# Commission of Inquiry <br> Into the Wrongful <br> Conviction of David Milgaard <br> before 

THE HONOURABLE MR. JUSTICE EDWARD P. MACCALLUM
and
Testimony before the Commission
sitting at the
Bessborough Hotel at Saskatoon, Saskatchewan

On Wednesday, January 26th, 2005
Volume 9
Inquiry Proceedings

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## Appearances:

| Mr. Hersh Wolch, Q.C., | for Mr. David Milgaard |
| :---: | :---: |
| Ms. Joanne McLean, | for Ms. Joyce Milgaard |
| and Mr. James Lockyer, |  |
| Ms. Lana Krogan, | for Government of Saskatchewan |
| Ms. Catherine Knox, | for Mr. T.D.R. (Bobs) Caldwell |
| and Mr. Robert Kennedy, | Esq. |
| Mr. Garrett Wilson, Q.C., | for Mr. Serge Kujawa |
| Mr. Rick Elson, Esq., | for the Saskatoon Police Service |
| Mr. Chris Boychuk, Esq., | for Mr. Eddie Karst |
| Mr. Bruce Gibson, | for the RCMP |
| and Ms. Rochelle Wempe, |  |
| Mr. Brian A. Beresh, Esq., | for Mr. Larry Fisher |

DESCRIPTION:
HARRY EDMUND EMSON

- BY MR. HODSON
- BY MR. LOCKYER
- BY MR. WOLCH

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## Transcript of Proceedings

(Reconvened at 10:09 a.m.)
MR. HODSON: Good morning,
Mr. Commissioner.

> Our witness for today is Dr.

Harry Emson and, just before he takes the stand, I would like to ask the Commissioner to provide an order banning publication of any of the Gail Miller autopsy photos. It will be necessary in parts of Dr. Emson's evidence to refer to autopsy photographs that were marked in previous proceedings. Some of them are very graphic; however, I believe that in my discussions with Dr. Emson they are necessary for him to go through his autopsy report.

I would ask that you order that
all autopsy photos of Gail Miller be identified as in camera and confidential exhibits and an order that they shall not be published, shown or disseminated by anyone in any form unless a party first applies to the Commissioner and obtains permission, and $I$ will ask you for that order now, Mr. Commissioner, and then identify for the record a list of -- not an exclusive list, but a list of those exhibit numbers that $I$ will be
referring to today.

COMMISSIONER MacCALLUM: Your application is granted.

MR. HODSON: Thank you. And for the record, $I$ will read a list of these exhibit numbers. $066724,066725,066726,066727$-actually 727 right down to 066735 consecutively, as well, 073506, 073513, 073514, 073510, 073512, 077880 through to 077885 inclusive. So that is an incomplete list, Mr. Commissioner, that's what I'll be referring to; the order refers to all autopsy photos. They will be exhibits, but they will not be put up on the Commission's web site as public exhibits unless someone obtains an order for you to do so.

So with that, I will call Dr.
Harry Emson to the stand, please.
HARRY EDMUND EMSON, Sworn:
BY MR. HODSON:
Good morning, Dr. Emson. Thank you for testifying before this Commission. I understand that you are a resident of Saskatoon? Yes.

And $I$ will get into your curriculum vitae in a moment, but you are a practicing pathologist?

A

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Q

A Yes.
I understand that you conducted the autopsy on Gail Miller in 1969?

Yes.

And as well you testified on four occasions at the preliminary hearing and trial of both David Milgaard and Larry Fisher; is that correct? Yes.

If $I$ could call up your curriculum vitae which is document 255203. Now this is a 1999 version you will see there, Dr. Emson, and I'll just go
through that in a moment. Can you tell me, in
your career, how long have you been a pathologist for?

I qualified in pathology in 1958.
And can you give me an estimate of how many
autopsies you've performed in your career?
I'm afraid it's a rough estimate, I regret that I
have never kept a running count, but my estimate
would be very broadly between five and 10,000 .
And can you give me an estimate of how many times you've testified in court with respect to work that you've done as a pathologist?

That would be more difficult because the
individual events don't stay in my mind. It would
probably be in the hundreds.
And $I$ understand that you've testified in courts in Saskatchewan, Alberta, Manitoba, Newfoundland and New Brunswick?

I have been qualified as an expert witness in the high courts of those provinces.

Now, if I can just go through parts of your resume here. I think, correct me if I'm wrong, 1952 to '55, would that be --

The 1952 to '53 are equivalent to resident positions in Canada. The 1953 to 1955 is compulsory military service. We still had conscription, the draft in Britain at that time, and a physician, a medical student was permitted to qualify and do 18 months resident position and then was conscripted into the Royal Army Medical Corps for two years.

So in 1956 you would have commenced your residency in pathology at St. Paul's Hospital in Saskatoon? I came back from military service to Britain in '55, I did another year's residency, and then I was resident at St. Paul's in Saskatoon in '56 and '57 and at the University Hospital in '57, '58, and I think it was November of '58 I took my pathology qualifying examinations.

Q

A
$Q$

Okay. If you could turn to the next page, please, 255204 , and again those would be an accurate listing of your degrees and professional qualifications?

Yes.
If you could go to page 255205 , the next page, I think this is a continuation of professional posts held, and is that an accurate summary of the professional postings you held from 1957 through until 1996 at least?

Yes. Since 1955, which I think -- no, 1995, I beg your pardon, $I$ ceased to be head in 1990 of the department at the university. I continued as a member of the department until I had to take compulsory retirement from the university faculty and I think that was 1995, but since then $I$ have continued in the active practice of pathology first in the Saskatoon Health District and now in the Saskatoon Health Region.

And you are still conducting autopsies today?
Not today, but --
Or currently, I'm sorry. I should rephrase that. Yes.

This week, how's that.
It depends how long I stay here.

Q

A just point out, I take it from your curriculum vitae that you served in a number of capacities at the Royal College of Physicians and Surgeons of Canada and as well served as president of the Canadian Association of Pathologists and the Canadian Society of Forensic Scientists; is that correct?

Yes. I think I should also comment there on something which $I$ don't believe is in the $C V$, that I was responsible for the first setting up of examinations in forensic pathology in the Royal

College examinations in pathology.
And do you recall when that would have been? No.

Go to page 255207, please, and I take it from paragraph 8 that you spent a good part of your career teaching as well in pathology; is that correct?

Yes. I was on the university staff from the time I started at St. Paul's involved as a part-time lecturer and then after 15 years $I$ went to the university full time in 1975 where $I$ was department head, so $I$ was responsible for education and research in the department as well as the service element.

Okay. Now if you could skip ahead to 255216, please, and there are a number of pages, publications and peer review journals. I don't propose to go through any of them in detail other than to ask, over your career as a pathologist did you take a keen interest in writing articles on subject matters relevant to your profession? Yes, and $I$ think $I$ wrote, published one article which is not on this list within the last couple of years. It's in the Journal of Medical Ethics and it is not relevant to the present proceedings.

Q

A
$Q$

A ,

Now if I could take you back to January of 1969. At that time approximately how many years had you been a pathologist? You had been practicing for --

Since 1958.
'58, so 11 years, and you were teaching pathology at the time?

I was teaching -- I remember I was teaching part time in the university. I was primarily occupied as director of laboratories at St. Paul's.

MR. HODSON: Mr. Commissioner, I intend to ask Dr. Emson about a number of matters relating to his opinions, not only those opinions he formed and expressed in 1969, but also subsequently. Our Commission is not bound by the strict rules of evidence. I don't think it's necessary for me to qualify Dr. Emson as an expert as $I$ would in a court proceeding, but $I$ do intend to ask him opinion questions and I expect other counsel will as well, and if any counsel have questions regarding Dr. Emson's
qualifications that they wish to bring out, they can do so when they are examining. I propose to proceed on that basis if that is fine.

COMMISSIONER MacCALLUM: That is fine.

BY MR. HODSON:
Q
Dr. Emson, if we could go back to January of 1969 and just some general questions about autopsies and pathologists. What was the role of the pathologist as far as the autopsy in 1969, and if it's the same as today, then --

The autopsies were performed by a pathologist.
All pathologists worked in hospitals. The autopsies then and now fall into two categories. One is the autopsy on the patient dying in hospital authorized by the next of kin and directed to elucidation of the clinical course, symptoms and their relation to what was found after death. The second autopsy is the forensic or medical/legal autopsy which is ordered by a coroner under the Coroner's Act, and the Coroner's Act was revised $I$ think about two years ago and it states that the coroner may order an autopsy and this autopsy will be performed by a pathologist as defined in the list in the chief coroner's office, and these are the medical/legal or forensic autopsies and these now form the greater part of practice because the number of hospital autopsies has declined dramatically.

Now, again back in January of 1969 --

A
-- the situation was exactly the same.

Exactly the same?
Except that the proportion of hospital autopsies was far greater.

And what are the objectives then of a pathologist in conducting an atopsy of the second kind, one ordered by the coroner?

Medical or legal autopsy, the objectives are generally defined, and I'm not sure if this definition is in our Coroner's Act or not, but they are generally defined as to state who the deceased was and how, where and when he or she came to his death, their death.

And what is the role, what was your understanding or is your understanding of the role that the police would play in the autopsy ordered by a coroner?

The investigation of death is a co-operative and collaborative enterprise with a number of people and agencies each putting their own piece into the jigsaw puzzle. It is our responsibility to be collaborative, not competitive, and there is no jostling for position or power or prestige in this, we are each trying to relate our piece, and it may be necessary to understand what the other
participants are doing in order to be able to collaborate effectively. For example, if $I$ am autopsying a case with a gunshot wound, it is necessary for me to know something about ballistics and to try and retrieve the missile for ballistic examination, and so on and so on, so that we are -- the responsibility for the conduct of the autopsy is mine, but in major forensic cases such as homicide, the police are present and can ask for particular specimens, make suggestions, contribute information as to the nature of the circumstances and in return $I$ can ask them for information, $I$ can make suggestions to them and ask for the disposal of specimens obtained at the autopsy. It's collaboration.
I see. Now, do you have a recollection of
conducting the autopsy of Gail Miller?

A

2

A
$Q$
2

A
autopsying a case with a gunshot wound, it is nature or the circumstances and in return 1 can I see. Now, do you have a recollection of conducting the autopsy of Gail Miller?

Yes.
And do you recall whether there were police officers present at that autopsy? My recollection, and $I$ think my record is that Mr. Penkala and Mr. Kleiv were present.

I believe that would be Thor Kleiv and Lieutenant Joe Penkala; is that correct?

I think those are their Christian names.

Q

A
Q


Yes?
Thor Kleiv and Joe Penkala is how I knew them. Now I will call up the autopsy report, it's document 065372 , you'll see it on your screen there, and is that your signature where I've circled, Dr. Emson?

It is.
And can you tell me just briefly the routine or how you would go about getting the report prepared from the work that you've done, the work that you did in the -- at the hospital and in the course of doing the autopsy, did you dictate it, did you make notes?

The, there are various ways of doing this. The way $I$ do it is that $I$ make notes before we start the autopsy as to what we see, I make notes during the autopsy on a blackboard because I do not want to contaminate -- have a contaminated piece of paper, I make notes after the conclusion of the autopsy, when $I$ have washed and degloved, and then I go away and dictate a report onto whatever system we are using at the time -- and I can't remember what we were using in '69 but it was probably a Dictaphone with a cassette -- and this is transcribed by a secretary. The -- it may be
added to if the results of other investigations come in, such as investigation for drugs, if it's toxicology, things like that, and then it is corrected for any spelling or grammatical mistakes, and the final report is issued. So that it goes through a number of stages, but basically it's taking notes before, during, and after the autopsy in the mortuary, and then it is dictation onto a tape, transcription, and final editing.

I just draw your attention, on this report it says:
"Autopsy Approximately 7 hours after Death", would that have been based on information that the police provided you?

Yes.

And then, if we could just go through the first part there:
"Stab Wounds and Hemothorax,"

I think there are five items identified. The first:
"1. Stab wounds of chest:"
and we'll get to this in a bit more detail, but is paragraph 1 outlining where the stab wounds were located on the body?

A

Q
A
Q

That was the cause of death though I think one has to add to this, though I haven't got it in that list, that it was a minus 40 degree day, and that if you lie down unconscious outside on a day like that, it probably takes 15 minutes to death for a person who is not otherwise injured. So there is always, as well as this, the element of extreme death?
shock from the cold.
Next, number 4:
"4. Positive for spermatozoa - vaginal fluid"?

Yes.

And can you just briefly explain what that means? It means recent sexual intercourse.

And 5:
"5. Chronic Cervicitis - (Moderate)"?
That is inflammation of the neck of the womb, and it does not relate to a sexual assault, but $I$ put it in because it's there and it shows up in some of the photographs.

Okay. If you could scroll down, please, to -- go back to the main document and just call out that, please. And, I'm sorry, is that word "Notanda"; right --

Yes. The notanda is really a narrative account as to the circumstances surrounding death, and what I have been told, and a summary.

Okay.
This is -- different pathologists will vary individually on how they do this, but I like to get in there a short one or two-paragraph narrative summary which encapsulates the case. 25
$Q$

A

Q

A
$Q$

A

Q

A

Q

A

So if we look at the:
"The autopsy showed:
(a) death was due to right-sided hemothorax
resulting from one or several stab wounds to the chest"?

Yes.
And so that am I correct, there, that you are stating that it was stab wounds to the chest that resulted in --

Yes, and as $I$ said, you have always got to add this element of thermal shock from the extreme cold.
"(b) the stab wounds were inflicted by a narrow-bladed weapon approximately 1.5 centimetres in width penetrating to a depth of approximately 7 centimetres." Yes, we measured these as the size of the knife, the presumed knife which had inflicted these. At the time you conducted this autopsy, sir, did you have a knife blade?

No, no, we did not.
So what is in point (b) would be what you measured from the body?

I measured the wounds, yes, I measured the size of the wound on the skin and the depth of the wound
into the lung tissue.

Q
Okay. And (c) I think you commented on:
"The vagina contained non-motile spermatozoa",
right?
Yes.
And I'll get to that a little later. If we could go on to the next page, please, and just in Identification it says:
"The body was first seen in the Emergency Department of St. Paul's Hospital at approximately 10:30 a.m. on 31st January, 1969. At this time the following points were noted:"

And if I could just pause there, from my read of the report am $I$ correct that, after the body arrived, you waited a few hours before you conducted the autopsy?

I have no note as to what time the body arrived in St. Paul's but I don't think we waited very long. Okay.

The photographs showing the body outside are taken in daylight, and daylight that time of year is not really established until around 9:00 in the morning, so $I$ don't think we waited very long
before we started.

Okay. If you will just go down, I think there are some other times that might assist us. So you would have made observations, did you, of the body when it arrived, when you first saw it?

Yes.

And the body, according to paragraph 1 , was frozen, or portions of it were frozen?

Yes.

Now paragraph 2 you say:
"2. The face was distorted and depressions were present, in the frozen skin just lateral to each angle of the mouth. The skin was not broken or bruised in those regions, which each measured about 1.5 centimetres in diameter and 1.5 centimetres in depth."

A Yes.
$Q$

A
$Q$

Number $3:$
"3. The body was clothed as described below."
that just an observation?
It's an observation. I can't attribute a cause to this.

And later on in the report there is a comment on that, if you could just scroll down to this paragraph, and it says:
"The body was identified to me in the morgue of St. Paul's Hospital at 2:40 p.m., on 31st January, 1969 by Identification Officer T.H. Kleiv of Saskatoon City Police, and an autopsy commenced forthwith on the order of Dr. S. Fogel, Coroner in and for the Province of Saskatchewan.

Identification Officer T.H. Kleiv and Lieutenant J. Penkala of Saskatoon City Police were present throughout the autopsy." Is that a correct statement, Dr. Emson?

Yes. If you could go down to External Examinations, please, or actually just that. Now in the external examination, would you have examined the clothing, or what role would you play in looking at the condition of the body and the condition of the clothing when the body arrived? The -- we look at the condition of the body and the clothing but $I$-- my responsibility with the clothing is to remove it and to hand it to the police representatives for further examination. I
do not examine the clothing for lesions, for incisions, for wounds, or anything like that.

