

IN THE CIRCUIT COURT OF THE 11TH JUDICIAL CIRCUIT IN AND FOR DADE COUNTY, FLORIDA

CASE NO: 03-09855 CA 20

ARMANDO VALDES, III, incapacitated,) by and through his legal guardian,) ARMANDO VALDES, JR., and VIOLETTA VALDES, and ARMANDO VALDES, JR., and) VIOLETTA VALDES, individually,)

Plaintiffs,)

vs.)

OPTIMIST CLUB OF SUNILAND, INC.,) OPTIMIST CLUB INTERNATIONAL, McNEIL) P.P.C., THE SPORTS AUTHORITY, INC.,) JOFA AB, KHf SPORTS OV, and THE) HOCKEY COMPANY,)

Defendants.)

DEPOSITION OF WILLIAM LEE HEARN, Ph.D.

WEDNESDAY, APRIL 11, 2007 2937 SOUTHWEST 27TH AVENUE COCONUT GROVE, FLORIDA 33133 1:15 p.m. - 5:00 p.m.

Reported By: Gary F. Monzillo, RPR-CP Notary Public, State of Florida Esquire Deposition Services Fort Lauderdale Office Phone - (954) 331-4400

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1 Deposition taken before Gary F. Monzillo,

2 RPR-CP and Notary Public in and for the State of

3 Florida at Large, in the above cause.

4 THEREUPON:

5 WILLIAM LEE HEARN, Ph.D.,

6 having been first duly sworn or affirmed, was

7 examined and testified as follows:

8 DIRECT EXAMINATION

9 Q. (BY MR. BON) All right. Dr. Hearn, my

10 name is Michael Bon. I'm an attorney with the law

11 firm of Thornton, Davis & Fein, and our firm

12 represents the McNeil PPC in this case.

13 Generally at this point I would explain

14 the groundrules of a deposition, but my

15 understanding is that you've had your deposition

16 taken numerous times over the years and I figured

17 we'd waive the formalities of doing that as long as

18 you convey to me your understanding of the

19 deposition process.

20 A. I've done this before. Yes.

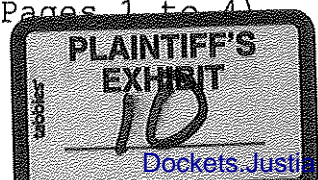
21 THE WITNESS: Could we go off for a

22 moment?

23 MR. BON: Fine.

24 (Discussion off the record.)

25 Q. (BY MR. BON) All right. Can you tell me



1 Q. Okay. What kind of workshop was it?
 2 A. It was something like Ephedra, Drug or
 3 Supplement, something like that. It was the title,
 4 and it had lectures by a number of my colleagues
 5 related to various topics such as the analysis and
 6 the pharmacokinetics and pharmacology and so forth.

7 Q. Of Ephedra?
 8 A. As I sit here right now, I don't recall
 9 the specific topics of the lectures. But that's
 10 the sort of thing that these workshops contained.

11 Q. Okay. The next page of notes has the
 12 name and case number, and then it says Florida EMS
 13 report. Let's go through that. Do you know when
 14 these notes were taken by you?

15 A. I don't recall the dates, but it was
 16 sometime between when I received them and 2005. It
 17 would probably have been sometime in early 2004,
 18 but I don't recall specifically.

19 Q. Okay. Relatively early on in your
 20 analysis?

21 A. Yes.

22 Q. Okay. Now, about midway through the
 23 page it talks about given Tylenol suppository, and
 24 then what does it say? Ten-year?

25 A. 10 grains.

1 Q. 10 grains plus Dilantin 100 milligram IV
 2 at 2:45 p.m.?

3 A. That's correct.

4 Q. Okay. Do you know if Mr. Valdes was
 5 given any Tylenol or other form of acetaminophen
 6 before 2:45 other than the presumed taking of two
 7 capsules of Tylenol Cold in the morning hours?

8 A. I didn't see any reference to that. I
 9 did note that - this, because it was about three
 10 minutes after his blood was drawn for the
 11 acetaminophen test. So just to clarify that it was
 12 not given to him before the blood was drawn.

13 Q. Okay. If it was given to him --
 14 Assuming it was given to him let's say 10 or 15
 15 minutes before the blood was drawn, would it have
 16 been detectable in the labs if they were done 10 or
 17 so minutes later?

18 MS. BZDYK: Object to the form.

19 A. Probably not. But if it were given an
 20 hour before or so it would probably have shown up
 21 in the test.

22 Q. (BY MR. BON) Okay. When it's given in
 23 suppository form, does it get into the bloodstream
 24 faster than if it's given orally?

25 MS. BZDYK: Object to the form.

1 A. I don't know the rate of absorption from
 2 a suppository. It wouldn't surprise me, but I
 3 couldn't say for sure. Of course he was not
 4 capable of taking an oral medication, and you
 5 couldn't give acetaminophen IV or anything like
 6 that. So that was the only route that was
 7 available to them. But whether it's faster I
 8 couldn't tell you.

9 Q. (BY MR. BON) Okay. Let me just see your
 10 notes for a second, because my page cuts off at the
 11 bottom. I think I missed the last line.

