can subjectively say is minimal asbestosis or substantial or --

A. Well --

Q. -- severe? Is that type of disease capable of being rated in those types of terms?

A. Yes and no. 0-1, by convention, is maybe positive. More negative, from a legal standpoint it's negative. 1-0 is more positive than negative and from a legal standpoint it's positive. 1-1 is definitely established disease. With respect clinical findings it's very very variable. People with 1-1 disease are very incapacitated. Whereas, others with more than that, 2-2 disease, are not as incapacitated. So it's very variable.

Q. Had he, in taking the history from him, had he reported any symptoms which were consistent with asbestos-related disease?

A. If you consider his hoarseness, which is asbestos and laryngeal problems, then that was -- he didn't complain of any shortness of breath or coughing.

Q. More or less pulmonary type things?

A. No. No coughing, no shortness of breath.

Q. Is that suprising to you, normal?

A. No. Like I said it's very variable.

Q. Would you expect that as time goes on his symptoms are going to increase, his pulmonary symptoms based on the findings that you made?

A. Based on everything, asbestos is a progressive disease. And he could very well begin to have shortness of breath one day. I would expect if it was to progress he would have shortness of breath. So he's still open for that.

Q. Did you in coming to your conclusion in this case make any prognosis concerning his asbestos disease?

A. I think the report -- I have some standard addendums which I add to reports. If that's not there --

Q. Where you talk about pneumonia and risk, is that what you're talking about in your report?

A. That's correct.

Q. Can you just, for the record, let us know what your prognosis is for this individual, as a

result of his asbestos exposure?

A. Well, asbestos by itself would be with respect to the lung, he has five times greater risk of contracting lung cancer, exclusive of any smoking. He doesn't smoke. And in its simplist form, people with chronic lung disease have weakened lungs and therefore, a pneumonic or pneumonia be much more severe in them than in a regular person. Couple that with his age, it's two risk factors. With mesothelioma, he's at moderate risk for the development of mesothelioma. The risk starts at about around 20 from on set and goes up with time. So as he gets older his risk with mesothelioma will continue to increase.

With reference to the GI tract the best you can say is that he's just at increased risk or colon cancer, et cetera.

Q. Did we mark Dr. Barisch's report and findings?

MR. TUZZIO: Mark this D-3c.

(Dr. Barisch's records are received and marked D-3c for identification.)

Q. D-3c is Dr. Barisch's report and attachments pages one, two, three, four, and five, which are his test results, essentially.

Did you rely upon his report or the test

results in coming to your conclusions in this case? And if so, what did you specifically rely upon and to what degree?

A. With respect to a diagnosis of asbestosis, specifically pulmonary asbestosis, Dr. Barisch's testing demonstrates restrictive process. That's card risk of pulmonary asbestosis.

In addition, diffusing capacity for oxygen or that amount of oxygen which moves across the pulmonary membranes is also decreased. That's also characteristic. An arterial blood gas which measures the amount of oxygen in the blood was also decreased. And finally, minute ventilation or the amount of breathing that we perform every minute. Normal person takes in and let's out about five liters per minute, five to six liters at rest.

Well, while at rest his minute ventilation is elevated. That's characteristic of restrictive or interstitial lung diseases. So putting all this together, this is further information which states that the man has pulmonary asbestosis. Pleural asbestosis is seen on X-ray.

MR. TUZZIO: We're going to mark as D-3d the physical examination chart, yellow form.

(Physical examination form is received and marked D-3d for identification.)

MR. TUZZIO: And then I'll ask you to refer to that and I'll ask you some questions about your physical examination of Mr. Petersen.

Q. What did your physical examination of him consist of?

A. It starts with a vital signs, blood pressure, heart rate, height, weight.

Q. Before you go any further, were any of those findings significant?

A. No. The blood pressure was slightly elevated. Other than that, nothing else.

Q. Weight was normal limits?

A. 75 inches high. So based -- I guess he also has a big frame. You would expect him to weigh -- he's actually within his weight range.

Q. What else did your examination consist of?

A. General inspection, which I noted that he was hoarse. His voice was deepened.

Q. What did you attribute the hoarseness?

A. His laryngeal cancer, chronic hoarseness. The

other abnormality was I noted clubbing of the terminal digits of the fingers.