It's important, when you remove the clothing, if you have to cut it, to make clear what are your cuts and what are any lesions in the clothing which were there, present, before you did that, but $I$ don't examine the clothing in detail, it goes to the police as a specimen.

And would it be fair to say, then, that, when the body arrives at the morgue for you to start your work, that the clothing would be -- according to your understanding the body would arrive basically how the police found it?

That is my presumption, but $I$ have no guarantee of that.

And so, when the body arrives, you and the police --

Well, for instance, if a body -- if a patient arrives in hospital and there are attempts at resuscitation, there may be a difference between what is on the body when it was found and what is on the body when $I$ receive it, and $I$ don't have detailed knowledge as to the first. I can only give an account of what $I$ see when $I$ get the body. If there have been intermediate
stages of resuscitation, which there were not in
Gail Miller's case, then there may be a
difference.
And $I$ understand, sir, that in the course of the
autopsy, photographs would be taken of the body
throughout various stages; is that correct?
Yes. This is a police responsibility.
So the police would take photos?
Yes.
Did the hospital have their own photographer as
well?
At that time, I think we did, in the laboratory.
Okay.
We had Mrs. May.
Now I'm going to show you a photograph, and this
is a graphic photograph, it is one of the photos
that is subject to the publication ban. If you
could call up 066726, and I would ask you, Dr.
Emson, to identify if that was the condition of
Gail Miller when you first started your work?
Yes, this was the body as $I$ saw it.
And so the clothing would still be on the body?
Yes, but very much disarranged.
Okay. Go back to document 065373, please. Now,
back here it says External Injuries, if you could
just call that part out, please, it says:
"External injuries were present as follows:

1. On the anterior surface of the neck and upper chest were a group of incisions totalling approximately 15. These ranged from superficial scratches on the skin to two incisions which divided the skin and subcutaneous tissues and exposed the superficial muscles of the neck. The incisions ran in general from above on the left to below on the right side, commencing superiorly in the left intra-auricular region and terminating inferiorly beneath the right clavicle. Some were vertical and a few were angled from above on the right to below on the left. They involved the entire anterior surface of the neck over the thyroid cartilage and the manubrium sterni. Little bleeding appeared to have resulted from these incisions."

Now if $I$ could pause there, a couple of questions, would those be the slashing marks you talked about earlier?

Yes, they were very superficial, only two of them
penetrated the subcutaneous tissue. The best I can describe them is as a slash.

Okay. I will show you photos in a moment. Here it says, when you say here:
"The incisions ran in general from above on the left to below on the right side..."; -Yes.
-- would that be the deceased's left --
Yes.
-- to the deceased's right?
Yes.

And so throughout this report, when you talk about "left" and "right", you are talking about -Left and right sides of the body.

And the fact that:
"Little bleeding appeared to have resulted from these incisions.", did you draw any conclusion from that?

They may have been inflicted at about the time of death, or afterwards, or bleeding may have been, also been arrested in part by the extreme cold. Okay. Again, $I$ will just have you identify these slashes, if $I$ could call up photograph 077 -- in fact, if you could put the autopsy report on the left-hand side, please, call up on the right

A

077881 . And --

Yes, those are the marks I'm describing, and they seemed to run from approximately below the left ear down towards the mid-line of the body in the region of the top of the breastbone, and most of them were very superficial, but two of them divide the skin and the tissue beneath it. They are -how -- they are not, in themselves, serious incisions in terms of causing death.

Can you help me out, here, identifying what type of action would cause that; would that be from a knife being held to the neck and the victim moving causing those?

No, I don't think so, I think it's more a knife being drawn across the neck. I can't conceive of a knife being held to the neck and the victim moving enough to cause that sort of -- that sort of wound.

So it was a slashing of the knife?
I, that's how I interpret it.
Now if you could just go down and call out paragraph 2, please, just -- can you zoom in on that, please, it says:
"2. In the region of the left clavicle area were three stab wounds. Each of these
was approximately 1.5 centimetres in
width. They lay over and just superior
to the left clavicle at approximately
its mid-point and penetrated downwards
inferiorly and slightly laterally
towards the left axilla."

What do you mean by, can you explain "superior" and "inferior", as you use them in this autopsy report?

A Yes. "Superior" is above and "inferior" is below. If you could move that overlay, --

Yes?
-- the wounds are in that picture, there they are.
Can $I$ point to these?
Okay, you go ahead.
Actually, you have your ring around them. There they are, over the left collarbone, and running downwards and slightly to the left side of the body towards the armpit.

I'm sorry about the terminology
here, but the autopsy reports are written very specifically in technical terminology so that they cannot be misinterpreted, and it is necessary to translate this, as far as one can, into non-technical and colloquial terms, and that's why
we're running into this business of --

Q
A
$Q$

A
Q

A
$Q$

A
$Q$

A
$Q$
"3. On the anterior lower chest was a group
of four stab wounds similar in size to those detailed above. (\#2)"

So those would be the stab wounds on the collarbone we looked at?

A
$Q$
$Q$

A

Q

A
$Q$
"One of these lay just to the right of
the mid-line inferior to the right breast
...",
which means below the right breast?
Yes.
"... and approximately 2 centimetres from
the mid-sternal line."
And I presume the "mid-sternal line" is?
It's the mid-line of the body, and you should locate wounds from a fixed point.

Okay.
The mid-sternal line is a line, an imaginary line, drawn down the middle of the breastbone.

Okay, and then it carries on here:
"It ran in an approximately diagonal
direction from above on the right to
below on the left."
Again, this is the deceased's right to left; correct?

Yes.
"The other three stab wounds were grouped
beneath the left breast, the highest of
them approximately 2 centimetres from
the lowest margin of the breast. These
wounds were approximately 2, 4, and 6
centimetres from the mid-sternal line
respectively and ran transversely."
Okay. We're getting to that next.
We haven't come to that yet.
Yeah. Is it fair to say, though, that, had that
stab wound not penetrated the lung, the other injuries would not have caused death in your opinion?

A

Q

A

2

A
$Q$

A

Q

Not necessarily, no, they were not deep wounds and they were not penetrating vital organs.

Okay. Next if we could call out paragraph 4, please, and this says:
"4. On the posterior right ...,"
so this is the back chest, is that correct, the back/exterior?

The right chest, yes.
"4. On the posterior right thorax were five stab wounds. The highest of those by approximately 2 centimetres ...,"

Lay.
"... those lay approximately 2 centimetres ..."

That's a typo, I'm afraid, a typographical error. "... those lay approximately 2.0 centimetres from the mid-line and was 12 centimetres below the shoulder line.

The lowest of these lay 2.0 centimetres from the mid-line and was 27 centimetres from the shoulder line. The others lay respectively 4 centimetres from the
mid-line and 27 centimetres from the shoulder line, 6 centimetres from the mid-line and 23 centimetres from the shoulder line, and 16 centimetres from the mid-line and 18 centimetres from the shoulder line. These stab wounds were approximately orientated each running from above on the right to below on the left. They were similar in size to the other stab wounds."

So, again, when you say "above on the right to below on the left" -These always refer to the deceased.

Right. So the back, if $I$ look at my hand as the back of the deceased, it would be from the right to the left?

A
$Q$
$Q$

A

Q

A

Q

A
Q

A
$Q$

A

Q

A

And then if you could call up photo 066733 , and that is the stab wound on the side?

Yes.
And is that the stab wound that penetrated the pleural cavity, the lung?

Yes.
And is that the stab wound, then, that, in your opinion, caused death?

Yes.
If we could go back to the autopsy report, please, 065374, just call out those, please, point 5:
"5. On the posterior surface of the lower right leg were superficial scratches running from above on the left to below on the right."

I take it that's just scratches on the back of the leg; is that --

And number 6:
"6. On the posterior surface of the left leg just below the popliteal fossa ...", --

Q -- which is the knee:
"... was an ill-defined superficial
abrasion."
I take it that's a bruise on the knee?

No, a scrape wound.
A scrape wound. And number 7:
"7. The face showed numerous superficial abrasions of recent appearance on both cheeks, the chin and the nose."

Yes. These also appeared to be scrape wounds, but wounds, lesions of this type do distort very quickly on freezing, and when the body had been frozen, essentially frozen and thawed in a fairly short time, this was how $I$ described them, but they -- it wasn't necessarily how they would have looked fresh.

Were you able to determine whether there was any wounds caused by a grabbing of the victim's face? I couldn't, I couldn't isolate any as such. We've described the two depressions on either side of the mouth, which could have been caused that way, but they could have been caused in a number of other ways too.

Okay. Number 8:
"8. The lips appeared excoriated."

A Umm, sore.

Q

A
$Q$

It's a routine decision, particularly in a case like that, if the victim has attempted to defend herself there may be foreign matter from the assailant beneath the fingernails. And this is a routine examination, we conduct it together, and if there are any, if there is anything beneath the fingernails, the scrapings are taken by the
police.
$Q$
Okay. When you said the word "we" you are talking about you and the police?

A
$Q$

A

Q
A
$Q$

A
$Q$
Now it talks about, number 1:
"1. A black coat into which both arms were fitted, into the sleeves.
2. A brassiere, the right strap of which was broken.
3. A white uniform of nurses type which was rolled down around the waist, the arms of the body being out of the sleeves of the uniform, which were intact.
4. A light girdle."

Would it be part of your duties to look at how
the clothing was situated on the body and identify anything on the clothing?

I think it's part of our responsibility to describe how the body is clothed when received. But did you check any of the garments for -- and $I$ think you may have answered this -- did you check any of the garments for stab wounds?

No.
Okay. And, in your view, would that be the responsibility of the police officers?

It's not my responsibility.
So, when you take the clothing off the body, what did you do with it?

The clothing is handed to the police officers and it is their decision what is done with it. The customary, it is customarily retained in a case like this for examination. I presume this will be in whichever police laboratory is doing the examinations at the time, $I$ think in 69 it was probably the RCMP lab in Regina, but once $I$ have removed it and handed it to the police my responsibility is finished.
$Q$ Okay. If you could go to the next page, please, 065375 , and just go down to Respiratory System, and it says here:
"The left pleural cavity was unremarkable. The right pleural cavity contained an estimated 1000 millilitres of bright red blood which was partially clotted. On aspiration the stab wounds noted in the right posterior chest were seen to penetrate the pleural cavity and there were two small lacerations in the lower lobe of the right lung."

If $I$ could pause there, those were the stab wounds that we identified earlier that you said caused death?

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Q right?
Yes, always remembering the effect of the -Cold?
-- cold too.
And can you tell me what -- this type of injury, you talk about a thousand millilitres of blood in the lung, would there be much external bleeding associated with this type of injury?

It varies a great deal. I can't tell. Whoever examines the scene has to note that.

If you go to the next page, please, 065376 , and just call out that paragraph, please, and I believe that says genitourinary system; is that

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Now just pause there. When we talk about the vaginal contents, can you tell me what you would have done to get that sample and what you did with it?

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Well, it says we aspirated it, so we presumably removed it with a small Papette, a glass Papette with a rubber bulb on it, and then a drop would have been put on a slide, microscopic slide. It might have been diluted with saline. A cover slip would have been placed on it and it was examined under the microscope, but from the description here, I presume we did it at that time and the examination under the microscope showed numerous spermatozoa that were not moving.

And do you know, sir, what happened with that, the vaginal contents after they were removed?

Well, we have no record of them being kept, so I presume they were discarded.

Can you explain when you look at -- what is the objective then in examining the vaginal contents for the non-motile spermatozoa?

Well, in this case, and in 1969, it was to establish the fact that sexual intercourse had taken place fairly recently. Spermatozoa disappear from the vagina at a variable rate depending on the age of the female and whether she was alive or dead and any or a lot of other conditions, so the rate of disappearance of spermatozoa is rather variable, but this
established that she had had fairly recent sexual intercourse.

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Now, can you tell me, Dr. Emson, the specimens that are saved, who makes the decision as to what specimens are saved?


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Well, nowadays, today we have a protocol. The police in general have a protocol for pretty well everything and were this examination being done this week, they would produce their sexual assault kit which is the same as is used on victims of sexual assault in life and this requires requests of a specific number of specimens.

In 1969 things were much less
formal. I don't think we had a developed sexual assault kit and the decision would have been made in the individual case as to what to save and the decision to save would have been made $I$ think on whether we could foresee anything more to be gained from that specimen.

And let me ask you that. The vaginal contents then, back in 1969, at that time what value if any would those contents have had?

I don't think we could have envisaged any future value. There were no further tests at that time to identify the assailant on semen. Now we have DNA. Then we had virtually nothing.

Would you have been able, or someone, a lab, have been able to test the vaginal contents to determine whether there were blood antigens?

Yes, a lab would have done, could have done, and

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the possibility of blood antigens either was -- I don't know what happened, either was considered and rejected or was not considered.

I see. In your view, sir, should the vaginal contents have been saved?

My reflex now, but I'm a lot older and a lot more experienced, is that you save everything. You don't know very often what you are saving it for. I see.

But if you discard it at this point it's gone, and nowadays $I$ would say yes, we should have saved it even if we didn't know why.

I see. Can you tell me, just as far as the process, and we'll talk a bit later about specimens that were taken by Lieutenant Penkala, specifically scalp hair, pubic hair, can you tell me how that happens? Do they say, Dr. Emson, we want the following things?

The sampling of hair from a sexual assault victim is pretty routine in the sense that some of her hair may have been left upon the assailant and this was routine in 1969.

Yeah.
So I don't think this required a decision on the part of anybody specifically.

|  | 1 | 2 | Do you recall back in 1969 any discussion with |
| :---: | :---: | :---: | :---: |
|  | 2 |  | Lieutenant Penkala -- |
|  | 3 | A | No, I don't. I can't remember whether there was a |
|  | 4 |  | discussion about what specimens to keep or not. |
| 11:00 | 5 | Q | Based upon your practice at that time, sir, if |
|  | 6 |  | either officer would have asked you for your |
|  | 7 |  | opinion as to whether the vaginal contents should |
|  | 8 |  | have been saved, what would you have told them? |
|  | 9 | A | I don't know. It's very easy to be wise after the |
| 11:00 | 10 |  | event and to be 100 percent accurate in |
|  | 11 |  | retrospection. I would like to say I would have |
|  | 12 |  | said yes, keep it, even if $I$ don't know why. |
|  | 13 |  | don't know if I would have said that. |
|  | 14 | Q | Is it possible that the contents were |
| 11:01 | 15 |  | inadvertently thrown out? |
|  | 16 | A | No, nothing was inadvertently thrown out. We |
|  | 17 |  | don't do inadvertent things at this point. |
|  | 18 | Q | So is it fair to say that it would be someone's |
|  | 19 |  | decision, someone made a decision that we don't -- |
| 11:01 | 20 | A | A decision which may have been made |
|  | 21 |  | collaboratively. I don't know. |
|  | 22 |  | COMMISSIONER MacCALLUM: Excuse me, doctor, |
|  | 23 |  | the question wasn't finished. |
|  | 24 |  | R. HODSON: |
| 11:01 | 25 | 2 | Yeah. The question is that someone would have |
|  |  |  | M eyer CompuCourt Reporting <br> Certified Professional Court Reporters serving P.A., Regina \& Saskatoon since 1980 Central Booking - Call Irene @ 1-800-667-6777 or go to www.compucourt.tv |

made a decision to discard the vaginal contents?

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Q Yes.

And you say it could have been collaborative with you and the police officers?

Yes. The decisions made at this point are usually collaborative because we are working together. Okay. Can we just go back -- whoops, sorry, the same paragraph, please, and it says:
"A small amount of reddish fluid was aspirated from the posterior fornix of the vagina."

Were you able to conclude where that blood would have, or reddish fluid, whether it was blood and whether it was from the victim?