12 A. (Indicating).

13 Q. All right. (Indicating).

14 MS. BZDYK: I think all of ours do. You
 15 want him to go ahead and read it in so that it's
 16 clear on the record what it is?

17 MR. RUTHERFORD: Good idea.

18 Q. (BY MR. BON) If you can just read
 19 (Indicating). Start with the underlined portion of
 20 that page of the notes that start with discharge
 21 summary dash Dr. Resnick.

22 A. Yes. I believe I have Dr. Resnick's
 23 discharge summary in these documents that we marked
 24 (Indicating). But from that I extracted that his
 25 weight was 70 kilograms. He was a 16-year-old

1 Hispanic male who collapsed while playing roller
 2 hockey. Urine toxicology positive for
 3 amphetamines; had been taking Tylenol Plus, quote,
 4 which contains ephedrine and closed quote, which is
 5 the information that I was referring to previously.

6 Q. Okay. That's all I really have on those
 7 notes. Let me just take a look at the -- Okay.
 8 Let's move on.

9 Other than the answers to expert witness
 10 interrogatories which you assisted in the
 11 completion of, have you prepared any type of
 12 written report or written conclusions in this case?

13 A. No.

14 Q. Okay. Here comes the big question.
 15 What opinions have you formed regarding this
 16 matter?

17 A. Well, they're listed in the answers to
 18 the interrogatories, but first of all to deal with
 19 the question of the amphetamine positive. As I've
 20 experienced in my laboratory or both of my
 21 laboratories that I've worked in, an amphetamine
 22 test can give a false positive by a number of
 23 things including pseudoephedrine. And, if you look
 24 at the Dade Behring product insert which was also
 25 among the documents that were marked related to the

1 urine amphetamine screen flex reagent cartridge,
2 they state in their documentation that D ephedrine
3 and D pseudoephedrine or D and L pseudoephedrine at
4 100,000 nanograms per milliliter give negative
5 results. That's in this table on the first page.

6 Q. Right.

7 A. They refer to D ephedrine, L
8 ephedrineepedrine, DL ephedrine, and then down on
9 the third column they refer to pseudoephedrine, D
10 pseudoephedrine, L pseudoephedrine, that all of
11 those give negative results.

12 Q. Okay.

13 A. And if you look under summary on the
14 left-hand column it states, "The Roach Abuscreen
15 OnLine reagents" --

16 Do you have that there?

17 Q. Yes.

18 A. -- "are in the UAMP flex reagent
19 cartridge." Okay? In other words, that is the
20 Roach Abuscreen OnLine reagents, and that is the
21 subject of the article that I also provided by my
22 colleague Peter Stout. And they evaluated on
23 actual samples from actual people that were in the
24 military drug testing program, and they used the
25 Roach Abuscreen OnLine reagents. And they had a

1 significance of this Dade Behring document, the
2 drugs that are all listed in these three columns
3 here where it says known interfering substances,
4 are those substances that could potentially produce
5 false positives for amphetamines?

6 A. No. Those are substances that they
7 tested to see if they would give false positives,
8 and - but they did it by taking known negative
9 human urine supplied by Roach I believe and not -
10 yeah, I guess it was by Roach, and adding the pure
11 drug standard to that urine at a known
12 concentration. They didn't get a positive.

13 Q. Okay.

14 A. Okay? That occurs with other drugs.
15 For example, dextromethorphan will frequently give
16 a false positive that indicates PCP, and then we do
17 the confirmatory testing and we find the
18 dextromethorphan, and yet their product inserts
19 will say it doesn't react with dextromethorphan.
20 It's something that is related to passing it
21 through the body that changes the nature of the
22 sample and gives them a false positive.

23 Q. So these are, and correct me if I'm
24 wrong, in vitro tests versus in vivo tests?

25 A. Correct.

1 substantial number of false positives that turned
2 out to be mostly pseudoephedrine. So something -
3 when a person takes the drug, some metabolite or
4 something about the composition of the metabolites
5 plus the parent drug in their urine are capable of
6 triggering a positive on that particular test.

7 So that's the background for that
8 opinion. They got a positive result which can
9 occur from the pseudoephedrine that we know based
10 upon the history that he took.

11 Then later, not much later but a little
12 bit later, he was tested by Miami Children's
13 Hospital and also by the send-out to SmithKline,
14 and that gave a negative result. If it had really
15 been amphetamine it would have been positive on
16 both tests and it would have confirmed, because
17 amphetamine being a controlled substance would have
18 had to be confirmed in order to be properly
19 documented.

20 So positive on one test that we know can
21 give false positives with pseudoephedrine
22 specifically and then negative with another
23 amphetamine test tells us that it's consistent with
24 pseudoephedrine but not with amphetamine.

25 Q. Okay. Now, just so I understand the

1 Q. Okay. So the study here in the
2 technical note was a study in actual humans, in
3 vivo testing, versus this would be a study in a
4 petrie dish?