Q. What is clubbing of the digits?

A. Some clubbing is just congenital, it gets passed on. In this case I attribute it --

Q. Before I ask you what you attribute it can you explain what clubbing is?

A. It's a widening or where the end part of the finger takes on a clubbed or a club type appearance.

(Whereupon, discussion is held off the record.)

Q. So clubbing condition is indicitive or attributible to what?

A. It suggestive of -- things that cause clubbing or first thing that you ask is was your father this way and has it always been this way. If the answer is yes, it's just congenital clubbing and that's it. People who use jackhammers I think have a tendency to get clubbing of the fingers.

So from the standpoint of cardiopulmonary disease, it's indicative of either heart disease, which comprises the circulation in the lungs or of pulmonary disease, chronic bronchitis, emphysemia and the numerous other -- just about anything within the spectrum of actual primary lung diseases, people with

lung cancer.

Q. So the degree of clubbing that you saw is just another factor you put into the equation with regard to pulmonary and asbestos exposure?

A. That's correct.

Q. What else did your physical examination reveal?

A. That's it.

Q. What specific examination did you do, if any, with regard to his laryngeal condition? In other words did you take a look at it? Did you scope? What did you do for him?

A. Basically took the history and noted his hoarseness.

Q. If I can ask you why didn't you do anything further?

A. I don't have a laryngeal scope here.

Q. That's something you can do, right?

A. Well, --

Q. You said you did it.

A. It's a bronchoscope, really. To get down to the lung you have to pass the larynx. I wouldn't biopsy or touch a laryngeal mass. I leave that to the ear, nose and threat specialists for numerous reasons. But in his case or from my standpoint I just need to

know -- I just need to know diagnosis. Diagnosis has been made already and I'll comment as an expert on that diagnosis, whether it's causally related or not to any of his exposures.

Q. What was his diagnosis concerning the laryngeal situation as you understood it?

A. He had been diagnosed as having squamous cell carcinoma of the larynx in 1984.

Q. I think you said before there was no tumor, to your understanding?

A. With Mr. Petersen?

Q. Yes.

A. No. He told me his last checkup there was no recurrence of disease. He was left though with chronic hoarseness.

Q. What was your understanding of what was done for him by way of treatment of the carcinoma? You can refer to your notes if you want. Take your time.

A. What was the question?

Q. What has been done for him to treat the cancer?

A. I have here a medical history which is listed by the Levinson firm. Which in October of 1978 he presented with hoarseness and lesion of the left vocal

cord. He underwent biopsy about a week later and it revealed hyperkeratosis.

Q. What is that?

A. The skin, horney layer of the skin, part that you see in the bathtub, the part that peals off, that -- so what happens is the normal, if you look in your own mouth, if the normal pink reddish mucous membrane instead of seeing that what you see is what white plaque and what that means is that that area has transformed from normal squamous cell to one which is hyperkeratotic or has keratin in it.

Keratin is on our skin for protection but not necessary within the mucous membranes.

Q. Okay.

A. And then in May of '79 he had a small tumor which was diagnosed as squamous papilloma, with chronic inflammation. Five years later he was diagnosed as having squamous cell carcinoma of the left vocal cord.

Q. Is that just a progression of what he had been previously diagnosed?

A. Yes. That's correct. Squamous papillomas have a malignant -- have tendency to regenerate. Couple weeks later they took out a large tumor.

Q. What time frame are we in now, '84?

A. Right. January, 1984. So it's a large tumor

was removed from the left vocal cord.

Q. Did they leave the vocal cord in tact?

A. They went back a month later and they took out half of his larynx, left side. Then he had some sort of procedure performed, probably to help him talk. And he's been seeing the ear, knows and throat specialist every six months.

Q. Did he report to you any recurrence since the hemilaryngectomy?

A. No. Just the persistent hoarseness.

Q. Did he, when you spoke with him, did he report to you any worsening of the hoarseness, pain, any change in his condition from the time of the hemilaryngectomy?

A. No. His hoarseness was fairly established.

Q. That's what he reported.

A. I'm going on memory.

Q. What other documents did you produce here today in response to request number one? I think you gave me everything that's been marked, obviously. Why don't we go off the record?

(Whereupon, discussion is held off the record.)

Q. Why don't you look at request number

one and let me know if there is anything else responsive to that request?

A. Just the report.

Q. Just the report itself, which we'll cover now.

MR. TUZZIO: D-4.

(Report of Dr. Velez is received and marked D-4 for identification.)

Q. Your report was mark as D-4. I'll ask you more questions. Did you make any notes of telephone conversations that you had with the Levinson office?