I didn't make any notes as to whether there was blood in the aspirate which we examined under the microscope. If it was blood, and it most probably was because there's no other reason for it being reddish, the victim, Ms. Miller, did have inflammation of the neck of the womb and this could have contributed a small amount of blood. When we examined the microscopic sections, the lining of the womb appeared to be on the verge of menstruation and she may have been losing a little blood at that time at the very commencement of

A
menstruation. These are the two possibilities as to how her blood might have got into the specimen.

Next you talk about the microscopic examination showed, and it says, "Numerous non-motile spermatozoa"?

Yes.
Now, tell me, the significance of that, sir, is to determine $I$ guess, $A$, whether Gail Miller had intercourse recently, and secondly, to try and put a time frame on that; is that --

Well, first of all, the spermatozoa, when ejaculated into the vagina, are motile, because it is their function to pass into the uterus and into the fallopian tubes. The motility is lost quite quickly, but here one is talking about a living person and a warm body. This girl died at or about the time, or shortly after intercourse, so that motility may have been lost because the body cooled and may have been lost earlier. But motility in the vagina is lost quickly anyway, probably within two or three hours. The spermatozoa are destroyed in the vagina if they remain there and this is quite variable, and you can go to the books which in general say -- I would say broadly, although I'm not an expert on
this, this could be qualified by a real expert, that spermatozoa would in general be lost from the vagina over 24 hours and it would be unusual in the living person to find spermatozoa in the vagina more than 24 hours after intercourse, but here again, this girl died at or shortly after intercourse and $I$ have found spermatozoa in a dead body a week after death, so all these are variables that come in here.

A couple of questions from what you said. Are you saying that in a dead person the spermatozoa will live longer before they become non-motile than a living person?

No, they don't live longer, but they are preserved longer.

Preserved in a motile state or -No, preserved in a non-motile state, but discoverable.

And I think you also said that you concluded or that Ms. Miller had intercourse shortly before death?

Well, shortly before again is hard to put a time frame. I'm not an expert on this, but my very broad assumption would have been within eight hours.

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BY MR. HODSON:
Next you concluded or you found that there was no evidence of injury to the vulva, vagina, anal or rectal regions; is that correct? Yes.

And is there any significance with respect to that in relation to whether or not the intercourse that Gail Miller had was consensual, forced, unconscious or dead?

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It was unusual to find significant genital injury in an adult woman from penial sexual intercourse, from normal sexual intercourse. In a girl before puberty or a woman after the menopause, there may be injury, but in a woman in her fertile menstrual years, it is unusual for penial sexual intercourse to cause injury, whether the intercourse was consensual or not.

So if intercourse was forced, you are saying you would not expect to find injury?

It would be unusual.
And so is it fair to say that the fact that there was no evidence of injury to the genital area did not allow you to reach any conclusions as to whether the sex was -- the intercourse was consensual or forced; correct?

The absence of injury did not to me indicate any evidence as to whether the intercourse was consensual or not.

And with respect to whether or not the intercourse took place when she was unconscious or dead, did your observations allow you to reach any conclusions?

No.
If you could go down to, just scroll down to
specimens taken, please, and here I presume you would make a record, it says:
"The following specimens were taken and handed to Lieutenant Penkala, Saskatoon City Police:

1. Scalp hair.
2. Pubic hair.
3. Blood obtained from the right-sided hemothorax.
4. The clothing removed from the body." Is that correct?

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Yes.
If you could go to the next page, please, call out
under respiratory system, and this says:
"The presence of lacerations in the lower
lobe of the right lung was confirmed. These were fresh and there was no vital reaction.

A small amount of fibrillar material had been carried into the depth of one of these wounds. This material resembled clothing fibres."

Do I take it from that that you found fibres in the lung or the pleural cavity?

In the lung tissue.
And do you know what happened -- did you retain or
did the police retain those fibres do you know?

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Oh, these were found on microscopic examination, they are in a microscopic section on a microscopic slide. It would not be possible to retrieve them from that.

I see. So these were observed, but there was no specimen taken; is that right?

These were observed in a section taken from the lung. We take a portion of tissue, we subject it to a processing, then a microscopic slide is cut and stained from this and examined under the microscope, and this is at a very considerable magnification showing a very small amount of material and --

I'm sorry, go ahead?
It would not be possible to retrieve these for any other form of examination.

Am I right in, when $I$ read that, that these were likely from the fibre of her coat picked up by -I'm sorry, picked up by the knife going through the coat?

The presumption from this is that the wound had passed through a garment and that a portion of the garment fibres had been carried into the depths of the wound.

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$\square$ it says:
"Section of the uterus showed an endometrium in the lato luteal phase with considerable infiltration of inflammatory cells into its superficial portions suggesting that menstruation was imminent or commencing." And that would have been a conclusion you drew at the time, sir?

When $I$ examined the section which was several days after the performance of the actual autopsy.

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It s very difficult because it implies that you are considering the relative positions of assailant and victim, but if you consider an assailant and a victim facing each other, then the left to right inclination of the lacerations on the neck suggest the probability of a right-handed
assailant.
If $I$ could pause you there for a moment then. The lacerations then on Gail Miller's neck, I think there was 15 of them that we talked about first, went $I$ think from her right ear down to the middle, from right to left; is that correct? Did you want to go back, Dr. Emson --

Commencing below the left ear.
Oh, the left ear.
Yes.

I'm sorry, I've had it backwards. So her left ear down --
-- towards the midline.
Towards the middle. So you are saying if she was facing the assailant when those lacerations were applied or given, you are saying it would be more consistent or more probable that it would be a right-handed assailant?

Yes. I think this is not a matter of expertise, but of common interpretation. If you raise your right hand to somebody in front of you, your hand is on their left.
$Q$
And just so that $I$ have this clear, because $I$ think $I$ stated to you wrong in the first case, the slashes were from Gail Miller's left ear to the
center?
Yes.
So from her left to the right. So then the assailant would be going from the assailant's right to the assailant's left?

Yes.
And what about the stab marks, would the same apply?

No. These aren't particularly oriented in any direction, they are grouped, and each little group seems to run in a defined way, but none of these suggest particular handedness.

Okay. Now, I understand at some point after the autopsy the police provided you with a knife blade did they?

I have no written report on this, but my recollection is that $I$ was shown a knife blade and that $I$ gave the opinion that this was consistent with a blade that could have inflicted the wounds. I call up document 073509. If you can just zoom in on that right-hand side. Does that look similar to the knife they would have shown you? Yes, this is what $I$ recollect. It was a small knife, a paring knife type with a reddish-brown plastic handle.
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And I think it's got a tape measure there, five centimetres I believe there?

Yes.
What kind of testings or what would you have done to satisfy yourself that that knife blade could have caused the injuries?

All $I$ can do is compare its size with the size I recorded at the autopsy.

Now -- so your conclusion was that that knife blade was consistent, the size of that knife blade was consistent with the size of the wounds?

Yes.
Now, were you able to tell from examining any of the wounds whether more than one knife was involved?

No, I was not. The wounds were all of similar size and there was nothing to suggest in examining them that more than one weapon had been used.

Am I to take from that, sir, that it's possible
that two knives could have been involved, two
knives of similar sizes?
Oh, yes.
What about -- this is a single-edged knife; is that correct, the one on the screen?

Yes.

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I can't remember. If $I$ was, it would have been in one of the transcripts of evidence, but you have to consider that double-edged knives are made for one purpose only which is killing people, they don't have a civil use, as it were, and they are very rare in the population. I have never, to my recollection, seen a wound inflicted with a double-edged knife, and the other thing is that single-edged knives, the back of the knife, the non-sharpened edge, is not very much thicker than the sharpened edge, so that while this question is often asked, it is not commonly possible to state with certainty whether a knife wound is single or double edged.

So in this case the --
And the probability is always that it's from a single-edged blade because single-edged blades are infinitely more common.

So with respect to the stab wounds on Gail Miller, are you saying it's possible that one or more of them may have been caused by a double-edged knife? No, I don't think so.
Were you ever asked to consider whether a double-edged knife may have been involved in any of the wounds?
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Q You don't think they were?
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BY MR. HODSON:
Dr. Emson, I now wish to travel into the area of blood secreter, an issue that we see in the documents here and there, and I'm hoping that we can have you explain for us -- and I'll maybe just walk you through with a few questions. There are four blood types; is that correct, $A, B, A B$ and $O$ ? Well, first I must qualify and say I am not an expert in this area. There are many different types of blood defined by what are termed the antigens and these are the specific proteins in the body cells which are expressed on the surface of the red blood cells and which may serve to please.
(Adjourned at 11:20 a.m.)
(Reconvened at 11:40 a.m.)
generate an immune response. At the time of this autopsy; that is, in 1969, we knew the basic four blood types which $I$ think had been defined around 1910 and these were $A, B, A B$ and $O$ and there were also a number of other blood types which were coming into knowledge at that time and the whole field has expanded immensely since then and become a specific branch of pathology, but at that time we had $A, B, A B$ and $O$ and $a$ number of other subgroups. The $A, B$ and $A B$, these define the antigens expressed on the surface of the red cell. In a group A person, the red cells will express A, in a group $B$ person they will express $B$, in a group $A B$ they will express both and in group 0 they will express neither.

So this is on the red blood cell?
Yes. These antigens will be present in every cell
in the body but where we're interested in them, and primarily for purposes of compatibility in transfusion is their expression on the surface of the red cells.

Now, I understand that with some people these antigens are secreted in their bodily fluids; is that correct?

Yes. There is a subgroup, and I don't know what

A proportion of people this is, termed secreters and as well as expressing these antigens on their cells, they will excrete them in body fluids such as saliva and sperm, and there is another group, the non-secreters, who, while they have the antigens on the surface of the red cells, they will not express -- they will not express them in their fluids.

And it's my understanding that these antigens themselves are not visible to the naked eye; is that correct?

No. They are molecules of protein.
So that if you see a sperm sample with a red tinge, that doesn't suggest antigens at all does it?

No. You can't see them either grossly or microscopically. You can do certain reactions which will define them there, but you can't see them on the surface of a cell, you can only test them chemically.

So if you had a semen or sperm sample with the presence of $A$ antigens, you could test for that to see if A antigens were in that fluid?

If the semen or saliva specimen or other body fluid specimen contains the antigen and if it is
not contaminated by blood, then this means that the person is a secreter.

So if you had a bodily fluid sample that contained the $A$ antigen, it would be likely from an $A$ secreter?

Certainly.

Is it possible that it could come from a person with blood type A, a non-secreter, where that person's blood found its way into the bodily fluid?

Yes.

And back in 1969 do you recall, again within your area of pathology, whether blood typing by secreter and non-secreter was used and to what degree?

In forensic pathology?

Yes, in the work you were doing.

Well it would -- it was available, but it is so uncertain that $I$ don't think it was widely used, because if you test a person and don't find an antigen it could be because they don't have it or they don't secrete it, and it was never a very practical or useful tool.

So are saying, in 1969, that a test would be performed by someone on saliva or bodily fluid; is
that correct?

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I have no written record of this, but my recollection is that he brought into the laboratory at St. Paul's a specimen of snow which he asked me to examine to see if there was semen
in it, and we melted it, put it on a microscope slide, and saw spermatozoa in there, and that was as far as we went.

And did you then return that sample to Lieutenant Penkala?

To my recollection, yes.
And do you recall whether you checked -- were asked for, or checked for, whether there was blood in that sample?

I cannot recall whether $I$ was asked and $I$ cannot recall whether I checked but my memory, at this considerable distance of time, is that there was not.

And I take it, sir, that it would not be your task, as pathologist, to test that sample for an $A$ antigen?

No.
That would have been done by someone else?
No, that's -- that would not have been within our laboratory's range.

Do you recall, sir, testifying at David Milgaard's preliminary hearing and trial?

Not specifically, no.
I'll show you portions of the transcript. If you could call up document 008097. And, Dr. Emson,
these are transcripts that we have obtained from other sources. I think this shows your examination by Mr. Caldwell at the preliminary hearing, and just before $I$ get into the transcripts, can you confirm for me that the evidence you would have provided at all of the legal proceedings related to David Milgaard and Larry Fisher would have been your truthful and best recollection of events?

A Of course. I was under oath on all these occasions.

Pardon me?

I was under oath on all these occasions.
Yes. If I could have you go to page 008103, and I just wish to go through and point out a few things, Dr. Emson, and ask some questions.

Question 26 the -- Mr. Caldwell asks you:
"Q And I believe, Your Honour, that those things have not been introduced here, so I'm not able to show them. What did you do though with the containers of blood when you assembled them?

A These specimens were handed to Lieutenant Penkala.

Q And what about the items of clothing you have mentioned?

A These were handed to Lieutenant
Penkala."

And I take it, sir, that's consistent with what you told us earlier, that anything that remained after the autopsy would go to Lieutenant Penkala, and everything else would be discarded; is that correct?

Yes.
And then, down at the bottom of the page, question $31:$
"Q Did you find any significant or measurable difference in the various punctures or stab wounds, one from the other?"

And answer at the top of the next page:
"A No, they appeared -- apart from the difference in angulation, they all appeared to be approximately the same size, they were certainly consistent with having been made by the same weapon, there were no major differences between any of the wounds."

I think, sir, that's what you have also told us today as well; is that correct?

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COMMISSIONER MacCALLUM: Just excuse me, counsel, I'm not sure I understood him to say that there wasn't any difference in angulation today. I have, at least $I$ understood his initial evidence to be that the stab wounds were similar in size as well as in the attitude of penetration, now he's apparently said something different?

BY MR. HODSON:

Go back, just read that again, call it out.
Perhaps, Dr. Emson, you can tell
me what you mean by "angulation?"
The position relative to the body or relative to the planes of the body, to the mid-line, as to whether they are angled to the right or to the left or up or down.

So when you say there at the preliminary:
"... they appeared -- apart from the difference in angulation ...,"

You are saying some were right to left, some were not?

Yes.

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                                "... they all appeared to be
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                    approximately the same size, they were certainly consistent with having been made by the same weapon, there were no major differences between any of the wounds."
    And it may be that those were referring to the stab wounds as opposed to the lacerations?

This is referring to the stab wounds, it certainly does not refer to the neck lacerations.

Okay. Is that, sir --

I think, sir, we have seen this today in the pictures that the, all the wounds, stab wounds, are approximately the same size.

Okay. Does that answer your question, Mr. Commissioner?

COMMISSIONER MacCALLUM: Umm, well not exactly. Of course, in earlier examination the object was to demonstrate whether or not the stab wounds could show right to left or otherwise in the way in which they were inflicted, and I understood the doctor to say, at that time, that that could not be shown.

His present evidence when he speaks of angulation of the wounds, of course, tells me that they demonstrated the direction of
penetration.
MR. HODSON: I think that maybe $I$ can clarify it this way.

BY MR. HODSON:

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Dr. Emson, I think what $I$ asked you is the wounds, the stab marks themselves, you were able to identify that some were angled left to right on the victim; is that correct?

Yes.
And some were not?
They are all described in the report with regard to their position on the body, their relation to the mid-line, and their relation to the planes of the body, yes.

And $I$ think the question with respect to the stab marks that $I$ asked you was whether you could tell, from the angle of the stab marks, whether it was a right-handed or left-handed dominant assailant?

You can't tell this from any of the stab wounds.
Okay. And I believe you said, sir, that the lacerations on the neck, you said it was more probable from a dominant right-handed person if that person was facing the victim; is that correct?

It's more consistent with this, but, of course,
there are a number of other probabilities which can be suggested.

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Such as?
Well, the relative position of the assailant, if he was behind the victim.

If we go to page 008107, just call out, starting at question 49. I just want to go through here, Dr. Emson, your evidence at the prelim regarding the estimate of time of intercourse:
"Q Did you examine the vagina for the presence of spermatozoa?

A Yes. The vagina contained a fluid which showed various non-motile, that is they were not moving, spermatozoa.

Q And what, in this instance, could you say about the quantity of spermatozoa that you found?

A Spermatozoa in the vagina disappear relatively fast, after 12 hours they are certainly starting to
disintegrate, so that the presence of large numbers of readily-identifiable spermatozoa would indicate that intercourse has taken place within probably the previous 12 hours.

