

SUPERIOR COURT OF NEW JERSEY
LAW DIVISION - MIDDLESEX COUNTY
DOCKET NO. L-050148-87

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

Transcript of the deposition of
DR. HENRY VELEZ, witness, called for Oral Examination
by the parties in the above-entitled action, said
deposition being taken pursuant to rules governing
Civil practice in the Courts of New Jersey by and
before MAXINE BLOCK, C.S.R., a Notary Public and
Certified Shorthand Reporter of the State of New Jersey
at the offices of Dr. Velez, 19-03, Maple Avenue, Fair
Lawn, New Jersey on Wednesday, November 1, 1989,
commencing at 6:10 in the evening.

AGENT FOR REPORTING SERVICES:

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RNW 2389

A P P E A R A N C E S:

LEVINSON, AXELROD, WHEATON
& GRAYZEL, ESQS.

BY: RAE T. HOROWITZ, ESQ.,
Attorneys for the Plaintiff.

PITNEY, HARDIN, KIPP & SZUCH, ESQS.

BY: MICHAEL K. TUZZIO, ESQ.,
Attorneys for the Defendant.

1 HENRY VELEZ, M.D.,

2 19-03 Maple Avenue, Fair Lawn, New
3 Jersey having been previously sworn
4 according to law by the Notary,
5 resumed testifying as follows:
6

7 MS. HOROWITZ: I have a letter
8 dated October 25th from Pitney, Hardin
9 requesting certain documents to be
10 produced. As to number three, the
11 request is for all medical literature
12 upon which Dr. Velez relied at the time
13 of the writing of his report in this
14 case which supports the opinions which
15 he has rendered and upon which he will
16 rely at the time of trial.

17 For the record, Dr. Velez has
18 indicated at his prior deposition that
19 he has requested materials which he has
20 not yet received and that he will not be
21 limited to the materials he produces at
22 this deposition but, if other materials
23 will be furnished later to the defense
24 as we get them, he'll be able to rely on
25 those at the time of trial.

RNW 2391

1 MR. TUZZIO: I'm going to ask
2 him again about all of the medical
3 literature which he relied upon in the
4 preparation of his report -- we started
5 talking about that last time -- which
6 he's seen before the time of his last
7 deposition, which was just last week,
8 and basically what he's seen up to this
9 point and we will take the position that
10 if we don't hear about any other
11 material between now and the time of
12 trial -- actually we're 20 days before
13 trial -- this is what he will be limited
14 to. If he does see something between
15 now and then and intends to rely upon
16 it, I think he has an obligation to tell
17 you about it and you have an obligation
18 to tell us about it, whether it's in the
19 form of a supplemental report or oral
20 report or a bibliography, but one way or
21 the other we should be told and at that
22 point we'll take the position that we
23 have the right, if we want to, to
24 continue his deposition to question him
25 about that new material.

RNW 2392

1 MS. HOROWITZ: I don't have any
2 problem with that. We will furnish you
3 with anything additional that we get.

4 MR. TUZZIO: Okay.

5 MS. HOROWITZ: If we get it.

6 MR. TUZZIO: As long as we're
7 all clear.

8
9 DIRECT EXAMINATION BY MR. TUZZIO (continued):

10 Q. We were talking last time --

11 You're still under oath from last time. You
12 understand that. Right?

13 A. No, I didn't know that.

14 Q. That's why I asked.

15 We were talking last time about the medical
16 literature support for the conclusions which you
17 rendered in your report. You were telling me -- I'm
18 trying to paraphrase a little bit so we can get to the
19 first question and go along from there.

20 You were telling me about the Wagoner review and
21 I think at a certain point we left it where you were
22 going to or at least you had some intention between
23 then and whenever to look at the material specifically
24 cited in the Wagoner report.

25 Have you looked at any of the materials cited in

1 the Wagoner review?

2 A. I think my memory was that I was in the process
3 of trying to get my hands on everything and anything
4 that I had given you before to look at. Not
5 necessarily limited to Wagoner.

6 Q. I have no problem with that, and, again,
7 why don't I ask the first question.

8 Have you looked at anything since the time of
9 the last deposition which in any way supports any of
10 the opinions which you have given in your report?

11 A. I have several other things at this time.

12 Q. Can you tell me what they are?

13 A. This is entitled Oncology Overview. There's an
14 abstract recording Pulmonary Tumors Induced From
15 vinyl chloride monomer.

16 Q. Who wrote the particular abstract?

17 A. This is by Dr. Suzuki -- S-U-Z-U-K-I -- from
18 Mount Sinai.

19 Q. What's the date of the abstract?

20 A. Nineteen seventy-eight.

21 Q. Can we have that marked? Is that your
22 only copy or is that something you got from a library?
23 Maybe a better question is where did you get that from?

24 A. This was supplied to me.

25 Q. By whom?

1 A. By Mr. Levinson. Probably his copy.

2 Actually there's a lot which I haven't looked at
3 in total. It has a section dealing with vinyl choride.
4 You can look at it if you'd like, starting with the
5 page clip.