A. No. I didn't. I generally don't.

Q. What else did the Levinson office send you to prepare you to write your report in this case, other than what you produced for me? I'm basically talking about request two.

A. They provided me with some NIOSH documents, some industrial hygiene reports.

Q. Do you have those with you?

A. Yes, I do.

Q. Could I take a look at those? These are additional materials given to you by the Levinson firm. Is this just for this case or is this what you have received from the Levinson firm in the past? Is

this all related to Petersen what I'm looking at here?
A. That's correct.
MR. TUZZIO: I'll want copies of all these.
MS. HOROWITZ: Okay.
MR. TUZZIO: Next exhibit D-5. D-5 will be an April 15, 1989 letter from Dr. Samuel Epstein to Mr. Levinson, with attachments. Letter describes the attachments as materials incorporated in the report and it's captioned Petersen versus Union Carbide. Can you mark that, please?
(Above-referenced document is received and marked D-5 for identification.)
MR. TUZZIO: Next document is Dr. Burton Davidson's's report in this case Petersen versus Union Carbide we should mark it anyway. It's D-6.
(Above-referenced document is received and marked D-6 for identification.)
MR. TUZZIO: Next document is an Engineering Control Assessment of the Plastics and Resin Industry, which appears to have been prepared by NIOSH in inviro control.
(Above-referenced document is

received and marked D-7 for identification.)

MR. TUZZIO: That was just marked as D-7. D-8 will be an OSHA report dated October 4, 1974 entitled exposure to vinyl chloride.

(Above-referenced document is received and marked D-8 for identification.)

MR. TUZZIO: The next which is going to be D-9 appears to be labeling for vinyl chloride.

(Above-referenced document is received and marked D-9 for identification.)

MR. TUZZIO: D-10 is an article entitled Case of Occupational Acro Steolysis Presumably Caused By Vinyl Chloride.

(Above-referenced document is received and marked D-10 for identification.)

MR. TUZZIO: D-11 will be an article or abstract entitled Statement to Employees in the Vinyl Chloride Industry.

(Above-referenced document is received and marked D-11 for identification.)

MR. TUZZIO: D-12 is an article entitled Angiosarcoma of the Liver in Vinyl Chloride/Polyvinyl Chloride Workers by

Drs. Spirtas and Kammisski.

(Above-referenced document is received and marked D-12 for identification.)

MR. TUZZIO: The next article is entitled the health hazards of plastics by Drs. Eckert and Hinden.

(Above-referenced document is received and marked D-13 for identification.)

MR. TUZZIO: Next item is PSNews Briefs February, 1976.

(Above-referenced document is received and marked P-14 for identification.)

MR. TUZZIO: Next item is a letter from US Consumer Product Safety Commission dated June 17, 1975 addressed to Levinson firm. That letter has attachments. Attachments are described presumably in the June 17 letter as a briefing package on vinyl chloride.

(Above-referenced document is received and marked D-14 for identification.)

MR. TUZZIO: Next item which is going to be D-15, is an article entitled Vinyl Chloride Induced Liver Disease by Dr. Thomas and others, including Dr. Selikoff and

reprinted from the New England Journal of Medicine January 2, 1975.

(Above-referenced documents are recieved and marked D-15 for identification.)

MR. TUZZIO: D-16 is the NIOSH recommended standard for occupational exposure to vinyl chloride.

(Above-referenced document is received and marked D-16 for identification.)

MR. TUZZIO: D-17 looks like a OSHA regulation 191093Q concerning vinyl chloride.

(Above-referenced document is received and marked D-17 for identification.)

MR. TUZZIO: D-18 looks like more OSHA standards. It's actually standards for exposure to vinyl chloride, corrections. There is a date on it says December 3, 1974, which is handwritten.

(Above-referenced document is received and marked D-18 for identification.)

MR. TUZZIO: D-19 is a letter which appears to be dated June 18, 1975 from the Department of Health, Education and

Welfare to Senator Harrison Williams.

(Above-referenced document is received and marked D-19 for identification.)

MR. TUZZIO: D-20 is a cover letter dated April 21, 1975 which makes reference to attachments, attached copies of OSHA program directive on vinyl chloride signed by R.N. Wheeler, Junior.

(Above-referenced document is received and marked D-20 for identification.)

MR. TUZZIO: D-21 is a statement of Dr. Marcus M. Key, dated August 21, 1974.