Q And are you referring, Doctor, to 12 hours previous to examination?

A Yes, pre-examination.
Q As opposed to pre-death?
A Yes."

Now is that -- Dr. Emson, I think earlier you said that -- did you say 8 or 12 , does that evidence you gave at the preliminary hearing, is that your opinion today?

Umm, I haven't been asked these questions for a long time and $I$ would have to go and look it up, but to the best of my recollection these figures are approximately accurate.

Right. So, and I think at this time the autopsy started at about 2:30 in the afternoon, so you are saying within the previous 12 hours, so 2:00 a.m.? That is a very broad estimate and, as I said, there were a number of complicating factors, including the cold, and if $I$-- if you wanted a really accurate estimate on this I would have to go back to textbooks now.

No, I'm just -- your evidence at the preliminary hearing, $I$ think -- I think, when $I$ asked you before we got into the transcript, I think you said "within eight hours of death", if $I$ recall
correct, and now you are saying within --

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The question -- I'm not quite clear where we're going on this, but $I$ think the question is does disintegration start at death, or does it -- is it postponed a short while. The answer, I think, is relative to the temperature of the body. If the body stays warm after death, then disintegration will proceed quite quickly; if the body is rapidly chilled, then the process may be arrested, and in this particular case we have virtual freezing at the time of death, so $I$ think any process of disintegration of spermatozoa would be arrested at that time.

Okay. If you could go to page 008109, question 64, you are asked:
"Q Now from your findings, and I'm not asking you to come to a specific opinion on this, but would it be -- first of all, $I$ take it, it's inescapable that sexual intercourse had taken place, involving the deceased, within some period which you have spoken of already?

A Yes.

Q I presume, this goes without saying, that this could be during life and by
the consent of the deceased, as far as you can see?

A As far as $I$ can see, yes.
Q Is there, in your opinion, any manner in which intercourse could have taken place during the life of the deceased and assuming it to be without her consent, and against her will, and end up with the situation in which you found no -nothing in the way of injuries?

A She could have been unconscious.

Q And is that possible from your point of view?

A From the physical findings this is perfectly possible, $I$ can't say anything for or against that, it's quite possible."

And the next question and answer:
"Q And it is possible, again from what you saw, of the body and what you found, that the intercourse could have taken place after death?

A Yes."
And I believe that's what you have told me earlier, is it Dr. Emson, that, based on your
examination of the genitals, you could not say whether intercourse was with consent, without, unconscious, or dead?

A
Yes.

Now down at question 71 -- actually, sorry, go up to question 70, if you go back to the full document, please, just call out that portion. And here's where Mr. Caldwell is asking you, question 70 :
"Q Is it your field, Doctor, can you tell the court, are the conditions under which human blood can get into, if $I$ may put it that way, into seminal fluid or spermatozoa, I'm speaking now of blood as opposed to constituents of blood?

A Are you speaking now of the male or the female part?

Q I'm speaking of a male person?
A Yes, blood can be present in seminal fluid from a male person, either from local injury to the genitals, or from disease of the internal genitalia, or I believe, although I'm not an expert on this, on occasion, without obvious cause.

Q And you are speaking now -- as I understand it -- at least my question's intended to speak of blood as opposed to any constituents of blood?

A Yes."

And is a "constituent of blood", is that an antigen?

It could be anything, it could be a specific type of blood cell, it could be a chemical in the blood, but the constituent is just part, and it could be anything.

Okay, and then it says, question 73:
"Q And are you familiar to some extent,

Doctor, with the matter of persons who are called secretors or non-secretors in that field in a general way?

A Yes."

And then, if $I$ can skip ahead to page $008115--$ now, sorry, just back on that last part that $I$ read you, was it -- is it common for a non-secretors male to have blood in their seminal fluids?

A
It's not common for any male to have blood in their seminal fluid.

Okay. So the portion $I$ read about local injury to
the genitals or from disease, is that something that could cause blood of a non -- blood to be in seminal fluid?

A

Q

A
$Q$
Yes.

And is that common?
Umm, that would be a question for another expert, but $I$ don't think so.

And at page 008115, please, and this is Mr. Tallis cross-examining you, if $I$ could just call out, starting at question 23 :
"Q I see. And then what was done with the sample after you did that?"

Actually, I should go up, go back up. Sorry, I should have asked the question previous.

Question 22, we won't go to that page, it says:
"Q Yes, well, that's fair enough. Then I
take it you conducted a test at the hospital for the presence of spermatozoa?

A Yes, this was examined microscopically for spermatozoa by myself.

Q I see. And then what was done with the sample after you did that?

A It was discarded.
Q And I take it that no portion of that
sample was turned over to the police at all?

A No, it was not requested as an exhibit, and it was not saved."

Does that assist you, Dr. Emson, in identifying what happened with that, the vaginal contents, at the time?

I take it that all this refers to the vaginal aspirate?

Yes.

And?

And my question is, it says here, question 24 your answer was:
"No, it was not requested as an exhibit, and it was not saved."

And my question is does that assist your recollection of whether it was your decision, the police decision, or a joint decision about whether the vaginal contents would be saved? Well, I have said here it was not requested, so the presumption from this is that this was a police decision.

Okay. And then down at question 25, and again we're talking about the same aspirate, it says:
"Q I see. And I take it that this sample

A No, the note was made that it was blood stained. I'm still uncertain as to whether this was -- there are three possible causes here, there is blood from the male, the girl did have slight inflammation of the neck of the womb, which is not uncommon, this could have led to bleeding, and there is a possibility that she was starting to menstruate, which again could have led to a little bleeding, so between those causes we were not able to determine the ..

Q .. the source of the reddish colour in the fluid?

A No.

Q But these are all very real possibilities, that you have cited?

A Yes.
Q Was there apparently enough blood in this fluid to have enabled one to test it for blood grouping?

A Yes, there would have been."
So that's correct, is it Dr. Emson, does that --

A

Well, that last question is, the answer to that one would be that you could have tested it for blood grouping, but if the blood had been from the victim and if the assailant had been a secretor, you would be in a problem there because you would have antigens from both the victim and from the assailant. It would have been possible to test it, I think, but one might have got inexplicable and confusing results.

Would it be fair to characterize it this way, Dr. Emson, that, depending upon the blood type of the victim and the assailant, you may have been able to do blood grouping to identify the blood type and the secretor status of the assailant?

You might have been, but it would have been a result very, very difficult to interpret.

I see. So, just so $I$ understand this, the -- for example, if the victim and the assailant had the identical blood type and were both secretors, would it be fair to conclude that testing the vaginal contents wouldn't have told you anything? No.

Do you agree with that?
Yes.
If the victim had a different type of blood, the
victim was a non-secretor and the assailant was a different type of blood secretor, is it possible that testing the vaginal contents would have identified the blood type and secretor status of the assailant?

Yes. But $I$ think you also have to consider, here, the possibility, as $I$ say, that this might have been a mixed specimen, with blood from the victim and spermatozoa from the assailant, and one would not have been able to tell from which of these components your results came.

Would you be able to test the victim's -- you would know the victim's blood type?

Not necessarily, because if you had let us say both $A$ and $B$ there, you wouldn't have been able to tell whether there were two people, one $A$ and one

B, or whether there was one person who was an AB. You could have checked this against them if you had the specimens in life but, as $I$ say, it would have been a very confusing set of results.

Yeah. And I think, as I have said earlier and I think you agreed, it would depend upon the blood types and secretor status of the victim and the assailant?

Yes.
Okay. If I could now go ahead, please, to the trial transcript, 075974 -- just bear with me for a moment, Dr. Emson. If you could go to page 075990 and just confirm this, Dr. Emson, I think you touched on this earlier about examining the knife, but Mr. Caldwell asks:
"Q If I could possibly just pause there, Doctor, and show you P. 12 a knife blade. From what you saw of the stab wounds both externally and internally what would be your opinion as to whether a blade of that dimension could have been responsible for the stab wounds?"

Answer, the next page:
"A Yes, it could.
Q And does the length of this blade appear
sufficient to you to reach the depth to which you found the wounds in this body?

A Yes, it does."

And so I think you told me earlier, sir, that you had in fact examined the knife, and your measurements, and concluded that they were consistent; is that right?

Yes.

If $I$ could refer you to page 076000 , please. And I asked you earlier, when $I$ referred to your preliminary hearing evidence, about how common it was for a non-secretor to have blood in their fluids, and $I$ just want to read you some evidence here:
"Q Are there conditions under which human blood as such can get into seminal fluid or spermatozoa in the male person?

A Yes.

Q Could you tell the court what they are please?

A One would be local injury to the male genitals.

A second and quite common
occurrence would be any inflammation either internal or external of the
male genitals.
Q Are there any other causes?
A There are rarer conditions but $I$ think the injury and the inflammation are the most common ones.

Q You understand my question to be speaking of blood as such as opposed to any constituent of blood?

A Yes -- blood cells."
So, again, $I$ think you told me earlier that those are causes where blood of a non-secretor could be in the bodily fluids, but you are saying it wouldn't be very common; is that right?

A
I said, on the previous page, "quite common," I think $I$ was wrong there at that time, I think these would be rather uncommon causes.

Okay. So at the time, in 1969, you understood that it was quite common for a non-secretor to have blood in bodily fluids, such as seminal fluid?

At that time, in this evidence, I said it was quite common to find blood in seminal fluid from internal causes in the male. I would vary that now, I don't think $I$ was correct at that time, I would say uncommon.

Thank you. And the page 076010 , and this is Mr. Tallis cross-examining you, sir, and this relates to the coat, and $I$ think you have touched on this earlier, that you did not have much to do with the garments, but the question is:
"Q And I take it, Doctor, that from your examination of the body of the deceased there was nothing from it you could form any conclusion as to whether the re-insertion of the arms into the coat took place before or after death?

A I have no evidence as to this."
So I take it that from your work, sir, you were not able to determine whether Miss Miller's arms were put into, back into her coat before or after death?

A
$Q$ I had no way of telling.

Okay. And again to page 076011 , and this is your trial evidence, sir, about the vaginal contents, and I'll just read this to you. It says:
"Q And this particular sample ...,"
actually let's go back up and I'll just show you where it talks about the vaginal fluid. Start right here, it says:
"Q I see; now, you told my learned friend
in evidence that you obtained some fluid
from the vagina of the deceased?
A Yes.

Q And subsequently tested this particular fluid for the presence of spermatozoa?

A Yes.
Q And this of course was done as I understand it right in the hospital?

A Yes.
Q And this particular sample of fluid that you had was characterized by a reddish colored tinge?

A Yes.
Q Now, what was done with that particular sample after you tested it for
spermatozoa?
A It was discarded.

Q I see; I take it that no portion of it was turned over to the police?

A No.
Q And as a matter of fact to be fair about it to ...,"
next page:
"... to be fair about it to you it was not requested by any of them?

A It was not suggested at the time, no." If $I$ can pause there, Dr. Emson, does that assist your recollection about whether or not it was you or the police, or a combination of both, that made the decision not to retain the vaginal contents?

No, I have no memory of that, but $I$ would presume it was a decision taken between us.

And just to carry on there, it says:
"Q Yes; and now I take it that there wasn't sufficient blood in this fluid to have enabled one to test for blood grouping if a request had been made?

A Yes."

And I think we had just earlier, when we looked at the preliminary hearing transcript, and your evidence was that there was, there was enough blood grouping to do a grouping, but that there were -- I don't know what term you used -- there were issues that might arise, you may not be able to get anything out of it but you could still test it; is that fair?

A
As $I$ said, $I$ think it could have been done, but the results would have been very difficult to interpret.

Q Okay. I think that's what you said, yes.

A

And I may say I have changed my opinion in general since then and in principle it is always better to do a test even if you know the result is going to be impossible to interpret or irrelevant rather than not to do it because of that. It's always better to have some results. Now, that's an opinion formed over the course of years and experience and $I$ hadn't formed it then.

Now, in 1969, sir, I don't believe DNA testing was being done, DNA matching? I'm not sure of the correct term.

No, DNA was not available. I don't know the precise date at which DNA became practicable in forensic work, you would have to ask another specialist about that, but my recollection would be not more than 10 or 15 years ago.

I see. And the vaginal contents then that were aspirated from Gail Miller, if those had been retained would that sample have provided the basis for a DNA test later on?

If they had been retained in proper condition in deep-freeze, yes.

And at the time in 1969 did you have any knowledge of DNA science and DNA matching that might require
those contents to be saved?
No. We had -- $I$ can't recollect when Watson and Crick first described the double helical structure of DNA, but it was certainly after 1969, and before that it was just, there wasn't even a hypothesis. All these dates would be in the reference books somewhere, but I don't have them in my head.

It was a number of years after 1969?
Yes, certainly.
Now I would like to skip ahead, Dr. Emson, to some letters that were written in the late ' 80 s by other forensic pathologists about your work and I have a few questions about those. The first, if you could call up 002486 , and this is a letter dated September 13th, 1988, Dr. James Ferris to Mr. Wolch, counsel for David Milgaard. Do you know Dr. Ferris?

Not intimately, but we've certainly met from time to time.

And he is in the same profession as you, sir? I'm not sure what he's doing now. He was either retired or semi-retired and $I$ know there was a possibility of him going to New Zealand the last time I talked to him, but this was some years ago
and I really don't know where he is or what he's doing now.

In 1988 or in the late $80 s$ were you aware that he was practicing in the area of pathology? Oh, yes.

Now if you could go to page 002488 of this letter and if you could just -- actually, go to the previous page, please, 2487 , and this is where he comments about pathology evidence, Dr. Emson, I just want to read you a portion of this. Dr. Ferris states in the letter:
"I think there is absolutely no doubt that Gail Miller died as a direct result of stab wounds inflicted on January 31, 1969 at or around 0700 hours. It may be important, however, to note that none of the stab wounds penetrated any of the major blood vessels or the heart and that Dr. Emson in his evidence states that the cause of death was the actual loss of blood into the chest cavity, the "shock intendant upon this and the embarrassment of breathing" (page 1146 transcript). While there is no question that these injuries are fatal, the speed with which an individual becomes immobilized
as a result of injuries such as this is relatively slow. Since death is as a result of bleeding from the lung tissue into the chest cavities, the speed with which unconsciousness will occur is also relatively slow. It would be my opinion that the stab wounds as described by Dr. Emson were neither immediately fatal nor even immobilizing. In my experience individuals with this type of injury may live for several minutes following the injuries. It is possible that in fact she could have survived for at least 15 minutes following the injuries."

Do you agree, sir, with Dr. Ferris' opinion stated there?

A
I don't think Dr. Ferris is taking into account the very severe degree of thermal shock which I've mentioned from being partly unclothed at minus 40 , and minus 40 is the same on both the Fahrenheit and Centigrade scales, and also from the shock resulting from a presumptive sexual assault. In general he's correct, but he's only considering one of a set of circumstances.

In your opinion, sir, can you -- do you have an
opinion as to how long Gail Miller would have been alive from the moment the fatal wound, the fatal stab wound punctured her lung until her death?

A
Next paragraph, Dr. Ferris goes on to say:
"If this is the case and if as we know from
the examination of the clothing she was
wearing her coat at the time that the
injuries were inflicted, then it is highly
likely that she was alive at the time of the
apparent rape. This would tend to indicate that her inner clothing had been removed before the injuries were inflicted. While this would explain the apparent absence of knife wounds to the nurse's dress, it also suggests that the circumstances of the rape/murder were complex, probably
prolonged, and in my opinion, incapable of having occurred within the time frame suggested by the evidence at the trial." Do you agree with Dr. Ferris' opinion stated there?

A

Q

Q

Well, I don't know because I've never had described to me or seen the lesions to the clothing. He's had a lot more information here than I've ever had.

So for the purposes of the trial, you did not look at, or you did not get into looking at the clothing, knife wounds, et cetera?

No.
The next paragraph, please:
"I note from Dr. Emson's evidence that some issue was made as to the apparent presence of blood mixed with semen in the vagina. It was suggested by Dr. Emson that the most
likely cause of this would have been
staining with menstrual blood, however, he failed to find any evidence of menstruation at postmortem examination."