6 MR. TUZZIO: I'm going to ask
7 the reporter to mark the outside of the
8 book D-29.

9 Q. Just so we're clear, you're talking
10 about abstract 161, Carcinogenicity of Vinyl Chloride
11 and Vinylidene Chloride.

12 A. No.

13 Q. Why don't you just let me know what one
14 you're talking about?

15 A. It's on the other page. It starts here.
16 Actually the whole F section entitled Carcinogenicity
17 of Vinyl Chloride and Related Compounds in Experimental
18 Animals. There are several abstracts here.

19 Q. So you're telling me that you relied on
20 section F in its entirety?

21 A. With specific reference to vinyl chloride.
22 There are several other compounds that are listed there
23 I believe.

24 MR. TUZZIO: We'll mark as D-29
25 Section F which goes -- which is from a

1 book called Oncology Overview, Selected
2 Abstracts on the Carcinogenicity of
3 Vinyl Chloride and Related Compounds,
4 and D-29 as an exhibit will run from
5 page 35 of that book through page 41.

6 (Whereupon D-29, book entitled
7 Oncology Overview, Section F, was marked
8 for identification.)

9 Q. These abstracts marked collectively as
10 D-29, are they cited in the Wagoner review?

11 A. They may be.

12 Q. You don't know?

13 A. The Suzuki. I think that one stands out.

14 Q. Do any of these abstracts refer in any
15 way to a connection between exposure to vinyl chloride
16 and cancer of the larynx?

17 A. As it is detailed, they're talking about in
18 experimental animals.

19 Q. Which experimental animals are they
20 talking about?

21 A. Most of them are rats.

22 Q. Do rats have larynxes?

23 A. Good question. I don't know. I really don't.
24 I can tell you that the pig is the closest to the
25 human.

1 Q. Let me ask a question. In what way does
2 anything in there support any opinion you've given in
3 this case? When I say in there, I mean in D-29.

4 A. We're talking about the carcinogenic potential
5 of a compound and that's -- while we all know the
6 difficulties in abstracting clinical animal studies to
7 humans, they are nevertheless helpful for all of us,
8 myself, in coming upon an opinion as to the
9 carcinogenicity of a particular compound; so in a
10 general, broad fashion, they're helpful.

11 Q. Is there anything in any of those
12 abstracts concerning a relationship between VCM
13 exposure and cancer of the larynx?

14 A. There doesn't appear to be any that I can see.

15 Q. What else, other than the things that we
16 marked at the deposition last time, do you rely upon to
17 support any of the opinions you have in this case?

18 A. These were cited in several of the reviews that
19 I supplied you last time and these are by Tabershaw and
20 Cooper.

21 Q. Spell that, please.

22 A. Tabershaw -- T-A-B-E-R-S-H-A-W -- and Cooper --
23 C-O-O-P-E-R. And this was a study that was done for
24 the Manufacturing Chemists Association and supported
25 by -- Union Carbide was one of the numerous companies

1 that supported this research.

2 Q. Can I see that first and then we'll mark
3 this as D-30 and I'll identify it as Epidemiological
4 Study of Vinyl Chloride Workers by Tabershaw/Cooper
5 final report dated May 3, 1974.

6 (Whereupon D-30, study entitled
7 Epidemiological Study of Vinyl Chloride
8 Workers, was marked for identification.)

9 Q. Dr. Velez, what specifically in this
10 article do you rely upon and what do you say supports
11 any of the opinions which you've given in this case?

12 First of all have you had a chance to read this
13 article?

14 A. Yes, I have.

15 Q. When did you read it?

16 A. Over the last couple of days.

17 Q. Not before you wrote your report in this
18 case?

19 A. That's correct. Essentially, this is a
20 historical prospective study of approximately 85
21 hundred workers who have had exposure to vinyl
22 chloride. The data was collected on the individuals as
23 far as initial date of exposure to vinyl chloride and
24 last date of exposure. Again, utilizing the arbitrary
25 mechanism, for lack of anything better, they were able

1 to come up with an exposure index which was rated from
2 one to three; one being the lowest and three being the
3 highest.

4 What they then did was they identified these
5 individuals and then they traced them and by tracing
6 them from company records they were able to see how
7 many people were still alive, how many people were ill
8 or, in essence, what was more important to them was how
9 many people had died. They then collected death
10 certificates and appropriate records in order to
11 establish an exact cause of death. When doing that
12 they came up with a group of people who had died. They
13 then compared this group to the general population by
14 year of birth and also by age in, I believe, five-year
15 intervals in an attempt to come up with what is called
16 a standardized mortality ratio. The general population
17 is considered -- is given a number of one hundred,
18 therefore, if you look at the general population across
19 the United States, you can come up with data that X
20 number of people are going to die from lung cancer, X
21 number of people are going to die from laryngeal
22 cancer, et cetera.

23 What you then do is you then compare your study
24 outcome to the general population and you come out with
25 standard mortality ratios and you look to see if the

1 group that you examined or the group for which you have
2 data has a standard mortality ratio equal to more than
3 or less than the general population.

4 When doing the standard mortality ratio for
5 cancers of the respiratory system, which in my mind can
6 be further borne out in this -- in the tables or in the
7 information supplied here, essentially cancers from the
8 nasal passages down to the lung, if you look at the end
9 portion of it -- the tables are marked -- the cancers
10 of the respiratory system, there is an increase in the
11 SMR or standard mortality ratio as compared to the
12 general population.

