

1 Q Commonwealth versus Angel D. Hernandez?

2 A. Yes.

3 Q And you are --

4 A. Officer James D. Pollard.

5 Q James D. Pollard. Would you please read on page 24, right  
6 there?

7 MS. DILLON: To yourself, sir.

8 Q Yes, to yourself. (Pause)

9 A. Yes.

10 Q All right. Now, I ask you again, had Mrs. Kratoville seen  
11 the gloves before she made the identification?

12 A. She may have, yes.

13 MS. SILVIA: No further questions.

14 MS. DILLON: I have no further questions.

15 May we approach the bench, Your Honor?

16 THE COURT: Yes.

17 (The following bench conference took place at this  
18 point):

19 MS. DILLON: Your Honor, John Abbott is here from  
20 Boston. I'd like to call him out of order, but it would  
21 necessitate having him talk about evidence that hasn't  
22 been admitted yet. Those things that I've marked for  
23 identification, I don't see a problem with, but other articles

1       [REDACTED] something that had been taken from Mr. Hernandez, which  
2       [REDACTED] be brought in, I propose --

3               MS. SILVIA (interposing): Does that mean he'd  
4       have to come back again?

5               MS. DILLON: If you don't object to his coming  
6       out of order.

7               MS. SILVIA: I don't mind. I have no objection  
8       to it being out of order.

9               THE COURT: All right, then, fine.

10              MS. SILVIA: No objection.

11              (The foregoing bench conference was concluded at this  
12       point, whereupon the following proceedings took place):

13              MS. DILLON: The Commonwealth calls John Abbott.

14  
15                      JOHN COPE ABBOTT (Sworn)

16       DIRECT EXAMINATION BY MS. DILLON:

17       Q       Sir, would you please state your name and occupation?

18       A       John Cope Abbott. I'm a forensic serologist and a  
19       [REDACTED] medical technologist.

20       Q       Sir, would you please tell us something of your education  
21       and technical background?

22       A       I have a Bachelor of Arts degree in premedical and  
23       professional biology from Gordon College, Wenham,

1 [REDACTED] Massachusetts, a Master of Science degree in Forensic  
2 Chemistry from Northeastern University in Boston, and

3 I'm a registered medical technologist.

4 Q What about your professional background, other than your  
5 formal education? Have you attended any seminars or con-  
6 ventions to update your education, so to speak?

7 A. Yes, I have. I regularly attend the national conven-  
8 tions and local conventions of the American Medical  
9 Technologists, of which I am a registered member. I  
10 also am a member of the Midwestern Association of  
11 Forensic Scientists, and I have taken continuing edu-  
12 cation courses through several other organizations.

13 MS. DILLON: I'd like to move to have him admitted  
14 as an expert, Your Honor.

15 THE COURT: Yes.

16 Q Sir, are you familiar with -- well, I'll stop. Basically,  
17 what is forensic science? What does it mean?

18 A. Forensic science means, in general, means it's that  
19 area of scientific analysis dealing with legal aspects.

20 Q Are you familiar with Serological Research Institutes?

21 A. Yes, I am.

22 Q What is it?

23 A. Serological Research Institutes is headquartered in

1 [REDACTED] California, and I was previously employed by Serologi-  
2 cal Research Institutes, attending approximately seven  
3 months of work in California, then moved back to Massa-  
4 chusetts and opened up the East Coast office of Sero-  
5 logical Research Institutes, which at that time was  
6 then located in Burlington, Massachusetts. I then  
7 moved the office to Bedford, Massachusetts and took  
8 over sole ownership of the company at that point in  
9 Massachusetts.

10 Q Are you familiar with something that's called the Seri Rape  
11 Kit?

12 A. Yes, I am.

13 Q Would you please tell the Court and jury what the Seri Rape  
14 Kit consists of?

15 A. The kit is a packaging of those materials used in the  
16 investigation of that alleged sexual assault of a  
17 victim. The kit contains envelopes and swabs. The  
18 swabs are for oral, vaginal and rectal examinations.  
19 There are glass slides presented. There are envelopes  
20 to contain hair samples. There are envelopes with  
21 combs to obtain combings of both head and pubic hairs.  
22 There are gauze pads for obtaining saliva and nasal  
23 secretions. There's a tube for obtaining a blood

1 sample. There are envelopes for photographs, if re-  
2 quired or desired by the medical staff. There is an  
3 envelope containing a physician's report form.

4 Q Let's start with the blood samples, sir. Why would you  
5 want a blood sample, and from whom would you want a blood  
6 sample in investigating a rape case?