(Above-referenced document is received and marked D-21 for identification.)

MR. TUZZIO: D-22 is an article entitled Multiple Primary Malignant Neoplasms in the Air and Upper Food Passages, by Dr. Epstein and others.

(Above-referenced document is received and marked D-22 for identification.)

MR. TUZZIO: D-23 is a cover letter from Mr. Levinson to Dr. Velez dated October 23, 1989.

(Above-referenced document is

received and marked D-23 for identification.)

MR. TUZZIO: D-24 is a three-page document which is entitled John Petersen up in the left-hand corner. It appears to be one of the enclosures for the August 23, 1989 letter from Mr. Levinson to Dr. Velez.

(Above-referenced document is received and marked D-24 for identification.)

MR. TUZZIO: D-25 is Dr. Epstein's preliminary report in this case, Petersen versus Union Carbide.

(Above-referenced document is received and marked D-25 for identification.)

MR. TUZZIO: D-26 is a NIOSH technical information document titled Cross-sectional Epidemiologic Survey of Vinyl Chloride Workers.

(Above-referenced document is received and marked D-26 for identification.)

MR. TUZZIO: D-27 is a cover letter with attachments from a Joseph K. Wagoner to Dr. Epstein. And attachment is a paper entitled Vinyl Chloride-Polyvinyl Chloride, Review of Carcinogenic and Other

Toxicologic Effects.

(Above-referenced document is received and marked D-27 for identification.)

MR. TUZZIO: And D-28 is a 114 page document entitled Worker Exposure to Vinyl Chloride in Vinyl Chloride and Polyvinyl Chloride Production and Fabrication.

(Above-referenced document is received and marked D-28 for identification.)

(Whereupon, recess taken.)

Q. Anything else than what I've just marked that big package of materials forwarded to you by the Levinson office that would be in response to request number two, all materials supplied to you by the Levinson office?

A. That's complete.

Q. Okay. What about request number three, which I'll read into the record,"All communications between you and any other person relating to this litigation or the issues raised therein, including but not limited to correspondence, memoranda, reports, notes regarding telephone conversations and other conversations and the like."

Some of the stuff might overlap from one request to another.

Is there anything that we haven't marked yet which is responsive to this request?

A. I had a brief conversation with Dr. Epstein, who was the author on one or two of those papers.

Q. Did you make notes of that conversation?

A. No. It was just a sort of call talking about risk factors, laryngeal cancer, et cetera.

Q. Did you rely on anything which he told you in that conversation in coming to your conclusion in this case?

A. No. It just -- I just wanted to talk to him. It's all sort -- I may have picked out a piece of this and piece of that. But I was actually -- it was more -- I had certain questions I wanted to ask him.

Q. What types of questions did you ask him?

A. Same sorts of questions you asked me before about relative risk and if there was a good body of information about things of that nature.

Q. Relative risk of what? Concerning what?

A. In an attempt to try to decide whether vinyl chloride was a weak, strong -- a weak or strong carcinogen. In looking at literature, there is -- it's

not clear, let me put it that way.

Q. Okay.

A. There is data that says it is strong.

Q. Okay. What did he tell you that he thought it was weak or strong or did he agree with you it was unclear from the literature?

A. He couldn't put a number on it. That's what he was able to tell me.

Q. What did that mean?

A. In his opinion.

Q. What does that mean?

A. We talk about cigarette smoke ten times the relative risk. That you couldn't put a number on it. And put it into that type of framework.

Q. I'm still not understanding what you mean by putting a number on it.

A. If you were to say to me Doctor, how would you rate cigarette smoking as carcinogen I would say to you that it's a strong carcinogen and you'd ask me what do you base your opinion on, and I'd say relative risk of ten, or ten times that of the general population, makes it a strong --

Q. Now, if I were to ask you that same question with regard to vinyl chloride?

A. Yeah. There are no actual numbers. But there

are some evidence in some of the studies that even after you correct for smoking, which is a strong carcinogen or removed the smoking component, that when collected for smoking there is still or when included for smoking, that the vinyl chloride is still working as carcinogen. It's not overshadowed, let's say, by the smoking.

Q. But you can't put the kind of number on it as you can with cigarette, such as nine times that of the general public?

A. It would have to be strictly my opinion. And strictly just theorizing. You can say that after you account for smoking it still comes through, that it's a very strong carcinogen. In addition, it appears to have both animals and humans multiple organ carcinogenicity. Again, making it a potent carcinogen.