13 If you then look at the individual cancers which
14 are then broken down, there are two, and most probably
15 a third cancer of the larynx in that group. The bulk
16 of them were primary lung carcinomas for which there is
17 also an increased mortality ratio.

18 Q. Was there any study as to the -- You say
19 the two and perhaps three individuals who were the
20 subject of that study died from cancer of the larynx or
21 had cancer of the larynx?

22 A. That's correct.

23 Q. Was there any consideration in that
24 study or the effect of the cancer of the larynx or any
25 conclusions drawn?

1 A. The conclusion is that vinyl chloride was an
2 agent which was active.

3 Q. Were there any other factors in those
4 individuals?

5 A. Those aren't considered here because in essence
6 what you're doing is you're comparing them against the
7 general population. So let me see if I can get this in
8 an understandable way to you.

9 If you look at the general population, any one
10 agent tends to average itself out, you would agree,
11 therefore, when you use this methodology and you have
12 an agent which you're saying that the general
13 population in total is not exposed to but there may be
14 some people out there that have had the exposure, their
15 exposure is averaged out over the general population,
16 so, therefore, other factors -- I would imagine the
17 most important factor in your mind is smoking -- is
18 averaged out. In other words, the general population,
19 X number of people smoke and therefore its effect on
20 the general population in all smoking-associated
21 cancers are averaged out. So when you compare this
22 population against the standard population those
23 factors, by this methodology, are inherently taken care
24 of. Therefore, there is no mention of smoking habits,
25 alcohol habits --

1 Q. Asbestos?

2 A. -- asbestos or any other potential confounding
3 variance.

4 Q. Were these people given an exposure
5 index?

6 A. Yes, to vinly chloride.

7 Q. What was their exposure index on that
8 one-to-three scale that you told me about?

9 A. Respiratory cancers -- and that's how they deal
10 with them; I can't do better than that -- appear to
11 have a higher exposure index.

12 Q. Closer to three?

13 A. Yes.

14 Q. Were these -- What type of work did
15 these people do that they were exposed to vinyl
16 chloride?

17 A. I assume I'm going to give this to you. Right?

18 Q. Sure.

19 A. thers an introduction and a summary on this
20 which details the exact work. I'm not sure except to
21 say that these people were at one point or another
22 exposed to vinyl chloride monomer.

23 Q. Now, do you understand that the people
24 who were studied in this study marked as D-30 had
25 exposures similar to that experienced by Mr. Petersen?

1 A. If I may quote the selection of study plants,
2 page three, The Manufacturing Chemists Association
3 identified 43 United States plants belonging to
4 nineteen companies which either produced vinyl chloride
5 or used it in the products of polyvinyl chloride.

6 Q. Do you understand that Mr. Petersen
7 worked in a plant where vinyl chloride was used or used
8 in the production of polyvinyl chloride?

9 A. My understanding regarding Mr. Petersen is that
10 they received -- that the poly -- they received the
11 polyvinyl chloride and that there was no production
12 from monomer to the polymerized form.

13 Q. Is that significant to you?

14 A. With respect to what?

15 Q. To any of the opinions in this case or
16 to a comparison of Mr. Petersen's situation to the
17 situations of the people in D-30?

18 A. I think analogies can be drawn from one to the
19 other, and while they're definitely -- I would
20 expect --

21 It depends, because I don't have the information
22 as to the industrial hygenic type of exposures. But
23 what we're looking at here is the effects of the vinyl
24 chloride monomer and that in Mr. Petersen's case he was
25 exposed to vinyl chloride monomer in these plants,

1 there was exposure to vinyl chloride monomer, so the
2 exposure is there in both situations.

3 Q. Upon what do you base your statement
4 that Mr. Petersen was exposed to vinyl chloride
5 monomer?

6 A. I think it's pretty well accepted and understood
7 that polyvinyl chloride is -- not all of the monomer is
8 polymerized or inactive, that there is a certain amount
9 of monomer which is released in the polymerized form or
10 the polymerized particulate either due to instability
11 of the polymerized form or due to the adsorption, which
12 in essence means that vinyl chloride monomers are
13 sticking to the particulates in a loose manner thereby
14 in essence giving off the vinyl chloride monomer or
15 exposing individuals to vinyl chloride monomer.

16 Q. Do you have knowledge from which you can
17 form an opinion as to whether or not you would expect a
18 worker in a manufacturing facility which uses vinyl
19 chloride monomer to make polyvinyl chloride to have
20 more or less of an exposure than a worker such as Mr.
21 Petersen?

22 A. I can't really say more or less. I can only say
23 that there's exposure in both situations.

24 Q. What else have you relied upon -- Well,
25 other than those references you've given me, is there

1 anything else in the form of a conclusion in that D-30
2 report that talks about cancer of the larynx?

3 A. These are the two articles here, one published
4 in the Journal of Occupational Medicine, that are
5 really similar and probably adjunctive to the final
6 report which I presented to you.