7 A. The rape kit is intended for victim collection and so  
8 the blood sample is that of the victim. The necessity  
9 for that is that, if an alleged sexual assault has  
10 occurred and there is an exchange of body fluids,  
11 either urine, saliva, fecal matter, seminal fluid,  
12 whatever there, one of the processes that a serologist  
13 will be looking at is, what is the identity of the  
14 material, and what are the blood groups that are  
15 possibly found in that material? And in order to  
16 make a proper determination of the blood grouping  
17 found in the material, we'd need to know what is the  
18 blood group of the victim?, because the assumption is  
19 always made that it is a mixed fluid, and will, there-  
20 fore, contain fluid from the victim, as well as from  
21 any person who may have deposited that material.

22 Q If you should have a blood grouping -- excuse me, a blood  
23 sample -- of both the victim and a suspect, would that be

1       [REDACTED] ul to you?

2       [REDACTED] Yes, it can be very much so, the having of both samples.

3               The victim's sample is then processed for its blood  
4               group or various blood groups, and then the suspect  
5               or other parties are examined as well to determine the  
6               blood group or blood groups present in their blood  
7               and other fluids, and if there are differences, then  
8               a conclusion can be drawn on any questioned sample  
9               that the fluid came from one or the other party to  
10              the exclusion of one or the other, if there were  
11              differences, and if there were similarities, then it  
12              would be -- the only statement would be made that they  
13              were similar, and no conclusion drawn as to the possi-  
14              ble origin.

15   Q       Now, you've also told us that you have something in there  
16             to check saliva. Why would you want saliva?

17   A.       When we examine blood, we look for a grouping, which  
18             we call Lewis Grouping. The Lewis Grouping is related  
19             to what's known as secretor status. If I may explain  
20             that a little bit --

21   Q       Please.

22   A.       Every person is either a secretor, a nonsecretor, and  
23             a secretor is defined as an individual who exhibits a

1 thing called H substance, as well as their blood group.  
2 In their other body fluids, that is semen, vaginal  
3 fluid, saliva, nasal secretions, ear wax, perspiration,  
4 and so forth. And so, if a person's a secretor, we  
5 can determine their blood group from other body fluids.  
6 If they are not a secretor, then we cannot determine  
7 their blood group from the other fluids. However, the  
8 Lewis Grouping is complex, in that it is not always  
9 clear from the blood grouping what the secretor status  
10 is of the person, so, therefore, we ask for a saliva  
11 sample so that we can directly test the saliva sample  
12 for secreted substances, and if we find them -- if we  
13 find the blood group substances and there was enough  
14 saliva to start with, then we're able to say whether  
15 or not that person is a secretor, regardless of the  
16 Lewis Grouping results.

17 Q What percentage of the population is a secretor?

18 A. Approximately 80 percent of the general population  
19 are classified as blood group substance secretors.

20 Q Now, you talked about blood groups. I think most of us  
21 are familiar with A, B and O. Is that all you work with?

22 A. No.

23 Q Do you work with that grouping?

1        Yes, I do. That is the classical ABO blood grouping  
2        system, of which there are four major types, which I  
3        believe most people are aware of, Groups A, B, AB and  
4        O.

5                MS. DILLON: Your Honor, may I make some markings  
6        on the upper corner?

7                THE COURT: Yes.

8                (Ms. Dillon did some printing on the chalkboard.)

9        Q        How is that spelled?

10        A.     S-e-c-r-e-t-o-r (spelling).

11        Q        You say 80 percent of the population?

12        A.     That's correct.

13        Q        What percentage of the population has blood group A?

14        A.     Approximately 40 percent, 35 or 40 percent.

15        Q        B?

16        A.     Group B, roughly 8 to 12 percent.

17        Q        O?

18        A.     Group O, approximately 40 to 45 percent.

19        Q        And AB?

20        A.     Group AB, 2 to 5 percent.

21        Q        Do you know if secretors are more or less evenly distributed  
22        amongst those four basic blood groups?

23        A.     They would be distributed within roughly that eighty-



1            twenty population, because they are not associated,  
2            the two systems. Secretor status is independent of  
3            blood group.

4        Q     Now, sir, is that the only grouping of blood that you work  
5            with when you perform a forensic examination in a rape kit?

6            A.   No, it is not.

7        Q     What is the other grouping that you work with?

8            A.   There are several others, but predominantly the one  
9            of most use is called the PGM system, and that is an  
10           enzyme system, which also is independent of the ABO  
11           blood group; it is independent of the secretor status;  
12           it discriminates among individuals, however, in that  
13           not everybody has the same PGM type.