Q. What else can you tell me about the conversation that you had with Dr. Epstein?

A. That's it. It was a brief conversation.

Q. Had you met him before?

A. No. I had heard his name and knew of him.

Q. Did the conversation with Dr. Epstein change any opinion you had with regard to any aspect to this case, and particularly vinyl chloride's role as carcinogen?

A. No. None really. I was, if anything, I was looking for more information.

Q. And did you get more information from him?

A. No. I was trying to get that information that we just discussed. He was not able to help me with that.

Q. Number request four, if you can look at it requests all materials which you have reviewed, consulted, read or considered in anyway in reviewing this litigation and issues raised therein and in the rendering of your opinions.

A. I've seen other things. I have small library at home. And I have access to library, of course in the hospitals. And I'm also in the process of requesting specific information. None of which I have for you now.

Q. You don't remember what else you've read other than what you've -- well, first off, that large packet of documents I marked that you got from the Levinson firm which would be D-6 through D-28 or so, did you review all those materials?

A. Yes, I did.

Q. And did you rely on any of those specifically in coming to your opinion in this case?

A. Yes, I did.

Q. Do you remember what you specifically relied on?

A. There are -- there is quite a bit of information in there, as you can see. There is certain -- couple of reviews which are always helpful because the reviews look at all the literature. And it helps you gain prospective. Those were probably the most helpful reviews.

Q. Is it your recollection that package of materials dealt with primarily vinyl chloride? If you want to take a look you can? It was my impression looking at them, the vinyl chloride material.

A. That's correct. Yes.

Q. And what else did you look at besides this in your personal library or at the hospital library that would have -- that you relied upon in coming to your conclusion?

A. Standard pathology texts.

Q. Can you tell me exactly what they are? If you relied upon them I'd like to know exactly what --

A. Robbins Textbook of Pathology is one.

Q. Do you remember what part of Robbins you looked at?

A. Under laryngeal cancer. The -- I have a couple of monographs at home regarding chemical carcinogenesis from the American Society of the Sciences.

Q. Did you rely on those in coming to your conclusion in this case?

A. Yes, I did.

Q. Could you send copies of those to the Levinson office please?

A. I'll send the front and you can always request them. You are asking me to copy a whole book.

Q. These are from textbooks?

A. No. They're monographs.

Q. Do you remember specifically what you looked at?

A. Just -- I just remember the New York Academy of Sciences. They're well known for publishing these.

Q. Anything else?

A. And like I said, I have a few minutes to look at a couple things in a library. There is Journal of Occupational Medicine, which stands out. Exact ones I can't tell you.

Q. Did you make copies of things you looked at?

A. I'm requesting all of that.

Q. And after you've had copies of those

made could you send copies or at least titles of the articles to the Levinson office?

A. Yes. Copies will probably be fine.

Q. I'd appreciate that. Anything else that you looked at in coming to your conclusion in this case, which would be in response to request number four?

A. No. That pretty much covers it.

Q. Request five, all written reports including drafts and memoranda notes or on documentation relating to oral reports rendered in this matter.

Did you do anything, draft anything other than the August 15, 1989 report in this case?

A. No. Just what you see.

Q. Did you do a rough draft in this case?

A. Yes.

Q. Do you have the rough draft?

A. No. It gets thrown away.

Q. Did you dictate the rough draft to somebody?

A. I have a dictation system, mechanical system. I dictate. It gets onto microcassettes and then the typist takes the microcassette and uses the word

processor and then I get a dot matrix copy.

Q. Do you know if that tape still exists that you dictated?

A. Probably not.

Q. Was this an outside service that did this for you?

A. No. Just someone who -- she does it in her home. And she mails this, the hard copies in.

Q. Does she still have the draft on memory, do you know?

A. No. We have the disk here.

Q. Do you have the disk?

A. But the disk has been corrected.

Q. So you wouldn't have the original of your report?

A. No. I can tell you the original is this report.

Q. Do you remember what changes you made?

A. Typos. Typos. That's all.

Q. There were no changes in the substance of the findings that you made from the time of your first draft up until this final product, August 15, 1989?

A. No. This is what you see is what I basically

put together originally.

Q. Request six is on the next page, "All reports, written and oral correspondence and memoranda prepared by you independent of the Petersen litigation relating to the toxic properties of any chemical including but not limited to polyvinyl chloride and vinyl chloride monomer, alleged to have caused Mr. Petersen's injuries or illnesses in this matter."