7 Q. Where did you get these two articles?

8 A. These were given to me by Dr. Epstein.

9 Q. Just this past week?

10 A. Yes, since we last spoke.

11 Q. Did you speak with Dr. Epstein since we
12 last spoke?

13 A. Just regarding if he would do me the favor and
14 send me some more information.

15 Q. Did you have any conversations with him
16 concerning the availability of information regarding a
17 link between vinyl chloride exposure and cancer of the
18 larynx?

19 A. We discussed that in the last deposition, that
20 he and I had discussed that point prior to the last
21 deposition. None since then.

22 Q. What did he say when you spoke to him
23 the first time so I might be able to compare it to what
24 he said about it now? What did he say about the body
25 of literature available on cancer of the larynx and

1 exposure to vinyl chloride monomer when you spoke to
2 him first?

3 A. What stands out in my mind most, what I can
4 remember is that it was his opinion that vinyl chloride
5 was a multi-potent carcinogen.

6 Q. What does that mean?

7 A. In other words, it produces cancers in various
8 body systems.

9 Q. Did you and he at that time speak
10 specifically about cancer of the larynx, which is what
11 Mr. Petersen's case is?

12 A. Well, at that time, knowledge of that was known
13 to me because of review of these submitted documents.

14 Q. Knowledge of what was known to you? I
15 didn't get that.

16 A. That one of its sites was the larynx. That
17 there was data for the larynx.

18 Q. What data did you have when you spoke
19 with Dr. Epstein the first time that one of the sites
20 was the larynx?

21 A. These articles which we discussed at the last
22 deposition.

23 Q. I had asked you last time to show me in
24 those articles where there was a reference to cancer of
25 the larynx and, not to be argumentative, I don't think

1 you've done that yet.

2 A. I pulled out the Wagoner article at that time
3 and stated that the reference was to the respiratory
4 system in -- when I briefly went through the Wagoner
5 review article I did not, other than the respiratory
6 system, I did not see any particular mention of the
7 larynx; however, if we were to go through all of this
8 again, there would be, with respect to the larynx,
9 mention of the larynx.

10 Q. You're telling me that somewhere in
11 those articles there is mention of the larynx?

12 A. That's correct.

13 Q. Which articles are we talking about?

14 A. You asked me specifically about the Wagoner
15 article.

16 Q. Let me ask the question about the
17 Wagoner article. Does the Wagoner article refer to
18 cancer of the larynx specifically?

19 A. If one includes cancer of the respiratory
20 system, that is the limit. And then there is -- if I
21 remember correctly, then there is mention in the
22 Tabershaw and Cooper study.

23 Q. The Tabershaw/Cooper study doesn't
24 mention cancer of the larynx specifically, does it?

25 A. It shows as cause of death.

1 Q. Which one is Tabershaw? Is that D-30 or
2 D-29

3 A. D-30.

4 Q. That's the one we just talked about?

5 A. That's correct.

6 Q. Okay.

7 A. So D-30, again, speaks of cancers of the
8 respiratory system and then when one goes through the
9 actual data, cancer of the larynx is there.

10 Q. What would be, in your mind, examples of
11 cancers of the respiratory system? What organs, parts
12 of the body would that involve?

13 A. Anywhere from the nasal sinuses or the nasal
14 mucosa; nasal pharynx; oral pharynx; hypopharynx, which
15 is the area right above the larynx; the larynx, that
16 area; the vocal cord area; the trachea and I think the
17 rest -- and I guess out to the pleura or the lining of
18 the lung.

19 Q. So you include as part of the
20 respiratroy system the larynx. Is that what you're
21 telling me?

22 A. From the nasal passages down. That's correct.

23 Q. And the larynx is included in that? I'm
24 only a lay person.

25 A. That's included.

1 Q. Other than the Wagoner article, which of
2 the other articles that we marked or any of the
3 materials we marked last time speak about cancer of the
4 larynx?

5 A. What I have not done is I haven't taken this
6 body of literature and presented it for you in a
7 summary fashion, each one, and which one is mentioned
8 and the specific references. I not trying to be vague,
9 I'm trying to be as specific as I can with you. In
10 this body of literature which I supplied to you, which,
11 I guess, has been copied, because you brought it back
12 to me, there are specific references to the larynx.

13 Q. As opposed to having you read all of the
14 articles here and show me, we'll let the articles speak
15 for themselves, everything they say or they don't. But
16 your position is here somewhere along the line you
17 remember reading in the body of literature something
18 about a causal relationship between VCM and cancers of
19 the larynx. Is that fair to say?

20 A. That's fair to say.

21 Q. Beyond what we've marked last time,
22 we've now marked two more items of the Tabershaw/Cooper
23 study and the abstracts, D-29 and D-30, from the
24 Oncology Overview.

25 A. That's correct.

RNW 2409

1 Q. Is there anything else which you feel
2 supports your opinion?

3 A. There's something else that I'm looking for,
4 which I don't have for you. There was a monograph on
5 vinyl chloride presented by the New York Academy of
6 Sciences.

7 Q. Well, again, as we started out the
8 deposition, anything that you find that you feel
9 supports your opinion upon which you feel you should
10 and must rely at the time of trial in support of your
11 opinion I think you are obligated to advise the Levison
12 office of that, whether you provide them with a copy of
13 the article or a citation or something, and at that
14 point the Levinson office has an obligation to let us
15 know what it is.