14       Q     How many different kinds of PGM are there?

15           A.   Conventional PGM, there are three types, which can be  
16           broken down further, so that there are ten subtypes  
17           of PGM.

18       Q     Do you have labels for them?

19           A.   Yes, we do.

20       Q     What kinds of labels do you have?

21           A.   They're numerical, as opposed to alphabetical. The  
22           conventional PGM types are Type 1, Type 2 and Type 3,  
23           and, as I said, those can further be broken down, in

1 that, PGM Type 1 is really three classifications.

2 There is a one plus, there's a one minus, and a one  
3 plus one minus.

4 In Type 2, there is a 2 plus, a 2 minus, a 2  
5 plus 2 minus. Let's see. (Pause) That's it for the  
6 Type 2. And let's see, did I originally say that  
7 Type 3 -- the Type 2, instead of type 3?

8 Q 2-1.

9 A. That's correct. I was confusing myself. The subtypes  
10 on Type 2, one type is 2 plus 1 plus, 2 plus 1 minus,  
11 2 minus 1 plus, and 2 minus 1 minus, so that there are  
12 ten types.

13 Q Doctor, did you have occasion to be sent a rape kit by the  
14 Chicopee Police Department relating to Rosemary Kratoville?

15 A. Yes, I was.

16 Q Do you recall what item she was sent in relation to Rosemary's  
17 case?

18 A. I have my case file, which I can refer to.

19 Q Please.

20 A. There were a number of items received.

21 Q How many?

22 A. From the rape kit only?

23 Q No. Generally speaking, sir, what did you get, in order to

1                   [REDACTED] our analysis in this case?

2                   [REDACTED] I received 46 items.

3           Q       What were they?

4           A.     They were a blood sample from Rosemary Kratoville,  
5                   oral swabs and slides from Rosemary Kratoville, vaginal  
6                   swabs and slides from Rosemary Kratoville, rectal  
7                   swabs and slides from Rosemary Kratoville, a nasal  
8                   mucus sample from Rosemary Kratoville, pulled head  
9                   hairs of Rosemary Kratoville, head hair combings from  
10                  Rosemary Kratoville, pulled pubic hairs of Rosemary  
11                  Kratoville, pubic hair combings of Rosemary Kratoville,  
12                  a dry blood sample of Rosemary Kratoville.

13          Q       Just a moment, sir. Now, of those items that you were sent,  
14                   in your analysis, did you discover anything of any forensic  
15                   value to this case?

16          A.     In examining the blood sample, I determined the blood  
17                   group of Rosemary Kratoville.

18          Q       What's the blood group of Rosemary Kratoville?

19          A.     She is a Blood Group B, and her PGM type is Type 1  
20                   plus 1 minus.

21          Q       Do you know if she's a key secretor?

22          A.     Yes, I do.

23          Q       Is she?

1 In examining the blood and the saliva, she is a Group  
2 B secretor.

3 Q Of the items that you have talked about so far, swabs from  
4 the vagina, rectum and mouth, was any semen or anything  
5 else found?

6 A. On the swabs and slides from oral, vaginal and rectal  
7 samples, there was no semen detected on any of those  
8 items.

9 Q What else were you sent, as far as Rosemary's clothing, in  
10 particular, sir?

11 A. All right. Additionally, I received a pair of panties,  
12 a pair of pantyhose, a bra, a slip and --

13 Q (Interposing) Of those items, was there anything of forensic  
14 value on the panties, pantyhose or bra?

15 A. There was. There was a bloodstain. There was no  
16 semen detected on those items. On the panties, there  
17 was a pubic hair, which was similar to the nonpubic  
18 hair standards of Rosemary Kratoville, and other than  
19 that on those three items, there was nothing further.

20 Q Was there a slip of Rosemary Kratoville that you mentioned?

21 A. Yes.

22 Q Was there anything of forensic value you noted on the slip?

23 A. There were several small bloodstains on the slip, but

1       there was no semen.

2       Q       were the bloodstains located on the slip?

3       A.     I believe the bloodstains were on the waist area.

4       Q     I'm sorry?

5       A.     On the waist area.

6       Q     Waist area, thank you, sir. What else were you sent?

7       A.     I also received an envelope containing a thread-like  
8               specimen, which fell off the victim's uniform.

9       Q     Did you do anything with that thread specimen?

10      A.     Yes, I did.

11      Q     What did you do with it?

12      A.     I examined that visually and microscopically, and I  
13               found it to be a purple thread, which was similar,  
14               in further examination, to the purple thread from the  
15               victim's coat.