A. I have nothing.

Q. You've never written another report pertaining to the toxic properties of any chemical. That's what it's asking you for.

A. Of any chemical?

MS. HOROWITZ: It says specifically.

MR. TUZZIO: Including PBC.

A. I have certain publications on dioxins.

Q. What about reports?

A. No. No, I haven't. No.

Q. What are the publications on dioxins you've written?

A. The first one was in JAMA, Journal of American Medical Association, March of '88 or '89. We have a copy of it here. And subsequent to that there were three more publications on dioxins, which were recently

published in Chemisphere. And we may have -- I think I have those. I'm sure we have them.

Q. Have you ever written another report, I might have asked you this before, concerning PBC or VCM?

A. No.

Q. You've never treated or examined for any purpose a person in which you've been asked to describe any kind of exposure he might have had to PBC or VCM and then subsequently written a report?

A. Yes. Those cases.

Q. From the Wilentz office, right?

A. That's correct.

Q. I'm going to request copies of the reports that you wrote in that case.

A. There is 100 reports.

Q. I know that. I figured that. You can talk it over with Mr. Levinson's office. I'll make that request and follow up with a letter.

A. I know what you want. But I don't know how you're going to do it. I really have no reason, if you want to see them and I know you're entitled to them but I can tell you personally, I don't have the time to copy 100 reports for you.

MR. TUZZIO: Why don't we just

note the request at this point. We'll talk with the Levinson office about it and we'll get back to you. We don't have to discuss it right now. Okay?

Q. In the literature you reviewed did you ever review any piece of literature which talks about the -- any kind of connection between cancer and exposure to polyvinyl chloride?

A. Oh, yes.

Q. And what specific pieces of literature talks about that? And you can review that --

A. We're talking about review articles that are noted here.

Q. Which would be what?

A. They're in this pile that's in front of me. Review articles about the multi-organ carcinogenicity of vinyl chloride.

Q. Could you show me exactly which ones? Just go through and give me --

A. Standard text all talk about the vinyl chloride. I mean, it was a hot topic in the '70s. This is pretty much in the standard textbooks. Those were the original reports about angiosarcomas.

Q. We're talking about what's been

marked as D-15 vinyl chloride induced liver diseases by Dr. Thomas and others.

A. There was a quick and dirty review by Dr. Epstein right here. You -- actually there are two of these but one is missing, the part on PVC, vinyl chloride.

Q. What is the exhibit number on that? That's D-25. And that's actually Dr. Epstein's report in this case.

A. And actually D-5, is the same report missing the vinyl chloride.

Q. You relied on that in coming to your conclusion in this case?

A. In part, yes.

Q. What specifics talk about Dr. Epstein's report? Did you rely --

A. I'd have to read it again and talk about it. This was helpful, NIOSH technical document. They usually are very helpful. I think one of the helpful things is the documentation that even though preliminarized there is still the monomer or the vinyl chloride monomer is still and still, I guess I call it degassed from the polymer. There is just some stuff on animals which is interesting but bottom line is that we always, you know, too many inconsistencies between

animals and humans. So like I say, it's interesting. Then there is short -- well, there is a review about the human factors. That's page four of the D-25. And then cites quite a few references.

Q. Did you go check those references or did you rely upon what Dr. Epstein --

A. Some of those I've already -- Will Lillis is the one I remembered from --

Q. Could you describe that more fully for the record?

A. This had been done, that is one by Miller and Lillis, et al, 1975 and Miller, et al. Dr. Miller was also in the pulmonary department at Sinai. I remember they had done some of this work and there had been a associations made with chronic bronchitis, obstructive lung disease. Some of it I'm trying to get. That takes care of that one NIOSH document.

Q. That's D-26, right?

A. D-26, that's correct.

Q. What did you rely on from the NIOSH study?

A. They went mainly into the lung problems, chronic obstructive pulmonay disease, chronic bronchitis and airway abnormalities they talked about liver. They didn't have much to say about other

things. There was a good review here by Dr. Wagoner.

Q. What is the exhibit number?

A. D-27. Which -- essentially he reviews the toxicity of vinyl chloride and asbestos, multiple organ toxicity, more specifically, I think multiple organ carcinogenicity of vinyl chloride. This was just an industrial hygiene study, D-28.