16 A. I understand that.

17 Q. Okay. Is there anything that you've
18 seen in the last week which you feel supports your
19 opinion that Mr. Petersen's exposure to VCM resulted in
20 cancer of the larynx?

21 A. Nothing else.

22 MR. TUZZIO: Off the record.

23 (Whereupon a discussion took
24 place off the record.)

25 Q. There are two other articles, Doctor,

1 you made reference to and one of them is from the
2 Journal of Occupational Medicine dated August 1974
3 entitled Mortality Study of Workers in the Manufacture
4 of Vinyl Chloride and Its Polymers and it's written by
5 Tabershaw and Gaffey. Why don't we mark that as D-31
6 and then I'll ask you a couple of questions about it.

7 (Whereupon D-31, article
8 entitled Mortality Study of Workers in
9 the Manufacture of Vinyl Chloride and
10 Its Polymers, was marked for
11 identification.)

12 Q. I'm not so sure what you mean when you
13 say this is adjunctive. I'm talking about D-31.

14 Is there anything in there that supports your
15 opinion, adds to anything, detracts from anything
16 that --

17 A. The information is the same that came out of
18 this -- What's marked D-30 is the final report which
19 incorporates information in this document marked D-31
20 and the same as what you probably will be marking D-32.

21 Q. Is there anything in D-31 about a
22 relationship between exposure to vinyl chloride monomer
23 and cancer of the larynx that you can recollect? And,
24 again, with the same provision that the article will
25 speak for itself and we'll have a chance to look at it.

1 But do you rely on anything in there or any conclusions
2 specifically that you can recollect at this time?

3 A. Again, this article relates to cancers of the
4 respiratory system, which, in looking at the individual
5 cases in the parent article, if you want to call it
6 that, laryngeal cancer is cited.

7 Q. The parent article that you refer back
8 to is D-30?

9 A. That's correct.

10 MR. TUZZIO: Okay. Now we're
11 going to mark this Tabershaw/Cooper
12 supplementary Epidemiological Study of
13 Vinyl Chloride Workers, one report dated
14 May 30, 1975. We'll mark that as D-32.

15 (Whereupon D-32, study entitled
16 Epidemiological Study of Vinyl Chloride
17 Workers I, was marked for identi-
18 fication.)

19 Q. You were starting to say something,
20 Doctor, while the reporter was marking the exhibit.

21 A. Right. There's a mention here --

22 Q. You're referring to D-31?

23 A. D-31. Specifically another table. It's marked
24 table ten. It's page 518. Study number or case
25 number, that would be the individual, 354 had been

1 diagnosed as having actually had removal of the larynx
2 and the surrounding pharynx surgically due to a cancer
3 of the left periform (phonetic) sinus. The left
4 periform sinus is considered an extrinsic cancer of the
5 larynx so that's considered laryngeal cancer.

6 Q. Is there anything about D-32 that you
7 find significant or upon which you relied to support
8 your conclusion that Mr. Petersen's exposure of VCM
9 resulted in his development of laryngeal cancer?

10 A. Again, the tables are duplicated as in D-30, and
11 again there is mention of the carcinoma of the larynx
12 that we've discussed already.

13 The only other thing that I can think of all in
14 three articles -- they really weren't articles but
15 different presentations of the data -- is that the
16 opinion of the authors was that the information
17 presented by them was probably an under estimate of
18 what was going on in the general population for two
19 major reasons: one reason being that 15 hundred
20 individuals who had been exposed to vinyl chloride, in
21 their mind, significantly were not traced, and these
22 were 15 hundred individuals, if I remember correctly,
23 who had had earlier and heavier exposures as determined
24 by their exposure index. In addition, there was the
25 healthy-worker effect. In essence, people working tend

1 to be healthier -- or let's back up a little bit.

2 If you examine -- If you take a hundred people
3 who are working and examine them and compare them to a
4 hundred people who aren't working, there will be a
5 marked difference in what you find in one group
6 compared to the other due to the inherent disabilities
7 that illnesses produce in non-working people.
8 Therefore, citing that healthy-worker effect, they felt
9 that their data overall was an under estimate of the
10 toxicity or carcinogenicity of vinyl chloride.

11 Q. When you get retained to consult, either
12 in anticipation of litigation or for some other
13 consulting purpose or in your daily practice, do you
14 tend to rely upon and do research through journals and
15 medical findings such as the articles that we've marked
16 here?

17 A. Yes, I do.

18 Q. So you're familiar with the concept of
19 medical research. That's something that you're taught
20 and that is a part of your practice and discipline.

21 A. Well, the question you're asking me is do I know
22 how to research the literature?

23 Q. Right.

24 A. That's correct.

25 Q. And is that something that every

1 physician or at least physicians in your field are
2 called upon to do from time to time?

3 A. I would think so to one extent or another.

4 Q. In your experience doing medical
5 research have you developed or do you feel that you've
6 developed an ability to characterize when something is
7 strongly established as opposed to something that's
8 more weakly established to something that has not been
9 established at all in the medical literature?