16      Q     From Rosemary's coat itself?

17      A.     That's correct.

18      Q     What else were you sent?

19      A.     I also received an envelope bearing what was identified  
20               as a sample which fell off the victim's slip.

21               I also received a hair sample or an envelope  
22               identified as a hair sample for the presence of semen  
23               from Rosemary Kratoville, and also received an envelope

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1 [REDACTED] containing photographs from the home of Rosemary  
2 [REDACTED] Kratoville, and a white uniform dress of Rosemary  
3 Kratoville's, a purple coat of Rosemary Kratoville's.

4 Q Stopping you right there, sir, now, those items, what con-  
5 dition were they in, generally speaking, when they were  
6 sent to you? Did something special have to be done, in  
7 order to preserve evidence?

8 A. They were packaged. The coat was in a separate paper  
9 bag. The panties and pantyhose, bra and slip were all  
10 contained within one bag, which was contained within  
11 the sexual assault collection kit, but the other items  
12 were separately bagged.

13 Q Other than the items of Rosemary's that you've described,  
14 did you receive anything else, in order to do your analysis?

15 A. Yes, I did.

16 Q What did you receive?

17 A. I also received items identified as from Angel Hernandez.  
18 Those consisted of a pair of black Sergio jeans.

19 Q Was anything of forensic value found on the jeans?

20 A. I found nothing of significance.

21 Q Anything else?

22 A. A pair of white Levis jogging pants.

23 Q Excuse me just one minute, sir. (Pause) I'd like to show

1 [REDACTED] these, and ask you if you recognize these (indicating).

2 [REDACTED]

3 A. Yes, I do.

4 Q What are those?

5 A. Those are the white Levis jogging pants identified  
6 as those of Angel Hernandez, which I received.

7 MS. DILLON: I'd like to have these marked for  
8 identification.

9 ASSISTANT CLERK MAZZA: That will be F, Your  
10 Honor.

11 THE COURT: Yes.

12 (The following was marked F  
13 for Identification: Jogging  
pants.)

14 Q Was anything of forensic significance found on the jogging  
15 pants?

16 A. There was no blood or semen on them. There was one  
17 dark brown pubic hair, which was unlike the pubic hairs  
18 of Rosemary Kratoville.

19 Q [REDACTED] else were you sent?

20 A. I also received a black and red sweater identified as  
21 that of Angel Hernandez.

22 Q I'd like to show you what's now marked for identification  
23 as C. Do you recognize this (indicating)?

1        [REDACTED] Yes, I do.

2        Q        [REDACTED] What is this?

3        A.        That's a black and red sweater which I received.

4        Q        Was there anything of forensic value found on that sweater?

5        A.        There was no blood or semen nor other forensic mater-  
6                    ials found on that sweater.

7        Q        What else were you sent?

8        A.        I received a pair of black leather driving gloves.

9        Q        I'd like to show you what's now been marked for identifi-  
10                   cation as D. Do you recognize these, sir (indicating)?

11       A.        Yes, I do.

12       Q        What are those?

13       A.        Those are the black leather driving gloves which I  
14                   received.

15       Q        Was anything of forensic value found on those?

16       A.        There was no blood or semen detected on those.

17       Q        What else were you sent?

18       A.        I received a pair of white jockey shorts.

19       Q        I'd like to show you these, sir, and ask you if you recog-  
20                   nize them.

21       A.        Yes, I do.

22       Q        What are those?

23       A.        Those are the white jockey shorts I received.



1 [REDACTED] MS. DILLON: Your Honor, I'd like to have these  
2 [REDACTED] for identification.

3 THE COURT: All right, G.

4 (The following was marked G  
5 for Identification: White  
6 Jockey shorts.)

7 Q Was anything of forensic value found in the Jockey shorts?

8 A. Three areas demonstrated the presence of semen. Saliva  
9 was not detected in any of the areas. That blood  
10 grouping showed the stains to contain H group substance,  
11 which is consistent with having come from a Group O  
12 Secretor.

13 Q A Group O Secretor?

14 A. That's correct.

15 Q Were you sent anything else?

16 A. I received a coat, winter kind of jacket.

17 Q I'd like to show you what's now marked for identification  
18 as A. Do you recognize this (indicating)?

19 A. Yes, I do.

20 Q [REDACTED] is this?

21 A. That's the coat I received.

22 Q Was anything of forensic value found on the coat?

23 A. There was nothing of significance noted on that coat.

THE COAT: May I see counsel for a moment? This

1       ...n't be on the record.

2       (There was a bench conference off the record, in  
3       accordance with the direction of the court.)