If $I$ could just pause there. I thought we had gone through your autopsy report and you had made mention that she was commencing or about to commence menstruation?

A
Yes. We have been into this and $I$ have said that the appearances of the lining of the uterus suggested that she was on the verge of menstruation and it is quite possible that a little blood could have been lost from this. I think Dr. Ferris is quite wrong here. Either he hadn't read that bit in my report or also he hadn't understood it.

So where he says that you failed to find any evidence of menstruation at postmortem examination, you say that's wrong?

Yes. I've described it in the microscopic examination of the endometrium in the autopsy report.
$Q$
Now next to the bottom paragraph, please, it says:
"Dr. Emson was unable to give a description of the type of knife used and whether or not
this knife was single-edged or double-edged. Although sometimes it is not possible to do this, a detailed examination of stab wounds and certainly in any case where there are multiple stab wounds, it would be very unusual not to be able to see from the examination of the skin wounds whether or not the pattern was one of a single edged or a double edged knife. I have not had an opportunity to examine photographs taken during the postmortem examination. It might be interesting for someone to review these photographs and see whether or not the shape of the knife can be determined from the photographs alone."

Do you agree with Dr. Ferris' statement there?
No. I have said that $I$ have never, in the course of my experience, to my recollection, seen an injury from a double-edged knife and that with the narrowness of the blade of a single-edged knife, even on the side which is not sharpened, I have frequently been asked to demonstrate whether a wound was from a single-edged or a double-edged knife and found it very difficult to do so. Okay.

0

A

Q

A

To do so means that there must be a very considerable difference between the sharpened edge and the blunt edge and looking at most knives made of modern steel, there isn't.

And again to page 002491 , and again this is Dr.
Ferris' -- if you could just call out that last part, and he says:
"The general circumstances of the scene would tend to indicate to me that the offence may have taken place elsewhere and that the body had been dumped."

If you go to the top of the next page:
"Nevertheless, there is no clear evidence to support this opinion. Of course the timing of the whole event would also seem to make this an unlikely scenario."

Do you agree with Dr. Ferris' -- I think it's an opinion or statement -- that the offence may have taken place elsewhere and that the body had been dumped? Are you able to provide any comment on that?

Well, I've never examined the whole evidence on this, on the scene or anything else, so I'm not able to give a valid opinion, but taking into account the circumstances of a minus 40 morning,
it would appear at least a possibility that the sexual assault had taken place elsewhere and the body had been dumped afterwards. I find it very difficult to imagine a sexual assault outside at minus 40 .

Apart from that, Dr. Emson, was there anything in your autopsy that would address the issue of whether or not the sexual assault and murder, and/or murder took place outside or in a vehicle or elsewhere?

No, there was nothing in my examination to
indicate this. I was not asked the question at the time, but from the report of the autopsy, there's nothing to indicate this at all.

MR. HODSON: Mr. Commissioner, I see it's approaching 12:30. This is probably as good a time as any to break. I will be about another half hour to an hour with Dr. Emson.

COMMISSIONER MacCALLUM: Thank you, and you will establish with counsel the order of cross-examination if you haven't done so already?

MR. HODSON: Yes, I will, Mr. Commissioner. (Adjourned at 12:28 p.m.) (Reconvened at 2:00 p.m.)

COMMISSIONER MacCALLUM: Before you begin,

Mr. Hodson, counsel, $I$ just wanted to deliver a friendly admonition to counsel for parties with standing. Please ask your clients not to discuss with the media evidence that a witness is giving before that evidence is concluded. We warn witnesses during adjournments not to discuss their evidence because we want their independent recollection. A witness hearing of, reading or viewing a media interview of a party with standing concerning his or her testimony before it is finished could be influenced indirectly by that party. Thank you.

BY MR. HODSON:
Thank you, Mr. Commissioner. Dr. Emson, we talked before lunch about antigens and secretor status. At the time of David Milgaard's trial in 1969, 1970, do you recall whether you were aware of whether David Milgaard, of his blood type or whether he had tested as a secretor or a non-secretor? I've never been informed of this in any official way. I've had hearsay and I've seen press accounts, but I've never been informed or consulted about this.

And again back at the time of Mr. Milgaard's trial
in 1970 or the prelim, do you recall having any discussions with any police officers or the prosecutor about David Milgaard's blood type or secretor status?

No.
The next document is 001256 and just some questions. Are you familiar with a fellow by the name of Dr. Peter Markesteyn.

Oh, yes, I've known him for a long time. He was a professor at the University of Alberta and then he was chief medical examiner for the Province of Manitoba. He's in retirement, but like myself he does consultation work and he's been involved in investigation of multiple deaths in Bosnia.

I see. So -- and I'm referring to a letter from him, June 4, 1990. At that time Dr. Markesteyn would have been practicing in the same area of medicine as you to your knowledge?

He's recorded here, it's on the letterhead of the chief medical examiner of Manitoba.

Yes. And just a couple of items in this letter. If you could go to page 001259, please, and this is 1990, and just call out that paragraph. Dr. Markesteyn says -- actually, maybe just go back up to the paragraph before. Actually, go back to the
full page, please. I think just -- if you can call out that, I'm sorry, and he's talking about blood from the accused, and the first paragraph says:
"The other source of blood, from the accused's genitals, could be the result of injury or inflammation of the genito-urinary tract. However, no evidence was produced to indicate that Mr. Milgaard at the time of the assault had any injury or inflammation to his internal our external genitalia or urinary tract."

And if $I$ pause there, sir, you don't recall
looking at anything of that nature back in 1969 or 1970 with respect to David Milgaard?

Any specimen from Mr. Milgaard?
Yes.

No. It's not that $I$ don't recollect, I never did.
Right, thank you. It then goes on to say:
"I have addressed this matter with some detail in that it is my impression, for what it is worth, that some inference could well have been drawn that the blood and semen mixture in the vagina and the so-called blood and semen mixture retrieved from a
snowbank several days later were somehow linked together."

And my question is do you have any explanation as to how they may be linked together as Dr. Markesteyn suggests?

I was never informed. I was presented with the snowbank material as a separate specimen and reported on it verbally, but never $I$ think in writing, and the assumption was that it was in some way linked with the assault, but $I$ was never told how.

And did you do any tests, any further tests other than identifying the spermatozoa?

No.
It then goes on and says:
"In any event, there was insufficient blood
there to be typed."
And $I$ think you told me earlier this morning that there was in fact sufficient blood in the vaginal contents to be typed; is that correct?

Well, Dr. Markesteyn does not make it clear what "there" means in that last sentence because he's discussing two specimens. Is he referring to both or one of them.

Very fair point, Doctor, so let me restate two

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questions to you. Firstly, the vaginal contents, I think you told me this morning that there was sufficient blood to be typed?

A

Q

A

Q

There might have been. The techniques in those days were not as subtle as they are now. There might have been. I don't know.

Now secondly, and you raise a fair point, the blood and semen mixture retrieved from the snowbank several days later, was there blood, sufficient blood in that sample to your knowledge to be typed?

I have no recollection of there being any blood at all. I merely reported on the presence of spermatozoa. I can't remember whether we looked for blood and I can't remember whether we reported it.

Is looking for blood, is that something that a lab would do or is that something that you would do? It's something that you could have done under the microscope. When you are looking for spermatozoa, human red cells in spermatozoa are in the same range of size and if you could have seen one, you could have seen the other.

If you can just scroll down, please, and maybe have the next page at the bottom, top and bottom
here, please, and Dr. Markesteyn says, and I'll just read that:
"I disagree with Dr. Emson's testimony that shedding blood in semen is a quite "common occurrence" as the result of inflammation to penis, urethra, prostate and/or bladder. I disagree with Dr. Emson's thought expressed at that time that it was "accepted medical knowledge that small amounts of blood commonly find their way into seminal fluid of males of any age beyond puberty." I have been informed that the forensic laboratory in Winnipeg has never seen such a case. Other investigators also have failed to confirm this impression of Dr. Emson's."

If $I$ stop there, $I$ think you told me this morning that -- or let me ask you this. Would you agree with Dr. Markesteyn's comments there?

He's right and $I$ was wrong.
Just down at the bottom of this page, please, under knife wounds, and Dr. Markesteyn says:
"It is unlikely that all the knife wounds would be the name five-eighths of an inch in width. I am sure that the estimated depth of penetration of the knife blade took into
account the thickness of the coat (not stated) as to the possible length of the knife blade. In passing, $I$ find it difficult to explain why the knife blade was broken in view of the fact that no bones were struck."

I have two questions. First, Dr. Markesteyn says that the estimated depth of penetration of the knife blade took into account the thickness of the coat, and $I$ believe you told me this morning, sir, that you in fact did take the thickness of the coat into account in measuring the depth? Yes, I did, and there was also the fact, you remember, that there were fibres at the bottom of the wound indicating that the knife blade had passed through a garment.

Thank you. And the last sentence:
"I find it difficult to explain why the knife blade was broken in view of the fact no bones were struck."

The first question, do you recall in your autopsy whether any bones were struck by the knife?

It's not recorded in the autopsy report and I don't recollect any being struck, and may $I$ make another comment, please?

Q
A

Yes, yes, you may.
It is unlikely that all the knife wounds would be of the same five-eighths of an inch in width.

Now, we have the photographs which show in fact that all of the stab wounds were of the same size very closely, so if Dr. Markesteyn's has seen this, then it is not unlikely it is in the material, it is in the evidence.

Yes.
And the second thing is that if you have a relatively short knife and at each blow it is thrust in to its full length, then the knife wounds would be the same size.

And so is what you are saying, Dr. Emson, that all the knife wounds were the same five-eighths of an inch in width, the stab wounds?

Yes, we measured them, they were, and it's in the pictures, and Dr. Markesteyn is wrong in this contention.

Now just down to the fact that Dr. Markesteyn says it's difficult to explain why the knife blade was broken in view of the fact no bones were struck. Do you have the same difficulty explaining it as he does or --

Well, I don't recollect that $I$ was presented with
a broken knife. I think the picture I've been shown here is of an intact knife.

And I believe, sir, your evidence this morning is that when you did the autopsy you were not provided with a knife blade?

Not at that time, no. The knife was brought to me later. I can't remember how much later.

And do you recall whether you were either provided with the blade or advised by the police that the blade and handle were found separately?

I can't remember.
To page 001261 , just call out that paragraph, please, Dr. Markesteyn states:
"Human semen does not freeze into a yellowish stain at minus 40 degrees Fahrenheit. In fact, it is white and difficult to spot in snow other than through special techniques such as ultraviolet light exposure, etc. One of the two yellowish lumps was found to contain semen; the other one, although it looked the same, did not contain semen or any other human material in that it did not contain, we are informed, blood, sweat, tears or saliva. Dr. Emson examined the material prior to having it
sent to the crime laboratory in Regina. He has informed me that he was sure it was semen, but, that he could not say from what species it originated. The Serology Section determined it to be not only semen but of human origin. In order to reach a firm scientific conclusion whether the semen retrieved from the snowbank four days after the assault was indeed human one needs to review the methodology used by the serologist at that time and thus one needs to review the notes that were made at that time."

Now, do you agree with Dr. Markesteyn's comments there or do you have any --

Well, to take them in order, I have no experience with freezing human semen so $I$ can't comment on his first statement.

The second one, "did not
contain, we are informed, blood, sweat, tears, or saliva, " $I$ presume, there, that this was a chemical reaction and probably investigation by what is termed antihuman globulin, which is a react -- will react with any human protein and, thus, show whether virtually any material is of
human origin or not.
"Prior to having it sent to the crime laboratory;" I did not have it sent to the crime laboratory, this was a decision of somebody else. I examined it and gave it back to Mr. Penkala, and I, I just want it clear that that was not my decision or my authority.

I could not say from what species it originated; yes.

I don't know what methods were used by the Serology Section, this is presumably on record, and $I$ would suspect that this, again, was the application of the antihuman globulin, which was a well-developed technique at this time in blood banking.

Now when they talk here about the Serology Section I think you said earlier this morning that lab testing at this time would have been done by the RCMP; is that your understanding?

I have -- I can't remember for sure, but the probability, $I$ mean in my mind -- and this can easily be established -- this says it was done in Regina, and this would be the RCMP lab at the Regina RCMP Depot.

Yes.

A
$Q$

A
$Q$

A

Q
A

Q

A
$Q$

And where they send what specimens has changed several times since then.

No. In fairness, sir, there are documents, and we will be hearing from members of the RCMP lab. Yes.

From your perspective am I correct, sir, that what you did with the frozen lumps were examine it for spermatozoa and then give it back to Mr. Penkala? That's all I did.

And you did not check whether it was human or not? This would not have been easy in my laboratory at the time, we were not set up for this type of test.

And you were not asked to, nor did you do that? No.

If you can then go to page 001263 and call out that paragraph, please, Dr. Markesteyn states: "If, to everyone's satisfaction, it was established that the origin of the yellowish patch was unadulterated, uncontaminated human semen, then the presence of the A-antigen in this specimen clearly, from a serological point of view, could not be Mr. Milgaard's."

I'm wondering if you have any comment or whether
you agree with that?
Well, I don't know whether Mr. Milgaard's secretor status was established or not, I've never been informed of this.

If Mr. Milgaard was not a secretor would, then, you agree with Dr. Markesteyn's statement?

Yes.
And if Mr. Milgaard was a secretor?
It could have been.
If Mr. Milgaard was a secretor would you agree with Mr. -- Dr. Markesteyn's statement?

No, because if Mr. Milgaard was a secretor, this could have been his specimen.

Okay.
It could have been a specimen from any other $A$ secretor too.

Okay. Next, if you could go to 002483 , and this is a memo to file from Eugene Williams, June 12th, 1990. Do you recall talking at all to Eugene Williams? He's with the Criminal Prosecution Section of the Federal Department of Justice at the time.

No.
If $I$ could refer you to page 002485 , and again,
this is Mr. Williams' memo, Dr. Emson, so I just
wanted to ask you, he says here:
"The often quoted paragraph in Dr. James Ferris report:

On the basis of the evidence that $I$ have examined, I have no reasonable doubt that serological evidence presented at the trial failed to link David Milgaard with the offence and that in fact, could reasonably be considered to exclude him from being the perpetrator of the murder..."

And then he goes on to say:
"... is perhaps best summed up by Dr. H.E.
Emson during a recent interview. The latter noted:

Dr. Ferris provided a re-interpretation on the evidence on what we now know to be a fallacy."

Do you recall having that discussion?

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$Q$

No, not at all.
Are you able to shed any light as to what that comment means that was attributed to you?

I could only presume that there was some dispute or variance over Mr. Milgaard's secretor status. Perhaps if $I$ could just carry on to the next
paragraph, $I$ should have read that to you, and this is Mr. Williams says:
"Very little, if any weight can be given to a conclusion that blindly ignored the obvious contamination of the samples that were collected. The conclusion is also wrong because an essential fact upon which it is based, namely, David Milgaard's status as a non-secretor, has not been
established."

Is that -- are you able to tell me, sir, is that what you are referring to?

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$Q$

A
I'm sorry, we're back here to secretor and non-secretor, and $I$ do -- I cannot remember what my statement quoted here was based upon.

Okay. That's fine.

A

Q
Okay. Next, $I$ would like to call up a document 040497 , and this is a report dated October, 1991 by Neil Boyd, a Professor At the School of Criminology and Kim Rossmo, a Ph.D. candidate, and I would like to draw your attention to page 040513 and just call up the last part there, please. And I'll just read this to you, Dr. Emson, and then $I$ have a question for you. In this report the authors state:
"At trial, the theory of the Crown was that there was blood in the sample - blood from David Milgaard. This theory was bolstered by Dr. Emson's claims that blood within ejaculate would be "a quite common
occurrence". Dr. Emson now indicates that he would have to vary that testimony from what he said at trial. He now knows that such shedding of blood into the urethra is not a common event."

And then footnote 29 refers to:
"Personal communication, Dr. Emson, Saskatoon, September, 1991."