10 A. As part of my training at Mount Sinai Hospital,
11 we were taught to critically review the literature and
12 also we were taught the basics and fundamentals of
13 epidemiology. In the learning of medicine it's
14 sorted -- while it's not broken out specifically, we
15 rely on that same information to diagnose and to use
16 treatment modalities; so, therefore, the answer would
17 be yes.

18 Q. It does happen, and you probably see it
19 all the time in your work with asbestos, that there is
20 a body of physicians out there that disagrees with
21 certain findings in the asbestos articles, reads them
22 differently. Sometimes two expert reports in a given
23 case might come to different conclusions reading the
24 same literature and looking at the same patient.
25 You've found that I assume.

1 A. All the time.

2 Q. All the time. Can you categorize or
3 characterize the body of literature on cancer of the
4 larynx specifically as strongly establishing a link
5 between VCM exposure or any other rating system that
6 you might be comfortable with?

7 I don't want to ask the question is there a lot
8 out there because you'll probably tell me that
9 sometimes it's the quality of the research or the
10 quality of the article that is more important than the
11 number of articles. Is that what you would tell me if
12 I would ask you that?

13 A. Probably not.

14 Q. Well, let me ask you the question. Is
15 there a lot out there on cancers of the larynx and VCM
16 exposure?

17 A. We discussed that the last time and I stated to
18 you there wasn't a lot of literature.

19 Q. The fact that there's not a lot of
20 literature, does that affect your conclusions at all or
21 cause you to question your conclusions at all in this
22 case?

23 A. I think that the most honest way in which I can
24 answer this, and this is no different than my clinical
25 practice because as I go further and further in my

1 clinical practice, I realize that many of the treatment
2 modalities that we use are based on folk lore, that the
3 literature supporting them is not that great but that's
4 what we were stuck with and that's what we call the
5 norm in treatment.

6 But the bottom line in all of this is that I
7 formulated an opinion. I feel at this point in my
8 life, in my career, that I can formulate an opinion
9 based on the available information, and with respect to
10 that, I feel comfortable with all the information
11 that's been provided to me and experience, et cetera,
12 and I feel comfortable with the opinion that vinyl
13 chloride is a potent carcinogen and that there is
14 evidence that it is site-specific in this particular
15 case to the larynx.

16 Q. By this particular case you mean Mr.
17 Petersen?

18 A. That's correct.

19 Q. Based on your experience and the medical
20 research which you've done ever since you started
21 medical school, can you tell me if you have an opinion
22 as to whether there is a larger body of literature out
23 there concerning a relationship between asbestos
24 exposure and cancer of the larynx than the body of
25 literature concerning exposure to VCM and cancer of the

1 larynx?

2 A. From the standpoint of volume, there is clearly
3 a greater body out there.

4 Q. Can you come to any opinion in this case
5 as to whether or not Mr. Petersen's cancer of the
6 larynx was the result of his exposure to asbestos or
7 his exposure to VCM or some other factor? And, again,
8 the question was can you come to a conclusion as to
9 that.

10 A. I think that I could come to a reasonable
11 conclusion in this matter, specifically in Mr.
12 Petersen's case, based on the information in front of
13 me at this time.

14 Q. That it was one or the other?

15 A. No. It would be my opinion, at this time, based
16 on the following: number one, a brief smoking history;
17 a non-drinker in essence, probably no more than any of
18 us in this room, social, whatever we call a social
19 drinker -- I'm sure it has a wide range -- so in this
20 particular case it would be my opinion that the smoking
21 and alcohol were minimal. Mr. Petersen's asbestos
22 exposure occurred earlier on in the earlier years
23 sufficient enough to give him documentable asbestosis
24 so I know that he had a reasonable exposure at that
25 time. But the single factor which stands out in my

1 mind is that he had a day-in-and-day-out prolonged
2 exposure to polyvinyl chloride and therefore vinyl
3 chloride, therefore, putting this case together and
4 putting forth my own personal opinion in essence based
5 on those facts, it would be my opinion that the vinyl
6 chloride was a greater factor than the others that I
7 have just mentioned in the subsequent development of
8 his laryngeal cancer.

9 Q. Do you, by that, eliminate asbestos as a
10 factor?

11 A. There's no way that I could honestly eliminate
12 asbestos as a factor. Again, if you ask me -- the
13 question you're asking me is which one did I think is
14 the most causative, then I can wave the flag and say
15 vinyl chloride, but it's impossible to do the latter,
16 which is exclude another source or another toxin.

17 Q. Why would you think it was VCM as
18 opposed to asbestos here? You sort of told me why but
19 why don't you tell me again? Explain in a little more
20 detail.