Q. Did you rely on that at all?

A. No. It's pretty useless to me.

Q. How do you rate or are you aware of any piece of medical literature which has linked the laryngeal cancer with exposure to polyvinyl chloride or vinyl chloride monomer?

A. Well, this body of information here and following up on some of these sources as I stated New York Academy of Sciences has a couple of monographs on chemical carcinogenesis and they talk about -- one of them talks about the multiple organ carcinogenicity of PCV and VC.

Q. My request is a little bit more specific and I know we're running out of time. But I want to know what articles in that pile or any other article that you're aware of that specifically deal with or have set forth any kind of causal connection between cancer of the larynx and exposure to PVC or

VCM?

A. One that's most complete is the Epstein review.

Q. The review is the litigation report in this case?

A. Yes.

Q. Do you know what he relied on to come to the conclusion --

A. He gives you a bibliography there that you can follow up on.

Q. Other than what you read in Dr. Epstein's report, litigation report in this case, are you aware of any medical literature which makes a causal connection between exposure to polyvinyl chloride or vinyl chloride monomer and and cancer of the larynx?

A. Like I said, Academy of Sciences there is mention there where they talk about they actually refer back to the NIOSH document where there was an excess of respiratory system cancers, meaning the whole nose, all the way down to the lung.

Q. And you don't know the date or title of that New York Academy of Science?

A. No. I have it at home. It's an old one. That's the ones I told you I'd get for you.

Q. Is there in your medical experience,

is there a large body of literature concerning connection between larynx cancer and polyvinyl chloride or vinyl chloride monomer exposure?

A. No. In comparison to other literatures it's small.

Q. Again, the articles that Dr. Epstein cited, did you look at them to see if any of them specifically talk about larynx cancer?

A. Those are the ones in the process of having pulled.

Q. Upon what did you base your opinion in this case that Mr. Petersen's larynx cancer was related to polyvinyl chloride or vinyl chloride monomer exposure?

A. Whole overall picture?

Q. Well, let me just go to your report. It's been marked as D-4. In addition, your assessment on page three of your report in addition his laryngeal cancer is causally related to long term exposure to vinyl chloride. How did you come to that conclusion?

A. Again, based on, well, number one, knowing he has the problem. Number two, exclusion of other known causes.

Q. What other known causes did you exclude?

A. The big ones; cigarette smoking and drinking.
Q. What about asbestos?
A. That would be -- that's included in the report.
Q. Well, did you conclude anywhere in your report that the laryngeal cancer is related to his asbestos exposure?
A. I think that with the information supplied, that it's quite obvious.
Q. Do you have an opinion to reasonable degree of medical probability as to whether or not his laryngeal cancer is causally related to the asbestos cancer?
A. Asbestos is a known carcinogen for the larynx. Therefore, I would -- it would be my opinion that there is a causal relationship.
Q. What about to a reasonable degree of medical probability, do you have an opinion that his laryngeal cancer is causally related to his exposure to vinyl chloride?
A. It would be the same. It would be my medical opinion based on what I have in front of me, that --
Q. What do you have in front of you?
A. I mean talking generically what I've looked at and that is causally related.
Q. What is the basis for that?

A. Information supplied here.

Q. What specific information? Again, I know we're sort of running out of time, we'll come back and finish this another day but I want the know exactly what piece of literature you're relying onto say there is a connection between larynx cancer and vinyl chloride exposure?

A. As I stated before, there is review article by Wagoner, which is actually in greater depth than the Epstein review. Where the multi-organ carcinogenicity of vinyl chloride is covered.

Q. Did you read the Wagoner report before you drafted your opinion in this case?

A. Yes, I did. Yes.

Q. Can you show me where in his report he talks about larynx cancer? I've never seen it.

A. He makes mention on page one, excesses of the buccal cavity which is basically the mouth and upper airways.

Q. What does he say specifically?

A. He calls it the buccal cavity.

Q. Can you spell that?

A. B-U-C-C-A-L.

Q. And what does he say about the buccal cavity that in anyway supports your opinion?

A. One or more studies showed excesses of buccal cavity. And he states on page two increase frequency of breasts cancer, lymphatic cancer and respiratory tract cancer.