Do you recall having a discussion with either

Neil Boyd or Kim Rossmo in 1991?

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"Q Why was what Dr. Emson obtained and
examined not turned over to the police?
A To answer this question $I$ contacted Dr. Emson by telephone this morning and discussed this issue with him. In response to my question Dr. Emson advised that he does not know why the fluid that was aspirated from the vagina or the potential for any further fluid to have been aspirated from the vagina was not obtained and in turn turned over to the police. It could have been a case where the police simply did not directly ask for or take possession of this particular item that was subject to his findings. This was not a case where Dr. Emson specifically recalled off the top of his head whether or not he did or did not turn over such an exhibit. Dr.

Emson pointed out that it is his practice to record in the autopsy report what exhibits he turns over to the police and as can be noted in his report, it is not referred to as being an exhibit handed over to the police."

Now that's what an RCMP officer wrote about a conversation with you, Dr. Emson, and my question is would that be accurate as to what you were thinking at that time, or your thinking today? Yes. And it is my practice always, was then and is now, to record what specimens were turned over to the police so that, if this material had been turned over, it would have been recorded.

And if you could turn to the next page, please, 045653 , and there is a question and answer here that $I$ just wish to read, Dr. Emson, then have a question. And this relates to information the RCMP obtained from their Biology Section, and the question is:
"Q Had the fluid that was aspirated from the vagina been taken as a exhibit, would our lab ...,"
and, again, this is the RCMP lab:
"... have been able to examine it and been able to draw any further conclusions beyond that which Dr. Emson had already made in his examination?
ie: determined a blood grouping that could point towards her assailant."

And the answer is recorded as:
"A As a result of a conversation with Jean Roney of our Biology Section this morning, $I$ learned that a potential examination could have been done, however, such an analysis would not necessarily have produced conclusive results. Apparently where one is looking at a stain or fluid that involves both semen and in this case fluid from the deceased, the results could be such that the deceased's own bodily fluid could be so overpowering that it would mask a possible grouping of the human semen. In that case a grouping other than that of the assailant's may be determined. In other words, one could end up identifying Miller's own blood grouping. The lab would not be able to conclusively say that the Group O results are from Miller even though it would be a reasonable assumption under the circumstances."

And my question, Dr. Emson, is that consistent with what you told me this morning about, $I$ can't recall the words you used, but concerns about
what type of blood grouping you could have done with the vaginal aspiration had you saved it?

What $I$ said earlier today, I think, was approximately the same; that if the tests had been done the results would probably have been so confusing as to be inconclusive.

But $I$ would also say now, today,
I know better; that it is better to do a test and then explain why its results are inconclusive than it is not to do one because its results would be inconclusive. It is always better, as a matter of defensive pathology, to do the test.

Right. Next, if you could turn to page 045659 of this document, and these are notes that an RCMP officer took purportedly of a conversation with you, Dr. Emson, and I think you told me you don't recall any such conversation but $I$ want to read a couple parts here and ask you whether this is -whether you agree with the statement that's attributed to you. And it says:
"- Had Gail Miller had intercourse before midnight the sperm would not have been present. (This refers to consential intercourse)

- had Gail Miller had consential intercourse
after midnight the sperm would be present.
(Non-motile spermatozoa found as a result of the autopsy could be from her assailant)" Do you agree with that statement?

A I think, now, I would stretch time more. If she had had intercourse before midnight, this would still have been within a 12 -hour time frame to her time of death, and survival of spermatozoa, as I have said, is variable and not easy to predict, but $I$ think this is a little bit too tight in timing; that sperm from an act of intercourse before midnight might have survived until her death.

Okay. Now this was recorded in 1993, Dr. Emson? Yes.

So is it possible that that's what you would have thought and told them at the time?

It's possible, yes. I keep on learning.
Okay. Next, if I could call up document 105103, please. And this is a letter May 31,1994 to the Chief of Police, Mr. Maguire, it -- that's your signature at the bottom, is it, right there?

Yes.
And I'll just call that portion out. And it's:
"re; Regina vs Milgaard (murder) and

Mr. Fisher",
it says:
"You will remember the case in which Mr. Milgaard was convicted of the murder of Gail Miller and its subsequent evolution. I am the pathologist who performed the autopsy on Miss Miller. The case was later linked with Mr. Fisher, and it was suggested that he and not Mr. Milgaard committed the murder.

Mr. Fisher has just been released from prison having served his sentence for another rape and attempted murder. From his history it seems likely that he will rape again and possibly commit murder, and you have commented publicly on this issue.

I write to ask that, if you become aware of another murder which Mr. Fisher is known or suspected to have committed, in this or another jurisdiction, $I$ may be informed. I should be most interested to compare my records of Miss Miller's autopsy with those of any murder which Mr. Fisher is suspected or alleged to have committed. Miss Miller's mutilation was unusual and $I$ have only seen similar injuries in one or two other
homicides with a sexual element. Comparison with any future homicide in which Mr. Fisher is suspected to be involved, might throw interesting light on whether or not he might have been Miss Miller's assailant."

Now I take it you would have written that to the chief of police?

No, I didn't, and my idea in this circumstance was what is termed, I think, modus operandi or M.O., the general picture of an assault, and assailants do tend to repeat themselves.

The mutilating injuries, as
opposed to the stab wounds on Miss Miller, I have only seen perhaps two or three times, other times, in my working life, and in those cases there was always a sexual element, and $I$ wanted to know if any other case that was linked to Mr. Fisher, potentially, had similar injuries, because this would have been a very interesting discovery of a repetition of the same pattern. I never, in fact,
did get such information.
I see. And when you talk "Miss Miller's mutilation," is that -- are you referring to those lacerations on her neck?

I'm referring to the slash wounds across the neck. And when you say "... I have only seen similar injuries in one or two other homicides with a sexual element.", what were you referring to there?

The same type of injury, the same type of injury, which is not apparently designed to kill but to mutilate.

COMMISSIONER MacCALLUM: What was the date of that letter, Mr. Hodson?

MR. HODSON: I'm sorry, the date of that letter is May 31, 1994.

BY MR. HODSON:
If you could then go to document 068604 , please, and this is a letter July 19th, '97 from I believe it's Constable Little, but I'm guessing at the signature, but it's -- it relates to an interview with you at your home on July 19th, 1997. And I believe, if my dates are correct, that would be within a few days after the DNA evidence was released from England regarding the Gail Miller
sample. And it says here, and $I$ just want to ask you about comments that are attributed to you, sir, it says:
"- Dr. Emson went on to make some other comments regarding this matter:

- since the Gail Miller homicide he has done either one or two other homicide autopsies where there were what he describes as similar cuts to the victims. He is referring to the superficial slashing cuts which he states are meant more to disfigure than to kill. He couldn't remember which cases these were other than one was a homosexual homicide. He felt that these were similar in style rather than the work of the same person, and were of interest because of that."

If I could pause there, and I think that's what you just told me, is that right?

Yes. These injuries, it seemed to indicate a particular type of psychological pattern. Now I'm not a psychiatrist, and this isn't my specialty, but they are -- appear to be inflicted with a desire to disfigure, to demean, to denigrate the victim, rather than to kill.
$Q$

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No, I don't think so, because $I$ think -- I don't think I had ever seen a similar case, and I have only seen two or three in a practicing lifetime, but they stick in one's mind as a pattern in sexual assault. A sexual assault rape, we're told, is not a crime of sexual desire but a crime of hatred.

The next comment attributed to you is:
"- Dr. Emson also states he has always felt that the body was dumped in the lane after the murder. He says he never visited the scene, but has seen the photographs. His belief is based on the outside temperature at the time and he was not concerned by the lack of blood at the scene. He went on to say that he was told there was no evidence to support the his theory."

Do you recall making comments like that to the officer?

A
No, but $I$ may well have done, and $I$ would vary it now, to "always felt" to "always suspected the possibility". "Felt" is very strong, "suspected
the possibility" has always been my mind.
And this last comment here that says:
"He went on to say that he was told there was no evidence to support ... his theory."

Or:
"... the theory."
Do you recall anybody telling you that, that there was no evidence to support that, or -I must have discussed this, I think, with the police representatives, and they knew more than $I$ did, they had been to the scene, I hadn't; they got all the other evidence, I didn't; and it may have been, again, that my suspicions were unfounded.

Okay. Next, Dr. Emson -- and we're nearing the end here -- you testified at Larry Fisher's preliminary hearing and trial; correct?

Yes, I did.
I will just call up, for the record, the transcript of the prelim, 315606, and there's only one section $I$ want to refer you to. Do you recall, Dr. Emson, being asked, I think by Mr. Beresh in cross-examination, about whether or not you saw a bite mark on Gail Miller when you did the autopsy?

A
$Q$正

No, I don't recall being asked, but if it is in the transcript $I$ was.

Okay. Maybe I'll just refer you to 315646 , and if you could just call out 193, it says:
"Q Fair enough."
And this is Mr. Beresh:
"Q ... I take it, sir, that you had been exposed to individuals who had suffered bite wounds in the past, prior to '69?

A A very -- $I$ can't remember. Certainly not a significant number, because bite mark analysis was certainly not well developed by 1969."
and the next page, please, and then:
"Q But clearly when you examined the body you found no evidence of any bite mark on her body?

A No. We examined the body carefully, because this was -- in addition to being, I hope, a competent pathologist, this was obviously a homicide and was going to -- likely to finish up in court. And under such circumstances one is particularly careful. I found no evidence of

A
significant other injury except a
number of bruises and grazes which are
recorded in the report.

Q Right. And none of those were
suggestive to you, in your expertise, of
being bite marks or --

A No

Q -- having been caused by teeth?
A No."

Do you recall that exchange, Dr. Emson? and $I$ think it was either at the prelim or trial, I believe it was Mr. Beresh may have put these to you and asked whether you could identify them as bite marks. The first is photograph 066731 , please, and if you could just zoom in on that area, please. And this was exhibit 14 at trial. Do you see that round mark? Do you recall looking at a photograph and being asked whether that looked like a bite mark?

No, I don't recall it, but it's certainly a valid question.
$Q$

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$Q$

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Perhaps I will show you another photograph that may show it, 073514 please, and if you could zoom in on that photo, please, and in that area. That's not going to work. If we could go back, we'll try another photo, 066732. And you will see, do you see that mark there, if we could just -- yeah, that's fine, you will have to back out, that's too close.

I think it's better in the larger photo.
That's fine, if it's like that, how's that?
To me it's not so clear, I -- it may be my own eyesight, I prefer the full-length photo. The demark is there. We're talking -- can $I$ point to this thing?

Yes, you may.
We're talking about this mark here, in this region, aren't we?

Yes. This mark right here.
Yes.
Yes.
It's certainly semi-circular, and there are vagaries here, sometimes the oddity is that you don't see a lesion on examination but some fluke of the film will, or the type of film, will bring it up in later photographs, I think we're all
familiar with this, and that might not have been apparent -- as apparent at the initial examination as it was when the photograph was taken.

If you like, Dr. Emson, I actually have the original trial exhibit photograph, if -- would you rather look at a --

No, it's -- the point is that the photographs, the emulsion on the photograph may be sensitive to something that your eye isn't as sensitive to -Yeah.
-- and, indeed, if you take different photographs with different films you may get totally different results.

That is certainly a suggestive mark now, it is a semicircular mark, it is approximately the size of the human jaw. But in 1969, I had certainly seen very few or no bite marks before, and we did not at that time have a College of Dentistry or anybody doing forensic dentistry in the province, that $I$ can recollect. Do you recall, in 1969 or 1970, any discussion with anybody about whether or not there was a bite mark on Gail Miller?

No, I don't.
COMMISSIONER MacCALLUM: Mr. Hodson, I
would like to see that photograph, if you could hand it up, please. Thanks. You say this was an exhibit at the trial?

MR. HODSON: Yes.
COMMISSIONER MacCALLUM: At the Milgaard trial?

MR. HODSON: Yes, and the number -actually, if you look on the front page of the booklet, it has the exhibit number, and then number 15 is the photograph number.

COMMISSIONER MaCCALLUM: So that what $I$ am looking at now is a black and white photograph of what has been marked in this inquiry as number 066732 , and it was marked in the Milgaard trial as Exhibit 15, and would you hand that, Madam Clerk, to Dr. Emson.

MR. HODSON: If you like, Dr. Emson, I actually have, there may be one other -- while you are looking at that, Dr. Emson, if you could call up 077880, please, and this is a, it might be the same -- it might be a colour photograph of the same.

COMMISSIONER MaCCALLUM: 077 what? Oh, 880.

BY MR. HODSON:

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Dr. Emson, does examining the original exhibit photograph assist you in any way? No. The mark is there, it's a semicircular mark, it's compatible with the size of a human jaw. This is the first time to my knowledge we've commented on it specifically in regard and $I$ can only say now what $I$ think $I$ would always have said, it's suspicious, but it's not conclusive. Next if you could call up document 313838 and just confirm that this is the transcript of your examination at Larry Fisher's trial. You recall being a witness at that trial?

I do, and $I$ would point out that my name is wrongly spelled in this.

Would that be the Edmond?

Yes. It's U-N-D.

That was the only question $I$ had for you on that transcript, sir. A couple of final questions. If you were doing Gail Miller's autopsy today, Dr. Emson, what if anything would you do different?

A
Well, first of all, we would have had -- we would have, if we did it tomorrow, a great deal more specialized police assistance. We would have people who specialized as major crime investigators, there is a unit in the Saskatoon City Police, we would have had specialized identification officers and we would have had a great deal more accumulated expertise over the intervening, what is it, 35 years?

Yes.
The whole science of crime investigation has developed exponentially in that period as has most other science. We've had a lot more experience and we've learned a lot more from other people's experience and we've got a lot more equipment. The second thing is in terms of the sexual assault, the police would deploy a special sexual assault kit which has a protocol and a requirement or request for various specimens so that we're not left to our own initiative on this. We have a great deal of again accumulated experience over what to obtain and of course a tremendous range of techniques over what can be done, and then more important than anything else, we have DNA evidence which we can use specifically to identify a given
individual out of $I$ think the world population, the individuality is as specific as that apart from identical twins.

If $I$ were doing it, I've got 35 years more experience and the experience of the police, the combined experience of the police officers would be a great deal greater, but basically speaking, these same procedures would have been followed. When people produce an autopsy report 35 years old, one is a little worried. I'm not in the least ashamed of this one. I think it was a competent autopsy at the time and place and I think we can pick minor holes in and around it now, but basically speaking, the right things were done, and what $I$ would do tomorrow would be essentially the same, but with the 35 years' increase of experience and technology that we have since then.

MR. HODSON: Thank you very much,
Dr. Emson. Those are all my questions. Counsel for other parties will have some and I think they will introduce themselves and who they represent when they come forward.

## BY MR. LOCKYER:

Good afternoon, Dr. Emson. I'm here representing

Mrs. Milgaard and $I$ want to begin by just spending a little more time on the sample that you took from Ms. Miller's vagina which you then destroyed, or discarded $I$ think is a word that has been used. First of all, do $I$ understand that it was likely discarded on the day of the autopsy?

Yes.
And you've told us that, I think you said at the preliminary hearing, and it has been read to you, back in 1969 that you seized about two cubic centimetres of material; is that right?

I don't recollect the volume being recorded, but that would be about right.

And am I right, sir, I go back pre DNA days just as you do, that -- in the profession that is -that back prior to DNA in sexual assault-type cases, forensic scientists regularly examined semen seized from scenes to see whether they could identify the perpetrator as a secretor or a non-secretor or even give, if the perpetrator was a secretor, give a blood type within the ABO system of the assailant; is that right?

A
I didn't do it, but if it was regularly done in
the forensic laboratories at that time $I$ don't know.

Because the irony in this case, sir, is that you having destroyed or discarded what you seized, just a few days later we have the RCMP lab in the person of a Mr. Paynter looking without really any success at all, some minor success perhaps on the panties, for semen on Gail Miller's clothing, so he's trying to replicate what you have discarded just a matter of days before. Did you know that? I'm sorry, is that a question?