4               THE COURT: This witness is liable to take a  
5       little more time. It's now past one. We'll now take our  
6       luncheon recess, and we'll stand in recess until two o'clock.

7               (There was a luncheon recess beginning at 1:00 o'clock  
8       P.M.. The luncheon recess ended at 2:05 o'clock P.M.,  
9       whereupon the following proceedings took place in the  
10       presence of the jury panel and the defendant):

11    Q       Mr. Abbott, I think, when we left, you had gotten to Item  
12       No. 10A on the list of items that you received in this  
13       case. Would you please tell us from thereon what it was  
14       that you received?

15    A       I received two blood sample tubes with blood -- I  
16       received two blood sample tubes containing blood  
17       identified as that of Angel Hernandez.

18    Q       Did you type that blood, sir?

19    A       Yes, I did.

20    Q       What kind does he have?

21    A       The blood was Group O, PGM Subtype 1 plus.

22    Q       Was he a secretor?

23    A       As identified by saliva sample, yes, he was a Group O

1        Secretor.

2        Q    Did you receive anything else?

3        A.    Yes, I did. I also received pulled head hairs and  
4              pulled pubic hairs of Angel Hernandez, and, as pre-  
5              viously mentioned, a saliva sample of Angel Hernandez.  
6              I also received fingernail scrapings from each of the  
7              ten fingers, five right, five left.

8        Q    What did you do with the fingernail scrapings from Angel  
9              Hernandez that you received?

10       A.    I opened the envelopes and examined the contents of  
11              them and --

12       Q    (Interposing) Just a minute, first of all, how would you  
13              take a fingernail scraping? What do they do?

14       A.    A fingernail scraping is generally taken with either  
15              an orange stick, or sometimes people use toothpicks,  
16              something of that nature, in order to remove what  
17              debris may be collected on the fingernails. The pur-  
18              pose for collecting that is to obtain only material  
19              that's obtained within the fingernail, not the tissue  
20              of the finger itself.

21       Q    What happens with any debris that is so removed? How do  
22              they get it to you?

23       A.    In any number of manners. It may be then placed in

1 glassine packets or, as in this case, the debris, if  
2 any, was collected on a gauze pad, folded and placed  
3 within an envelope.

4 Q Did you examine the fingernail scrapings taken from Angel  
5 Hernandez?

6 A. Yes, I did.

7 Q What, if anything, did you find?

8 A. Very little. Do you want it itemized by finger?

9 Q Sure.

10 A. From the left thumb, there was a very small amount of  
11 debris, nothing of forensic significance. There was  
12 no blood or semen.

13 The left index finger, there was nothing, other  
14 than the gauze pads.

15 The left middle finger, nothing other than the  
16 gauze pads.

17 The left ring finger, there was again a very small  
18 amount of debris, nothing of forensic significance,  
19 no blood or semen.

20 The left little finger, there was nothing, other  
21 than the gauze pads.

22 From the right thumb, there was only a gauze pad.

23 The right index, only the gauze pads.

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1           The right middle finger, there were the gauze  
2 pads with a small wood splinter contained therein.

3           From the right ring finger, only the gauze pads.

4           And from the right little finger, again only the  
5 gauze pads.

6 Q       Were you made aware of what time of day or night the scrapings  
7 were taken from his fingernails?

8 A.       I believe identified on the submission envelope there  
9 was a time and a slip that was contained therein -- I  
10 believe quarter past midnight.

11 Q       Sir, is there anything unusual about finding nothing but  
12 a small amount of debris on a person's fingernails at the  
13 end of the day?

14 A.       Depending on the hygiene of the individual, if the  
15 person works nights, then perhaps the fingernails would  
16 be cleaned prior to going to work. If the person has  
17 worked all day, then it is not uncommon to find a  
18 certain amount of debris collected under each of the  
19 nails from just normal activities, but it's hard to  
20 say, depending on hygiene and a number of circumstances.

21 Q       Thank you, sir. Now, there was one other item submitted  
22 for your analysis, I believe.

23 A.       Yes, there was.

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1 Q [REDACTED] was that?

2 A. That was a swab taken from the penis of Angel Hernandez.

3 Q Was there anything of forensic value found on that swab?

4 A. There was no saliva indicated, and blood grouping  
5 showed the presence of H Group specific substance,  
6 which would be consistent with having come from a  
7 Group O secretor.