21 A. I think most people would agree that vinyl
22 chloride is a potent carcinogen, so we can set the
23 stage with that knowledge. The most basic action of a
24 carcinogen is that it alters the normal properties of a
25 cell causing that cell to become malignant. And then

1 for reasons not clearly understood by us, the body does
2 not recognize it as foreign and in essence let's it
3 grow. Because these malignant cells are not part of
4 our normal constituency, therefore, when you have
5 constant exposure to any toxin or any carcinogen, the
6 chance occurrence is increased. If you have a one-shot
7 exposure, the -- even with the strongest of
8 carcinogens, the probability is low, but with repeated
9 exposure over time, then the probability increases.
10 And that's what we're really -- That's what you're
11 asking me in essence, the probability, if I understand
12 you correctly. Therefore, when there is exposure to
13 the same agent day in and day out, day in and day out,
14 especially in an area where I expect to find the
15 polyvinyl chloride and therefore the monomer, then this
16 is what leads me to my final opinion that if I had to
17 identify one or if asked for an opinion which was the
18 most causative, then I would put the vinyl chloride at
19 the head of the class.

20 Q. Just so I understand, is that because he
21 was exposed to more vinyl chloride than he was
22 asbestos?

23 A. Duration, length of time is what stands out in
24 my mind as being most important. If you were to take
25 all the asbestos that he was exposed to and put him in

1 a bag and expose him over 24 hours and then take all
2 the vinyl chloride monomer, let's say, and put it in a
3 bag and somehow expose him over 24 hours, there
4 probably wouldn't be very much difference between both,
5 whether one was more or less. But in carcinogenesis,
6 time is an important factor.

7 Q. How much asbestos and over how long a
8 period of time would he have had to be exposed to
9 asbestos for cancer of the larynx to have developed?

10 A. It's funny. It's a question I asked myself. I
11 was trying to think about the literature because I
12 thought that this would come up. There are people who
13 develop their cancer of the larynx while exposure
14 continued and there are people who developed their
15 cancer after the exposure ceased. The actual interval
16 I don't know and it's a question in my mind.

17 Q. When did you come to the conclusion that
18 if you were questioned as to what was a more likely
19 causative agent, the asbestos or the VCM, that it was
20 the VCM? When did you come to that conclusion?

21 A. Well, I was asked for an expert's report and so
22 that's dated as the time of my report.

23 Q. You did tell me last time, though, that
24 you did intend, and by reference in your report, to say
25 that asbestos was a potential causative agent in the

1 cancer of the larynx.

2 A. If I remember correctly, what I said --

3 Q. I don't mean to characterize. Why don't
4 you tell me?

5 A. -- was that it was obvious the information was
6 there that that would come up and that would be
7 questioned.

8 Q. Anywhere in your report do you
9 differentiate or come to the conclusion that you just
10 told us about that you think VCM was a more likely
11 cause in this case?

12 A. I believe the report states that the laryngeal
13 cancer was causally related to his exposure to vinyl
14 chloride. That was the statement that was made.

15 Q. Can you ascribe a percent as to the --
16 in other words, the ratio or relationship between
17 asbestos as a likely causative agent and VCM as a
18 likely causative agent, if one is more likely than the
19 other? I mean 55 percent to 45 percent? 51 percent to
20 49 percent? Can you speak in those kinds of terms?

21 A. My understanding of the law, as I'm looking over
22 to you, is that is it more probable than not, in my
23 mind now, is from a legal standpoint that we're talking
24 about. Is that correct?

25 Q. Well, I'm not asking you for the legal

1 standard. I'm asking you based upon medical standards,
2 numbers that you're comfortable with because more
3 likely than not could mean just pushing one over the
4 edge in terms of the scale going more one way than the
5 other, but I want to know if you have any kind of
6 numbers that you can ascribe percentages to the
7 causative agency of VCM as opposed to the causative
8 agency of asbestos exposure.

9 MS. HOROWITZ: I think what he's
10 asking you to do is to give percentages
11 only if you're able to, if you've come
12 to some decision in your mind. If you
13 haven't, then --

14 MR. TUZZIO: That's why I
15 prefaced the question.

16 Q. Can you put percentages on that that
17 more likely than not the opinion that you've given
18 me -- I think you understand now. Not based on
19 legalese, based on your medical knowledge.

20 A. Yes, I understood the question. The reason I
21 looked towards Ms. Horowitz is because my thinking and
22 being asked as an expert is it more -- you know, more
23 probable than not and that means to me at minimum 51
24 and 49. So the answer is that's the way I see it. But
25 in this case with respect to your specific question, I

1 cannot.

2 Q. Do you have an opinion in this case that
3 the exposure to asbestos and the exposure to VCM caused
4 his development of cancer of the larynx?

5 A. I think that I've gone on record as saying that
6 it's my opinion that the agent responsible for his
7 laryngeal cancer is the vinyl chloride, for the reasons
8 as specified before.

9 Q. Do you have an opinion that the two
10 agents in any way working together or synergistically
11 caused him to develop cancer of the larynx?

12 A. That information is not available. I don't
13 think anyone knows and I wouldn't hazard a guess.

14 Q. If there was no history of VCM exposure
15 or no reliable medical information linking VCM exposure
16 to development of cancer of the larynx, would your
17 opinion change in this case?

18 A. I certainly would think it would.

19 Q. What would your opinion be under those
20 circumstances?

21 A. I'd have to look at other exposures that we know
22 that he does have.

23 Q. And in this case that would be, of
24 course, asbestos.

25 A. Asbestos, smoking, even though remote and

1 distant.