Yes, it is. Did you know that?
No.
Whereas if what you had discarded had been kept, he would have been off to a very good start without even having to go to the clothing in the first place; right?

He would have had more sample tests, certainly. And if we take the now known facts of this case, sir, which is that the deceased Gail Miller was a type $O$ and her killer, Larry Fisher, was an A secretor, under those circumstances what you discarded, it could have been really quite useful even back in those days in identifying the perpetrator, the results?

Yes.
Right?

A Yes.
Q
And obviously by the time we get into the late '80s, perhaps ' $88, \quad$ '89, ' 90 , somewhere around there when DNA starts becoming available, DNA typing becomes available to forensic labs, obviously that sample that you discarded may well have produced a result back in those years, the late ' $80 s, ~ c e r t a i n l y ~ a t ~ t h e ~ v e r y ~ l a t e s t ~ t h e ~ e a r l y ~$ '90s; is that right?

Yes, if it had been stored so long. So was it a regular practice back then to destroy samples of that nature in a sexual assault case without even trying to type them in the first place?

Well, I don't know because $I$ saw very few homicides where sexual assault was involved. They were and are a considerable rarity. I can only go back and presume, this is an assumption, that at the time of the autopsy we discussed whether there was a further use for this specimen and we were not aware or we did not realize that there was a further use for it.

One of the things that has come out of previous inquiries of this nature, sir, is retention policies, so, for example, at the Morin Inquiry,

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$Q$
which you are certainly familiar with -- you've heard of anyway; right?

Yes.
The recommendation that was made by the
Commissioner there, it's recommendation 29 of the Morin Inquiry under the heading post-conviction retention of original evidence, the Commissioner recommended the following, and I quote:
"That the ministers of the attorney general and solicitor general, in consultation with the defence bar and other stakeholders in the administration of criminal justice, should establish protocols for the post-conviction retention of original evidence in criminal cases."

You understand the recommendation?
Yes.
Which has, incidentally, since been followed through on by the solicitor general's office, or by the ministry in Ontario. Presumably you would -- perhaps I should just ask you. Would you feel such a recommendation would be a good idea in this province as well, sir?

I would go rather further than that, that $I$ have learned over the years that it is always better to
retain everything if you can because more and more we do not know what techniques will be available in the future. We cannot predict in ' 05 what techniques are going to be available in '15 and for this reason, as $I$ say, over the years of experience, really formed the opinion it is better to retain almost everything, everything you can even if you don't know what you are retaining it for.

Commissioner Cory at the Sophonow Inquiry, sir, was more specific, he recommended, and $I$ quote:
"That exhibits should be stored for at least 20 years from the date of the last appeal or expiry of the time to undertake that appeal."

Would you think that's a pretty good recommendation as well?

If you are setting a time frame, yes. The problem always arises in this sort of instance as to what space you've got and where, but that's a matter for administration. In principle I think now you should always keep everything.

And there's no such retention policy in this province at the moment; is that right, sir, as far as you know?

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I'm not aware.
And you probably would be if there was one? No, not necessarily. The police and the department of justice can have policies of which $I$ am not aware.

Did you see your job back in 1969 , sir, as in any way being a reconstructionist-type job, where you were to try as best you could, for the assistance of the police, to reconstruct the crime?

No.
Okay. Would you see that as being one of the roles of the pathologist today?

It would be very difficult in my circumstances where $I$ may be dealing with homicides from a site 200 miles away. I am very rarely aware -- well, never aware of all the significant circumstantial evidence, and as $I$ have said earlier in this inquiry, my job is to put my piece of the jigsaw in and to make as sure as possible that it is congruent with the neighbouring piece.

In this case, sir, you conducted the autopsy how far from the scene of the murder?

I'm not sure. I think it was within a mile.
And did you ever give consideration to going to the scene, sir?

I was never asked to.
Well, true, we all do things sometimes that we aren't asked to do, we sometimes act on our own initiative. Did you consider that, sir?

No, I didn't. I don't think my acting on my initiative to intervene in a police investigation would be, then or now, welcome.

So you don't think even today that it would be helpful or an idea for you to say to the police what do you think of me attending the scene and help you reconstruct this crime?

Under our present system of administration $I$ would want that suggestion to come from them.

I'm sorry, I didn't hear you.
Under our present system of administration $I$ would want that suggestion to come from them.

Why?
Because our spheres of influence are defined. I do not welcome a direction from anybody else as to how $I$ shall conduct an autopsy and equally another participant in the investigation may not welcome an intervention from me.

Surely we're not dealing with individual sensibilities here, sir. Why wouldn't you just say to a police officer as a matter of course what
do you think of the idea of me attending the scene of the crime?

A
It would have to be established as a normal practice. I have a number of homicides currently in my files awaiting one form or another of legal procedure arising within two or three miles of the hospital where $I$ work. In none of these have I been asked to go to the scene of the crime. It is not $I$ think within my scope as a pathologist working under the Coroner's Act to suggest this. It is a matter for the police or the other investigating officers to decide that this might be useful.

Let me ask you this. Do you think in some cases it would be helpful, sir, for you as the pathologist to attend the scene of the crime?

I don't know about the scene of the crime, but it certainly would be helpful in some of the cases I investigate, but -I'm not sure what you mean by investigate. As a pathologist you mean?

I'm thinking of other things which are not criminal like death from epilepsy which may result in very peculiar positions and circumstances which are hard to explain. Sometimes one gets a good
account, sometimes one doesn't, but as things stand, no, $I$ would not suggest this to the police. If this suggestion is going to come, it's going to have to come from someone else.

You lost the question, sir. Let me do it again. Do you think in some cases, sir, that you've conducted as a pathologist, some homicides on which you've worked as a pathologist, it would have been helpful for your work and potentially for the case as a whole if you had gone to the scene of the crime?

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case in depth, but let me ask you this at a very superficial level in this case, did it ever become, did you ever come to know that in essence the police and prosecutorial theory of culpability on David Milgaard's part depended on a conclusion that the assault, rape and murder had all taken place in the outside essentially right where she was found dead?

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$Q$

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$Q$
$Q$

A

Q

A
No. I was not and am not aware of all the circumstances of the police investigation, of them establishing in their belief that all the events took place at the same site.

In the open?

Yes.


Q

Q

You never knew that until $I$ just pointed it out to you?

No.
Okay. Which raises a further point, sir, as to did you ever feel in the ' 80 s and the ' 90 s when this case is getting as much publicity as it is and you know that David Milgaard is protesting his innocence, both himself and through members of his family and others, did you ever feel that there was an obligation on your part, sir, to review the case yourself to see whether you could assist in determining whether he had been wrongly convicted? A little earlier in my evidence there was a letter produced which $I$ had written to the then chief of police asking that if Larry Fisher was ever involved or suspected of being involved in a similar event, that $I$ should be informed because $I$ would like to compare the modis operandi in the two, so to that extent $I$ was sensitive.

That's two years after David had been set free by the Supreme Court of Canada. If we can go pre '92
when he was set free by the Supreme Court of Canada, did you ever feel that you, as the pathologist on the case, should pay an interest and review the case yourself from the perspective
as one of the, really the only independent expert who had been involved in the case from the outset?

A

Q I don't know what $I$ could have reviewed. My findings were pretty straightforward and did not specifically point to anybody, and what more $I$ could have done in the 1980 s I do not know.

Well, throughout the 30 odd years, or 30 plus years of the case, you always seemed to have expressed the same opinion, that you believed that the sexual assault most likely took place inside, not outside; is that right?

Well, that was because of the sheer, to my mind, improbability of a sexual assault occurring outside at minus 40, but the information $I$ had then and have now is that all the circumstantial evidence pointed to all the events having occurred at the same place. I was not in possession, nor am I in possession, of all that other circumstantial evidence.

Well, the only circumstantial evidence of that, sir, so to speak, was premised on the assumption that David Milgaard had committed the crime, because it had to have happened that way for him to have committed the crime. Do you understand? I can understand that, but it appears to me to be
reasoning in the wrong direction.
Well, that's true, and I'm just thinking, sir, and I'm really not meaning to be critical of you here, sir, understand that, it just seems to me that if you had got involved in this case when it was becoming as notorious as it was post conviction, in the ' 80 s and -- $70 \mathrm{~s}, \quad 180 \mathrm{~s}$ and 90 s , that perhaps you had a valuable contribution to make in terms of your view that it seems quite unlikely that this crime took place in the open air.

I don't know how $I$ could have been involved further, and that opinion had already been expressed to the investigators.

I'm wondering if you feel, sir, that from a systemic point of view, that in the future in a case like this someone in your position should perhaps have a duty to get involved in reviewing the case and studying it, it might be very helpful to exposing miscarriages of justice in the future? One of the possibilities in this is the involvement of another forensic pathologist and indeed $I$ have been involved since the Milgaard case in another case of wrongful conviction where the initially convicted man was subsequently, at a later retrial, acquitted, so that to that extent $I$
think one of the possibilities you suggest is the bringing in of another forensic pathologist or indeed the possibility of a panel of forensic pathologists sitting in review on such a case, but what, $I$ repeat, what more as an individual $I$ can or should have done in this case $I$ do not know. I'm going to come to the case you just referred to shortly and talk more about your panel idea, sir, but do you think that perhaps in the pre '92 period, that it might have been helpful if the powers that be, who were trying to uphold David's conviction, had consulted with you for some opinions on the case, because they didn't, did they?

No.
No.
And I was not asked to appear at the Supreme Court either.

Do you think it might have been a good idea if they had, sir, if only so you could tell them that you always had problems with the idea that this crime was committed in the open?

A
I would be very willing to be re-consulted on any of my cases if there is a suspicion or a doubt as to the validity of the conviction. I do not like
being involved in miscarriages of justice, but in this case, as $I$ say, examining my conduct, $I$ do not know what more $I$ could or should have done. If some authority had consulted me, of course I would have given them all the help I could.

Well, insofar as this case sort of ever got moving in the direction of ultimately exonerating David, sir, it was through Dr. Ferris who really got things moving, so to speak, back in the '80s, a man of your profession, and $I$ can't help noticing that, or pointing out that when you were asked about Dr. Ferris some years later by the RCMP, you referred to him as a grandstander. Do you remember that?

No. It would be a very improper comment to make on a fellow pathologist and indeed a more improper one to record.

Mr. Commissioner, it's at 034488 that that
appears. This is an interview of you, sir, on the 12th of February or the 2 nd of December, I'm not sure which, of 1993. It's not an interview of you, it's a report of an interview of you $I$ think is probably a better way of putting it, and you'll see in the passage that I've just circled there that the following is written:
"In a report to Hersh Wolch, he --"
Meaning Dr. Ferris -- sorry:
"In Dr. Ferris' report to Hersh Wolch, he refers to the pathology evidence of

Dr. Emson. During the interview of
Dr. Emson on the 10th, a copy of Dr. Ferris' report was shown to Dr. Emson.

Dr. Emson is fully comfortable
with his autopsy and findings based on the
resources available to him in 1969 and feels
he did an admirable job. He describes the
conflict of opinion of Dr. Ferris in his
report as erroneous to some degree and
described him as being a 'grandstander'."
Do you remember that, sir?
A
No, I don't. By whom is this report made or signed?

Well, it's an RCMP officer by a name of -- well, two of them, Williams and Jorgenson.

A
No, I don't remember this, and it seems to me, I hope unlikely, that $I$ would have described my own report as admirable, and if $I$ described Dr. Ferris as a grandstander, it was quite wrong of me. I don't remember doing it and it would be a term $I$ would not willingly employ in a comment upon
another professional, but if these people have written it down, then they must have heard it. When and how did you first hear of Larry Fisher, sir?

I can't remember.
Can you remember how?
No. I can only presume in some media publication. And did you ever form, prior to July 17th, 1997 when the DNA results became public, indeed it was the day of the results too, did you -- had you ever formed an opinion in the meantime about David Milgaard's innocence or guilt, sir?

No.
Because certainly your 1994 letter to Chief of Police Maguire that was shown to you, the May 31st, ' 94 letter that was shown to you by Commission Counsel, you know the one $I$ mean -Yes.
-- a reading of it would suggest that you had drawn the conclusion that Larry Fisher had likely committed the crime by 1994; is that right? No, certainly not. What had been suggested was that he might have been involved and as Mr. Fisher was a serial sexual criminal, it appeared possible that he had a specific pattern of action, a modis
operandi, as such people often do repeat
themselves. What was in my mind is that if there was any record or any subsequent involvement of Mr. Fisher, that it would have been, as I think I said in my letter, of interest to compare this with the Miller findings.

The fact that you never got a reply to that, sir, is, at least to me, a little disturbing. When you wrote that letter were you still working for the Government of Saskatchewan?

I don't work for the Government of Saskatchewan.
I don't mean -- don't take offence. I'm not quite sure what your capacity is.

At that time $I$ was professor and head of the department of pathology in the University of Saskatchewan. At present $I$ am an independent practicing pathologist performing autopsies under the Coroner's Act as, I understand, a specialist physician. I do not work for a government.

All right. Well please take the annoyance out of your voice, sir, and let's just carry on, because what $I$ want to know, the reason $I$ ask the question is this: Is there any reason in principle why Chief Maguire wouldn't have responded to you -No.

Q

A
Q

A
$Q$

Q
-- that you can think of in the context in which you are asking the question?

No.

All right.

But $I$ had thrown out the suggestion and my only presumption would be if anything had come up, I would have been informed. As it is, $I$ do not know of another similar case in which Mr. Fisher has been implicated.

If we could go to 033006 , please.

COMMISSIONER MacCALLUM: Mr. Lockyer, just be conscious of an appropriate interval to stop.

MR. LOCKYER: Why don't I just do this, Mr. Commissioner, and that would be a good time.

MR. COMMISSIONER: Right now?

MR. LOCKYER: Sure, unless they are having trouble finding it.

MR. HODSON: What document?

MR. LOCKYER: 033006 .

COMMISSIONER MacCALLUM: There you are.

BY MR. LOCKYER:

Page 2 of the document, please. This is a memo, sir, from Mr. Fainstein who was the department of justice lawyer who opposed Mr. Milgaard's application to set aside his conviction in the

Supreme Court of Canada and he's here sending a memo to a man called Dave Werrett who is one of the people in the, at the Forensic Science Centre -- sorry, the Forensic Science Services in England at the time they were in the midst of doing the DNA testing in 1997 that ultimately led to David's exoneration and Larry Fisher's arrest. Are you with me?

A
$Q$
$Q$
And you'll see if we focus in at the bottom of page 2 -- it's page 1 in a sense -- Mr. Fainstein writes:
"Here are a few observations that $I$ hope will assist your understanding of the case.

Dr. Emson testified at the trial, as
follows, about the clothing:
A When we started the examination the body was clothed most externally in a black coat with both arms fitted into the sleeves.

Below the coat there was a white uniform of the type which nurses wear; this had been rolled down around the waist so that the arms of the body were out of the uniform but reinserted into the sleeves of the coat.

There was a brassiere off of which the right strap was broken, and a light girdle."

And further:
"There was a pair of white stockings pulled down around one ankle, and a single boot on the left leg."

And that was your trial testimony; understand, sir, or part of it?

A
$Q$

A
Q

A
"Dr. Emson also testified that toward the end of his examination, around 4 or 5 p.m., he found a large quantity of --"

And then -- that's how $I$ read it.
Right, $I$ think you are right:
"-- non-motile sperm and fluid taken from
the vagina. (The body was found at 8:30
a.m. in the morning. The killing took place after the victim left for work. She was required to report at the hospital at 7:30 for an 8 a.m. shift). Unfortunately,

Dr. Emson discarded the fluid after his examination for sperm."