8 Q I'd like to call your attention back to item label 1T.

9 Can you tell us what that was?

10 A. Item 1T on my report was, quote, a specimen which fell  
11 from the victim's slip.

12 Q What was that, sir?

13 A. That particular item turned out to be a dark black-  
14 brown pubic hair.

15 Q Did you examine that item in relation to the pubic hair  
16 samples of Rosemary Kratoville and the known pubic hair  
17 samples of Angel Hernandez?

18 A. Yes, I did.

19 Q What were the results of your comparison?

20 A. The specimen which fell from the slip, which was  
21 pubic hair, was unlike the submitted standard pubic hairs  
22 of Rosemary Kratoville. That hair, however, was  
23 within the range of the known submitted hairs from

1 Angel Hernandez.

2 Q next item, sir, Item 1U, what was that item?

3 A. That was a hair sample submitted, cut hairs from  
4 Rosemary Kratoville, cut head hairs, which contained  
5 a substance initially purported to be semen. It was  
6 identified to be semen, and the semen was demonstrated  
7 to be Group O, in that it contained the H Group sub-  
8 stance, and it had PGM Type 1 plus. It's where the  
9 semen was from a Group O secretor.

10 Also stuck in the matrix of the hair and semen  
11 was a dark black pubic hair, which was unlike the  
12 pubic hairs, the submitted standard of Rosemary Krato-  
13 ville, but was within the range of the submitted known  
14 pubic hairs of Angel Hernandez.

15 Q And Item No. 3, sir?

16 A. Item No. 3 was the purple coat of Rosemary Kratoville.  
17 On the left shoulder area, there were white, crusty  
18 stains, which testing demonstrated them to be semen,  
19 and the semen was Blood Group O, PGM Subtype 1 plus.  
20 There was no saliva contained within that stain.

21 Q Just as a general question, why is it that you use various blood  
22 groupings when you do a forensic analysis such as this?

23 A. In any forensic analysis, the reason for doing more

1 [REDACTED] than one blood grouping is to profile the individual  
2 [REDACTED] depositor of that stain, in that, since all of the  
3 blood group systems they have, which were described  
4 here, the ABO system, PGM system and secretors, all  
5 of those then are independent, one of the other.  
6 That means the ABO system has nothing, no relationship  
7 to the PGM type, so it doesn't matter what your ABO  
8 group is to determine the PGM type. They're all  
9 different, and, therefore, I can discriminate lesser  
10 and lesser populations by getting more and more results.  
11 It narrows the population from which a stain may have  
12 derived.

13 Q Did you do a comparison on Group O, PGM 1 plus Group O  
14 secretor? Could you tell us what percentage of the popu-  
15 lation that would represent?

16 A. A Group O PGM Type 1 plus secretor is approximately  
17 eleven percent of the Hispanic population.

18 Q And you derived that OPGM plus from some of his semen  
19 samples; is that correct?

20 A. The Group O semen was found in the undergarments in  
21 his Jockey shorts, as well as the swab from the penis,  
22 Group O secretor. I did not type those in the PGM  
23 system.



1 Q [REDACTED]uld, however, eliminate the Hispanic female population,  
2 [REDACTED]n't it?

3 A. Given that there was semen present and that women do  
4 not produce semen, that's correct.

5 MS. DILLON: Thank you, sir. I have no further  
6 questions.

7  
8 CROSS-EXAMINATION BY MS. SILVIA:

9 Q Good afternoon, Doctor. I'm Jane Silvia. I represent Mr.  
10 Hernandez, and I have some questions I'd like to ask you.

11 First of all, when you were given all these items to  
12 be tested, were they given to you all at once?

13 A. Yes, all of the items were submitted on the 12th of  
14 December, 1987.

15 Q And are these items submitted with a summary of what the  
16 case entails or whatever, that type of thing?

17 A. It varies from case to case, but in this particular  
18 case, and in all the sexual assault cases collected  
19 by seri kits, I received a copy of the report form  
20 that's contained within that kit, and further in this  
21 case reports from a police department were also sub-  
22 mitted.

23 Q I see some from those reports you also knew at what time

1 [REDACTED] Hernandez has been arrested and that sort of thing;  
2 [REDACTED] that correct?

3 A. Approximately, I believe, yes.

4 Q Okay. Now, as far as the blood that was found, I believe,  
5 on the pantyhose of Mrs. Kratoville and on her panties and,  
6 I believe, on her half slip, did that, to you, as an expert,  
7 signify that there was how much blood present? Would it  
8 give you any idea of how much blood would have been present  
9 for that to have shown?

10 A. I'm not sure I follow your question.

11 Q All right. From what you were given, from the panties,  
12 from the half slip and, I believe, the pantyhose of Mrs.  
13 Kratoville, from those bloodstains, just the bloodstains  
14 alone, would they give you any idea of how much blood had  
15 been present?