2 Q. The smoking is remote and distant or the
3 asbestos?

4 A. The asbestos.

5 Q. I don't know what you meant by that.

6 A. I think both of them. The asbestos, I think,
7 occurred the first six years that he worked at the
8 Amboy terminal or whatever they call themselves.

9 Q. If Mr. Petersen came to you as an
10 asbestos case as opposed to a vinyl chloride case and
11 he had no exposure to vinyl chloride but presented the
12 same history of asbestos exposure as Mr. Petersen had
13 with no history of vinyl exposure at all, would you be
14 comfortable in saying with a reasonable degree that his
15 cancer of the larynx was the result of his asbestos
16 exposure?

17 A. I would be comfortable, yes.

18 Q. How else does somebody get cancer of the
19 larynx as opposed to the external agents that we've
20 talked about? Is it something that can just develop?

21 A. The risk factors. That's how we really look at
22 the development of the disease, whether it be heart
23 disease or this particular cancer. The risk factors
24 are the smoking, drinking.

25 Q. Smoking I counted and drinking as the

1 external things. If you couldn't find any exposure or
2 risk factor and someone presented with cancer of the
3 larynx, what would you think then?

4 A. Bad luck.

5 Q. Is that really all there is to it?

6 A. If I wanted to be smart and medical I'd call it
7 etiopathic causes. Etiopathic means we don't know
8 and --

9 Q. I'm not suggesting that that's the case
10 here, but I'm curious.

11 A. Yes. I understand.

12 So etiopathic and bad luck sort of go together
13 in my own thinking.

14 Q. You told me that you had another
15 conversation with Dr. Epstein. When did you call him?

16 A. Just recently.

17 Q. Since the time of the last deposition?

18 A. Yes. That's what I'm talking about.

19 Q. About how long did you talk to him at
20 that particular time?

21 A. Two minutes.

22 Q. What did you talk about?

23 A. I just asked him to send me these particular
24 articles if he would be so kind.

25 Q. How did you know about those articles?

1 A. I read his summary, which I provided to you.

2 Q. These are articles that were cited in
3 the Epstein report?

4 A. That's correct.

5 Q. Did you have any other conversation with
6 him about the conclusion that either one of you had
7 reached in this case?

8 A. None others.

9 Q. Did you ever work with him before?

10 A. No. I know of him and I've heard his name but
11 I've never worked with him.

12 Q. I didn't mean to imply that you're
13 working with him now, but you had not worked with him?

14 A. No, I didn't take it that way.

15 Q. I guess I've asked this question a lot
16 of different ways but let me ask it this way: Can you
17 say to any reasonable degree of medical probability
18 that his asbestos exposure, as you've documented, was
19 not the cause of his cancer of the larynx?

20 A. I don't think I could truthfully or honestly say
21 that.

22 Q. In the last two pages of your report you
23 have an addendum, and I'm reading it now and it seems,
24 if I can characterize it, and you can correct me, that
25 you're giving an opinion as to a prognosis with regard

1 to his asbestos exposure. You're talking about an
2 increased risk of lung cancer. You can take a look at
3 it. Tell me what you're doing in there.

4 A. I think that's an assumption.

5 Q. Anywhere in your report did you give any
6 sort of prognosis as to his VCM exposure?

7 A. No, I didn't.

8 Q. Were you asked to do that by the
9 Levinson office?

10 A. No, I wasn't.

11 Q. If you're going to do that between now
12 and the time of trial and, of course, you understand
13 your obligation, if you're going to add to your
14 opinions in this case or find additional support for
15 what you've already told me, again, you are obligated
16 to let the Levinson office know about that and they are
17 obligated to let me know about it or we will take the
18 position that you will be limited by these depositions.
19 I think counsel understands.

20 MS. HOROWITZ: I think we've
21 discussed that about ten times already.

22 MR. TUZZIO: Off the record.

23 (Whereupon a discussion took
24 place off the record.)

25 MR. TUZZIO: That's all I have.

1 MS. HOROWITZ: I don't have any
2 questions.

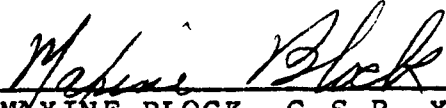
3 (Whereupon the deposition of Dr.
4 Henry Velez was concluded and the
5 proceeding was adjourned.)
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CERTIFICATE OF OFFICER

I, MAXINE BLOCK, C.S.R., a Notary Public and Certified Shorthand Reporter of the State of New Jersey, do hereby certify that prior to the commencement of the examination, the witness, DR. 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 hereinbefore set forth.

I DO FURTHER CERTIFY that I am neither a relative nor attorney nor employee 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.


MAXINE BLOCK, C.S.R. XI 01206
A Notary Public of the State
of New Jersey

My Commission Expires
January 15, 1990

RNW 2430

I N D E XWITNESSDIRECT

DR. HENRY VELEZ

Mr. Tuzzio

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D-29	Oncology Overview, Section F	8
D-30	Study Entitled Epidemiological Study of VC Workers by Tabershaw/Cooper	10
D-31	Study Entitled Mortality Study of Workers in the Manufacture of Vinyl Chloride and Its Polymers by Tabersahw and Gaffey	23
D-32	Study Entitled Supplementary Epidemiological Study of VC Workers I	24