5 A. Well, not specifically in a petrie dish,
6 but we refer to it as spiked samples.

7 Q. Okay.

8 A. Where you've added the drug to the
9 sample, you haven't passed it through the metabolic
10 processes of a body.

11 Q. Okay. In this article that you provided
12 to us which we've marked as Exhibit Number 6, it
13 talks about a couple of different products,
14 ephedrine, pseudoephedrine, and I'm just going to
15 call it PPA?

16 A. Yes.

17 Q. Okay. Are there any other known
18 substances that you're aware of that could
19 potentially produce a false positive for
20 amphetamine screenings in the type of screening
21 that was performed here that produced the positive
22 result?

23 MS. BZDYK: Object to the form.

24 Which testing is that?

25 MR. BON: The one that came out positive

1 between 8:00 and 10:00 o'clock in the morning?
 2 A. Well, it's the final conclusion based
 3 upon the history that he had taken the Tylenol
 4 Cold, number one; the positive screen using a
 5 method that can give positive results with
 6 pseudoephedrine; the negative screen obtained at
 7 Miami Children's with the followup testing at
 8 SmithKline, which I've already alluded to; the
 9 reference here that I've referred to where it
 10 points out that there are a lot of false positives
 11 and that these are at concentrations below those
 12 that the manufacturer suggests, or in other words
 13 the concentrations that they found in the study
 14 extended below the concentrations that the
 15 manufacturer of the product suggests are necessary
 16 to produce a positive, and yet they did have a
 17 positive. And there's no other explanation for it
 18 that fits the facts.
 19 Q. If the parents had not reported that
 20 Mr. Valdes had taken Tylenol Cold or Flu that
 21 morning, if that was not something that appeared in
 22 the medical records, would you have been able to
 23 reach that conclusion using any of the tests or any
 24 of the science or mathematics unless you were also
 25 provided the parents' testimony or statements that

1 parents' testimony?
 2 MS. BZDYK: Object to the form.
 3 A. Without the parents' testimony, I can't
 4 say anything about the dose. All I can say is that
 5 the medication, within a reasonable scientific
 6 certainty, a medication containing pseudoephedrine
 7 was taken in a time frame such that it was
 8 responsible for these results.
 9 Q. (BY MR. BON) What about the time frame
 10 between 8:00 and 10:00 a.m.? Without the parents'
 11 testimony, would you have been able to reach that
 12 conclusion with the information that you had except
 13 for the parents' statement of the time frame that he
 14 took pseudoephedrine?
 15 MS. BZDYK: Object to the form.
 16 A. I couldn't say specifically when he took
 17 it based upon the results. It could have been
 18 taken - we know it was taken before the test, but -
 19 and most likely at least a couple of hours before
 20 the test, but then if - with the acetaminophen
 21 result if it was taken just a couple of hours
 22 before the test that would have been positive. So,
 23 you know, taking those two results together, it had
 24 to be a little bit longer. But it could have been
 25 the night before and probably still given the same

1 Mr. Valdes had taken a pseudoephedrine containing
 2 product?
 3 MS. BZDYK: Object to the form.
 4 A. I couldn't pin it down to
 5 pseudoephedrine based solely upon information
 6 that's available. I could rule out amphetamine and
 7 methamphetamine, because they would have been
 8 positive both times.
 9 Q. (BY MR. BON) Right.
 10 A. But I couldn't distinguish whether it
 11 was ephedrine or pseudoephedrine or PPA or
 12 norpseudoephedrine. I couldn't distinguish among
 13 that group, because they can all give positive
 14 results on the testing that was done at the Deering
 15 laboratory.
 16 But the fact that at the time the
 17 parents said, "Oh, well, he took Tylenol Cold,"
 18 which we now know contains pseudoephedrine, that is
 19 - that concludes it as far as I'm concerned.
 20 Q. But were you able to determine without
 21 the parents' testimony that it was a single adult
 22 dose versus a half of an adult dose versus a double
 23 or a quadruple adult dose? Were you able to
 24 determine that from the information that was
 25 provided to you if you weren't to rely on the

1 results, without having narrowed it down based upon
 2 the parents' testimony.
 3 Q. (BY MR. BON) All right. I'm just going
 4 to read your second opinion here which is the
 5 answer to Interrogatory Number 6 and ask if I
 6 understand what goes into your opinion and what
 7 formed the basis of it, and that's "within
 8 reasonable probability Armando Valdes did not
 9 consume any drugs containing amphetamines given the
 10 negative blood toxicology screen obtained at Miami
 11 Children's Hospital."
 12 A. I want to make a correction at this
 13 point. It's not based upon the blood. It's based
 14 upon the urine. Somehow that got confused in the
 15 translation. But it should have said the urine
 16 toxicology. And I've already discussed that as far
 17 as the immunoassays, one positive, the other
 18 negative, the most likely explanation for that is
 19 that it's an Ephedra-type alkaloid.
 20 Q. So, just so the record's clear, you're
 21 correcting an answer to Interrogatory Number 6, the
 22 second bullet pointed opinion that says, "Within a
 23 reasonable probability Armando Valdes did not
 24 consume any drugs containing amphetamines given the
 25 blood toxicology"? You're saying it should read