16 A. Well, I know how much blood was present on the items.

17 Q Just on the --

18 A. (Interposing) On the items themselves, on the panties  
19 and the pantyhose, the crotch of those two items were  
20 fairly well bloodstained, the pantyhose, in particular.  
21 The slip only had very, very small bloodstains. The  
22 blood on the panties and the pantyhose, from my ex-  
23 perience, would be consistent with menstruation.

1 Q [REDACTED] I have a question about the O, the O, the type O  
2 secretor; is that correct, Doctor?

3 A. Yes.

4 Q And the O secretor with the PMG and the 1 plus, that would  
5 put Mr. Hernandez, as I understand it, in eleven percent  
6 of the Hispanic population?

7 A. It would put any individual with that particular  
8 combination in the eleven percent, and since Mr.  
9 Hernandez has that blood group, he would be within the  
10 approximately eleven percent, yes.

11 Q All right, but you can't be any more specific than that,  
12 is that correct, Doctor?

13 A. To say that it is his blood, as opposed to anyone else's,  
14 no.

15 Q All right, thank you. Now, as far as the fingernail  
16 clippings, were there actual clippings, or was it just  
17 the debris that was taken?

18 A. It was only debris. The nails were not present within  
19 the sample.

20 Q And it's been your testimony that there was no blood; there  
21 was no blood found?

22 A. On what item?

23 Q Under -- from the scrapings from the fingernails.

1 That is correct, there was no blood or semen detected  
2 on those items.

3 Q All right. And also as far as the semen that was found  
4 in Mr. Hernandez' underwear, there was only semen; is that  
5 correct?

6 A. There was semen. There was no saliva. There was no  
7 blood.

8 Q Now, as far as the hair is concerned and hair being des-  
9 cribed as being similar, could you please explain that to  
10 me? Similar is not identical?

11 A. That is correct. What I mean by similar, or, as I've  
12 testified to within the range of, it means that, in  
13 examining a person's hair sample, a given individual  
14 has more than one kind or characteristic of hair, so  
15 a range is assigned to that, under a microscopic exam-  
16 ination. By saying it is consistent or that it is  
17 in the range of, it means there are similarities that  
18 cannot exclude the hair as having come from that in-  
19 dividual. It certainly is not present to be taken as  
20 positive identity. It means that it could be this  
21 individual. It could also be other individuals whom  
22 -- who are placed at the scene at the time, at the  
23 place, and so forth, who could have contributed.

1 Q [REDACTED] you, Doctor. All right, now, as far as the clothing  
2 [REDACTED] was submitted from Mr. Hernandez, was there anything  
3 found on the jacket?

4 A. No.

5 Q All right. Was there anything found on any of the clothing,  
6 other than the underwear, that I believe had the three spots?

7 A. Right, the underwear had the seminal stains. The other  
8 items had nothing of significance, other than the one  
9 pubic hair in the Levis jogging pants, which was not  
10 associated with any of the victim's hairs.

11 MS. SILVIA: Excuse me for one moment, please.

12 (Pause)

13 Q With your experience in the field, Doctor, could you give  
14 an expert opinion as to whether or not there would be blood  
15 present under fingernails if a person had inserted their  
16 fingernails into blood?

17 A. If they submitted -- if they had placed their hand into  
18 blood and did nothing else after that, did not scrub  
19 their hands, didn't continually rub them or do any  
20 other kinds of mechanical manipulations, then it is  
21 possible that there could have been blood. I can't  
22 say whether there would have been. Circumstances can  
23 vary so significantly, but, yes, there may very well

1        have been blood.

2        Q       not sure I understand your response. If the person --  
3                there would not have been, had the person been able to  
4                clean up right away; is that what you're saying?

5                A.    Yes, if the person either immediately or within a  
6                      couple of hours, depending on when the examination went  
7                      on, were able to sufficiently manipulate their hands  
8                      and/or actually scrub them, then I would not expect to  
9                      find something, but failing the scrubbing or sufficient  
10                     manipulation, then if the hands were placed into blood,  
11                     I would expect to find some blood, probably.

12        Q       And as far as the lack of saliva from -- I believe that there  
13                was something taken from the penis of Angel Hernandez -- now,  
14                for there not to have been saliva present, what would have  
15                had to have taken place, Doctor?

16                   MS. DILLON: Object to the form.

17                   MS. SILVIA: Okay.

18        Q       Let me rephrase the question, please. I notice here that,  
19                from the swabbings of the penis of Angel Hernandez, there  
20                was semen detected on this item, but no saliva was indicated  
21                to be present?