Q. Does he mention larynx specifically there?

A. Again, page three of the second part of the same one, again, buccal cavity and pharynx and then respiratory system.

Q. What did he say about them?

A. Excess. And he's quoting Gaffey.

Q. What do you mean excess?

A. Excess, retrospective study where cancer was found in excess in a group of what would be expected.

Q. Okay.

A. The mention is to the respiratory system. He doesn't say in here specifically, he doesn't say specifically larynx.

Q. Is it your experience in publishing those types of works and in reviewing those types of works if there was a significant causal connection between something like larynx cancer and exposure that it would have been mentioned more specifically? I know we can't ask you to read Dr. Wagoner's mind but on the other hand --

A. The answer to that question is that's why if you are going to do it thoroughly you go to the sources. You go to what it is they reviewed in order to make your own final opinion, let me put it that way.

Q. So in other words, Dr. Wagoner's article was a review?

A. I would consider it a review.

Q. And to be sure whether or not he intended or meant to include larynx cancer in his review you'd have to look at those sources yourself?

A. That's correct. Yes.

Q. Did you in fact look at any of the sources he cited there?

A. That's what I'm in the process of doing now.

Q. Okay.

A. When I have those available I'll -- since we will get together again.

MR. TUZZIO: It looks that way.

A. Hopefully I'll have those for you.

(Whereupon, discussion is held off the record.)

Q. And again, the same with regard to Dr. Epstein you'd have to look at his sources?

A. That's correct.

Q. Okay. But you've, nonetheless, made the statement that the larynx cancer is as a result of vinyl chloride exposure.

A. Yes.

Q. Have you read anything yourself that leads you to that?

A. Yes. Based on what I reviewed, which is basically materials submitted and a few things I've been able to look at myself, independent of what's been provided, it's my opinion at this time that there is enough of a body of literature which would support that contention that vinyl chloride does produce laryngeal cancer.

Q. But you can't tell me as you sit here exactly what body of literature you're talking about, other than what you've told me about Wagoner's more general type review?

A. The, as we discussed before, the body of literature is not that large. And it's all cited there for you.

Q. Is the body of literature larger with regard to a causal connection between asbestos exposure and laryngeal cancer?

A. Probably.

Q. Do you have an opinion in this case

as to what degree the asbestos played in the onset of the laryngeal cancer as opposed to exposure to polyvinyl chloride?

A. It's a very difficult question to answer. Simply because asbestos is a known potent carcinogen. Vinyl chloride is also a known potent carcinogen. How you can -- the only way you can pose one against the other is in the absence of the other, really. And that's not the case in Mr. Petersen's situation.

Q. In the absence of exposure to PBC or VCM, would you be comfortable in saying that's to a reasonable degree of medical probability his condition was a result of asbestos exposure?

A. If that was the only, --

Q. That's what I mean.

A. If that was the only discernable risk factor or causative agent then I would go on record as saying that. Yes.

Q. That asbestos did it?

A. That's correct.

Q. Can I ask you why you didn't say in your report that asbestos caused his laryngeal cancer specifically in your assessment?

A. It's no particular reason. I mean, I would expect anyone who read that report to know asbestos was

an agent involved in this.

Q. Did the Levinson office ask you to come to a specific conclusion concerning polyvinyl chloride or vinyl chloride monomer and laryngeal cancer as opposed to ask you to come to conclusion regarding asbestos exposure and laryngeal cancer?

A. They just -- their request was for an opinion on the case, based on the facts before me. And the report basically states that. And asbestos exposure and the -- it's inescapeable. You'd have to agree.

MR. TUZZIO: This is probably a good time to break.

For the record, I've got an hour, to hour and a half more of questioning, couple different areas I have to explore. The Doctor has patients that are coming so I reserve my right to continue and of course counsel has no objection.

MS. HOROWITZ: No.

MR. TUZZIO: And neither does the Doctor.

(Whereupon, proceedings were adjourned at 3:30 p.m.)

C E R T I F I C A T I O N

I, MAUREEN RATTO, a Notary Public and Certified Shorthand Reporter of the State of New Jersey, do hereby certify that prior to the commencement of the examination HENRY VELEZ was sworn by me to testify the truth, the whole truth and nothing but the truth.

I DO FURTHER CERTIFY that the foregoing is a true and accurate transcript of the testimony as taken stenographically by and before me at the time, place and on the date herinbefore set forth.

I DO FURTHER CERTIFY that I am neither a relative nor employee nor attorney nor counsel of any of the parties to this action, and that I am neither a relative nor employee of such attorney or counsel, and that I am not financially interested in the action.

Maureen Ratto

A Notary Public of New Jersey
License No. XI01165

I N D E X

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