22                A.    That's correct.

23        Q       And would not such saliva appear if, in fact, that person

1 [REDACTED] some sort of oral sex with another person?

2 [REDACTED] saliva may or may not appear. If the person perform-  
3 ing the oral intercourse had a dry mouth or if there  
4 were minimal saliva, or if there had been one prior  
5 to the swabbing of the penis, then I would not expect  
6 to find saliva.

7 Q Now, as far as the semen that was found present, could that  
8 have been from the day before? Is that possible?

9 A. The semen found on what?

10 Q On the underwear.

11 A. Oh!

12 Q If the underwear had not been changed, if the person had  
13 intercourse, say, the night before, is it possible that  
14 there would still be semen in the underwear the next day?

15 A. If a given individual had worn the garment previously,  
16 and if there had been intercourse, if it were a female,  
17 or even without intercourse, it is not uncommon to  
18 find semen in a man's Jockey shorts.

19 [REDACTED] MS. SILVIA: I have no further questions at this  
20 time. Thank you.

21  
22 REDIRECT EXAMINATION BY MS. DILLON:

23 Q Doctor, based on your experience, is it unusual to find

1 [REDACTED] in a woman's head hair?

2 In my examination of sexual assault cases, or in normal  
3 individuals, one does not expect to find semen in an  
4 individual's hair, unless intercourse or ejaculation  
5 had occurred. Since women don't produce semen, it's  
6 hard to expect otherwise.

7 Q And just for clarification, this is eleven percent of the  
8 Hispanic population (indicating)?

9 A. That is correct.

10 Q Doctor, I'd like to show you what has been marked as B  
11 for Identification. Are you familiar with these (indicating)?

12 A. Yes, I am.

13 Q What is it?

14 A. It is the kind of scrub brush and material commonly  
15 found in hospital settings, particular emergency rooms  
16 and/or surgical suites.

17 Q What effect, if any, would using that substance on finger-  
18 nails have, as far as normal debris is concerned?

19 A. Its purpose is to remove the debris, so, therefore,  
20 if it were used in a consistent manner, as its supposed  
21 to be, to scrub nails, it would remove debris entirely.

22 Q Would it have any effect on blood?

23 A. It would remove blood.



1 Q [REDACTED] Thank you. Doctor, do you have a clean copy of your report,  
2 [REDACTED] to speak?

3 A. I have a copy without letterhead, and it's unsigned,  
4 but I'd be willing to sign it, if you need it.

5 Q Would you please?

6 A. (The witness signed the last page of a document.)

7 MS. DILLON: Thank you. I'd like to introduce  
8 this, Your Honor, without objection.

9 THE COURT: Exhibit No. 5, I believe.

10 ASSISTANT CLERK MAZZA: Exhibit 5, yes, Your  
11 Honor.

12 (The following was marked Ex-  
13 hibit 5: Analysis report by  
14 Dr. John Cope Abbott.)

15 RECROSS EXAMINATION BY MS. SILVIA:

16 Q Thank you. Doctor, with this type of scrub brush used to  
17 clean the nails, would it leave any kind of residue? Is  
18 there soap in it?

19 A. Yes, there is a cleansing agent, and if the hands are  
20 not rinsed, there may be traces.

21 Q And to your knowledge, working in a hospital, is it rela-  
22 tively accessible, a scrub brush such as that relatively  
23 accessible to people who have access to hospitals?

1 [REDACTED] it depends on the location in the hospital at which  
2 [REDACTED] a person works, but especially in the surgical suites  
3 area or emergency room area or, perhaps, even on nursing  
4 floors, nurseries again are again other major areas  
5 where scrub brushes like that are commonly used.

6 Q Nursery, meaning also maternity area?

7 A. Nursery and maternity. Again I mentioned nurseries  
8 simply because, if you're a new parent or visiting a  
9 parent, visiting individuals are required to use a  
10 scrub brush similar to that prior to seeing newly-born  
11 infants.

12 MS. SILVIA: Thank you, Doctor.

13 MS. DILLON: I have nothing further, Your Honor.

14 THE COURT: All right, thank you.

15 MS. DILLON: The Commonwealth calls Officer Jeanne  
16 Nowak.

17  
18 JEANNE NOWAK (Sworn)

19 DIRECT EXAMINATION BY MS. DILLON:

20 Q Please state your name. Spell it for the record.

21 A. My name is Officer Jeanne Nowak. That's J-e-a-n-n-e  
22 (spelling), and the last name is N-o-w-a-k (spelling).

23 Q How are you employed?