Okay, we now go on, and this is Mr. Fainstein, the prosecutor speaking:
"Gail Miller was killed in Saskatoon, Saskatchewan on January 31st, 1969. It was bitterly cold that morning. (I forget the exact temp. but it was somewhere in the range of minus 30 to minus 40 , the latter being the point where Farenheit and Celsius scales converge). I believe that she was raped in a car, then pulled on her coat without taking the time to put her arms back through the sleeves of her dress, tried to flee down a lane way, then was caught and stabbed by her assailant. This would also explain why she was stabbed through her

A

Q
coat, but not through her dress."
You see that, sir? he is relying on the evidence that her arms were back in the sleeves in her coat but her dress was still rolled up?

Certainly, that would be a part of it one would
think, yes?
A

Q This is a good time, Mr. Commissioner. Mr. Commissioner, I have to catch a plane leaving at 4:15; could we shorten the break by ten minutes, five minutes? I may not make myself very popular with that request, but -COMMISSIONER MacCALLUM: I will be here five minutes early.

MR. LOCKYER: Thank you. So will I. (Adjourned at 3:21 p.m.)
(Reconvened at 3:32 p.m.)

BY MR. LOCKYER:
Just going back to one issue that $I$ was asking you about before the break, Dr. Emson, in this.

Do you think it would be helpful
if the Commissioner were to make a recommendation somewhere along these lines: That the police and the pathologist, in an apparent homicide, should always discuss between themselves whether it would be helpful for the pathologist to attend the scene of the crime?

Well that is a, it's a little out of chronological order, because it is the police, when they are called to the scene of a homicide, who have to decide what they are going to do about it. Now if you read all of the established forensic texts, they all say that the pathologist or the Medical Examiner should attend at the scene of the crime. They do indeed.

And in my own practice, with cases from up to 200 miles away, this is, of course, impossible. Right.

Whether, in fact, the pathologist should attend at the scene of a crime in a case of a city is a possible recommendation, and $I$ would certainly not wish to preempt his Lordship's recommendations.

One would have to see how justice might better be served, and one would also have to examine the position of the pathologist, who at the moment is -- or at the present time is only involved under the Coroner's Act after the Coroner has issued a warrant for the examination of a body, which customarily takes place rather late in the sequence of proceedings.

So, medically, the investigation
system, at the moment, is not set up for this. Whether, in fact, it would be of use, I do not know.

And, also, one would have to
investigate the -- consider the legal position, and indeed the remuneration of the pathologist, if he or she is going to be called out a dozen times a year, sometimes in the middle of the night.

I want to move on, sir, and talk to you about the role that has been played by pathologists, not in this case because I don't suggest it happened in this case, but in other cases of wrongful conviction. Because there is no doubt, am $I$ right sir, that your profession has, on perhaps more occasions than any of us would like, been responsible for wrongful convictions having taken
place; is that right?
A
One is always regretful of any wrongful conviction, but the number of these that I'm aware of in Canada which depend upon inadequate pathological examination of evidence is, in fact, rather few --

It's --
-- and the number that's -- of investigations, I think, that are done is quite large.

I think the major portion of
forensic pathology in Canada, as far as we know, is well and competently done, and we do everything we can to increase this, but I am aware that there are cases where it has not been rather competently done.

Well there is two fairly recent cases in our country, sir, where it might fairly be said that pathology, bad pathology, was the cause of a wrongful conviction; the Clayton Johnson case in Nova Scotia and the Ronald Dalton case in Newfoundland; correct?

Well Dalton $I$ was personally involved in, the other one I am not aware of the details of. But you are aware that it was a case where pathology suggested a death had been caused by
homicide when, in fact, it had been caused as a result of an accident?

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$Q$

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I --
Falling down the stairs.
I have heard of this, $I$ have read of it, but $I$ have no detailed knowledge.

And in Ronald Dalton's case, the one you were involved in, sir, which was a 1988 death of

Mr. Dalton's wife; is that right?
Yes.
And she died as a result of an obstruction in her throat caused by aspiration of food; is that right?

Yes.
And at the trial of her husband the pathologist, Dr. Charles Hutton, testified that in fact she had been the victim of manual strangulation; is that right, sir?

Dr. Hutton misinterpreted the findings at autopsy as being of manual strangulation when, in fact, the injuries to the throat were caused by rather inexpert attempts at resuscitation.

And Mr. Dalton, as a consequence, spent about eight years in jail for a crime he didn't commit? Yes.

Q

Along with two other cases at the same time? Yes.

And that particular case, sir -- and I'm quoting
And his case is now the subject of a public inquiry very like this one being conducted by Commissioner Lamer, the Former Chief Justice of the Supreme Court of Canada; is that right? I am not aware of the details, but I'm aware that it is being reviewed.
you as you were quoted by the Newfoundland Court of Appeal so hopefully they got it right -- this was a quote -- Mr. Commissioner, the judgement in this case can be found at 1998 NJ number 131 if anyone wants to find it -- you are quoted, sir, as saying:
"Dr. Hutton seems to have formed his opinion from the beginning and all he did was support it."

Do you remember saying words to that effect, sir? That was certainly the impression $I$ got, that he seemed to have gone into the case with a preformed conviction.
"He operated under a preconception of murder and his forensic inquiry was prejudiced by a proclivity to substantiate his hypothesis." That's, if $I$ said that, that was very good, yes. In fact, sir, Dr. Hutton used to have an expression -- or probably still does for all I know -- that he liked to think dirty when he did an autopsy; have you heard that expression, sir? I believe he did say that.

Yes. And that notion of thinking dirty, in other words conducting an autopsy on the basis that you are likely looking at a homicide rather than an
accident or a suicide or some other cause of death, is really contrary to the scientific method; is that correct?

I think the pathologist, in an approach to an autopsy, first of all may be conditioned to some extent by the circumstantial evidence he has been provided with by the police and the Coroner. After that, you must have an open mind and be neutral, and be guided by what you find. I don't have preconvictions, $I$ may have suggested lines of approach or suggested things to look for, because of the circumstantial evidence.

Now am I right, sir, that in your profession as -of pathology, there is no supervisory body other than, I suppose, the Royal College of Physicians and Surgeons; is that right?

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A
My licence to practice pathology, or practice medicine in any form, is subject to renewal each year by the College of Physicians and Surgeons of Saskatchewan. My privileges to practice pathology in the Saskatoon Health Region are reviewed and
renewed or modified each year by the governing body of the region. I'm subject to annual renewal by my peers, and by my administrative superiors, and I am always subject to review on that. Okay. What is the governing body; who is on the governing body?

Well the governing body for the province is the College of Physicians and Surgeons who licence me to practice.

All right, who are not pathologists as such?
It is an elected body with defined representation under the Act from the medical profession itself, we're a self-governing body with appointed lay representatives, it's not specifically pathologists.

All right. So there isn't a supervisory body which contains your peers, meaning pathologists, only?

It may or may not depending on who's elected to it. We're a part, we're a small specialist -we're a small specialty within the practice of medicine.

Because, as a practicing lawyer, one of the things that $I$ think probably Crowns and defence are all very familiar with is that, in many homicide

to time, that particularly in a very small jurisdiction like my own, we should have perhaps a greater input of people from the wider world. And, in fact, $I$ think in an article as recently as April of last year you were quoted as saying that; is that right?

Quite possibly.
And then could you be a little more specific as to what you think would be a helpful supervisory body to supervise pathologists?

Well, this is very difficult, because it goes against the construction of law in Canada, which is provincial, and when $I$ think of Newfoundland and I think of Saskatchewan $I$ think essentially of what we need, as for instance in the Dalton case, where not only was the pathologist appearing for the Crown wrong but that the pathologist appearing for the defence was also incompetent.

That's Dr. Hoffman (ph) from the U.S.?
Well, he didn't do anything useful. And in such cases, and in particular in a small province, it would be advantageous if we had some form of national panel of accepted -- perhaps the Chief Medical Examiners of those provinces which have
them -- but it's difficult to see how, under the present Canadian system of administration of the law, that this would be possible. But in a very large country with a relatively small population, it's what we should be looking at, and in fact these things are going to get more and more important as we deploy more and more scientific resources.

The days are long gone of the generalist who knows everything.

And a pathologist is, in fact, perhaps one of the last survivors of the generalist approach; is that fair?

No, I don't think so. I think more and more we're finding, and certainly $I$ could particularize this in Saskatoon, that our pathologists are in fact more and more subspecialists, which is why it is difficult to find people to do what $I$ am doing, which is the regular Coroner's work.

Which is generalist work?

Essentially, yes.

Yes, and that's what $I$ am saying, pathology is one of the last survivors of the generalist --

Most forensic pathology doesn't need an expert, but in this province, with perhaps 30 to 35
homicide cases a year, we do.
So a supervisory body of some sort, sir, perhaps even at a national level?

I'm not saying supervisory, I'm saying consultative or available, or some term like that.

So that for example, and let's look at it from a supervisory point of view if $I$ may, although you don't like the term, if -- take an example, if you will, from what's come out of the Morin inquiry. There's that kind of body now exists, sir, for the Centre of Forensic Science which is located in Toronto and Sioux St. Marie, a supervisory body that one can complain to as a defence lawyer for example, if it's a defence lawyer wants to make a complaint, or as a prosecutor if you want to make a complaint about an individual scientist's skills or lack of skills and expertise. Well, I wasn't aware of that, but -It came out of the inquiry and now it exists. Well, you see, it will be difficult to establish a body like that in Saskatchewan or Newfoundland or New Brunswick because of the sheer problems of size and administering the resources available to a million people or fewer.

A In an ideal world, yes, but -Well, we're not in an ideal world, but being human beings we all strive towards it. Can we look it at it as from a post-conviction
something like that, probably, until afterwards, but you could certainly catch it a lot quicker if you had a better process to catch, don't you think, where expert evidence is potentially the cause of the wrongful conviction?

Well certainly from my point of view, it looks that way, but I'm not an expert or, indeed, even knowledgeable in the administrative structure of the law, which is where it would have to come from.

Well we're talking recommendations arising out of this inquiry, which is why I'm getting into this with you, sir; you think it would be a good idea, the mechanics of setting it up is, of course, for other people to consider?

It's a good idea. I don't think this applies to our present case but certainly, in $R$ v. Dalton, it would have been a very good idea if such a panel review had been -- in fact, if it had been available at the original trial, $I$ don't think there would have been a conviction. It was only the -- oh, dear, this is going on record -- it was only the combined mistakes of both prosecution and defence pathologists that allowed that conviction to take place, and that's why $I$ think the
intervention might, should have been at that level, but it should certainly have been available at the level of an appeal.

And if, say, a panel of three
Chief Medical Examiners from across Canada had been consulted in $R$ v. Dalton post-conviction, I don't think the conviction would have been upheld.

And, tell me, would a case like Dalton be well-known in your profession --

No.
-- now, sir?
It wouldn't? It might be amongst a very small body of forensic pathologists who specialize in, forensic pathologists in Canada, we probably don't number more than 20. But it's not, certainly, a prominent, high-profile, publicly-known case. Okay. But would it be known, well-known, amongst your profession as such?

I don't know. I don't circulate much amongst my profession and $I$ don't know how many people know about $R$ v. Dalton. I don't know, for instance, if he's well-known in British Columbia. I doubt it. There isn't a mechanism for reporting this sort of case in the medical literature as there is in legal profession.

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$Q$

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It might be, actually, because as I recall Ferris was involved in it and he was in British Columbia at the time.

No.
But that's by the by. Perhaps, just so we understand the scope of this, sir, how many forensic pathologists are there in Canada, roughly; are we talking hundreds?

Depends how you define a forensic pathologist, but --

Someone who does autopsies on a reasonably regular basis?

I don't know, but my estimate would be less than 50.

Less than 50?
COMMISSIONER MacCALLUM: Just a minute, I'm not sure $I$ know what either one of you means.

You mean forensic pathologist
in the sense of a pathologist who investigates potentially criminal deaths?

MR. HODSON: I think, if you do autopsies, you are almost inevitably going to be investigating, potentially, homicides. So yes, I mean, so --

COMMISSIONER MacCALLUM: Well, I mean, as
opposed to a hospital pathologist. A pathologist, Dr. Emson -- excuse me for intervening --

MR. LOCKYER: No problem.
COMMISSIONER MacCALLUM: -- a forensic pathologist, Dr. Emson, is one who is a specialist in that field but he might be doing hospital work and nothing but, whereas a forensic pathologist you would, I gathered earlier from your remarks, is one who is involved in the criminal investigation of sudden death?

A

A
Most of the pathology $I$ do, I think 95 percent of my cases are referred from Coroners, and I think this would be probably the average across Canada. Now if you take the pathologists who are doing most of those, of which the vast majority turn out to be death from natural causes, my estimate would be that perhaps there are fewer than 50 people who are doing a significant number of those. In those provinces with a Medical

Examiner system, they would be easy to identify; in those province with a Coroner system they would be less easy to identify.

COMMISSIONER MacCALLUM: Thank you.

Mr. Lockyer?
BY MR. LOCKYER:
$Q$

We've talked, sir, about two cases in Canada, two recent cases, where pathologists have turned non-homicides into homicides, so to speak, and just so we understand the -- that that's not unique to Canada, you are aware of similar cases south of the border, is that right?

Not specifically, but I'm sure it occurs.
Yeah, and in the U.K. as well?
The U.K. has quite a distinguished history of this.

Quite a distinguished history of doing that?
Of wrongful convictions based on --
Indeed.
-- rather variable evidence.
From pathologists?
Sometimes.
Yes. Have you ever heard of the Nichols (ph) case as an example, sir?

I can't identify.

Q

You don't know the Nichols case. But certainly, if you go south of the border, there's been -- and I don't wish to stain your profession, I'm much more ready to stain my own profession to be quite honest with you, but you are the witness today -there's been some pretty notorious pathologists south of the border; have there not? I'm not very well versed in this.

All right. Fred Zain is a familiar name, I'm sure?

Who?

Fred Zain, Z-A-I-N?
No.
Oh. All right. Tell me, back in 1969, sir, how were you paid for an autopsy?

I was paid a fee on -- $I$ was paid a salary by the hospital and $I$ was paid a fee under the Coroner's Act for doing Coroner's autopsies.

And was the fee the same regardless of how long or how short the autopsy -- how much or how little time the autopsy took?

As far as $I$ remember, yes.
Is that still true today?
No.

Because it certainly doesn't encourage one to
cover all the bases, so to speak, that kind of fee-for --

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$Q$

A
Q

A

Q

A

Q
Tell me this, sir; back then would $I$ be right in saying that you were not -- you were rarely, if ever, made aware of the purpose to which the prosecution at a trial intended to put your we've got here.

|  | 1 |  | evidence? |
| :---: | :---: | :---: | :---: |
|  | 2 | A | I'm sorry, I don't quite understand that. My |
|  | 3 |  | evidence goes in in the form of a written |
|  | 4 |  | report -- |
| 03:57 | 5 | $Q$ | Right. |
|  | 6 | A | -- and an examination on that report. |
|  | 7 | 2 | And testimony -- |
|  | 8 | A | Yes. |
|  | 9 | Q | -- at trial; right? |
| 03:57 | 10 | A | Yes. |
|  | 11 | $Q$ | And would you necessarily know, sir, what it was |
|  | 12 |  | that the prosecutor planned to do with your |
|  | 13 |  | evidence in terms of trying to convince the trier |
|  | 14 |  | of fact, the jury, as to why they should come in |
| 03:57 | 15 |  | with a particular verdict? |
|  | 16 | A | A prosecutor, then and now, will discuss my |
|  | 17 |  | evidence before the trial -- |
|  | 18 | 2 | Right? |
|  | 19 | A | -- and show how he, she or he, means to present |
| 03:57 | 20 |  | it, and look at any points which may be difficult |
|  | 21 |  | to interpret or which may be contentious. |
|  | 22 | $Q$ | But do they advise you, sir, as far as you know, |
|  | 23 |  | as to what they intend to do with your evidence |
|  | 24 |  | after you have given it? |
| 03:58 | 25 | A | No. |
|  |  |  | Comey CompuCourt Reporting Certified Professional Court Reporters serving P.A., Regina \& Saskatoon since 1980 Central Booking - Call Irene @ 1-800-667-6777 or go to www.compucourt.tv |

No? And do you feel, sir, you are under an obligation, when you discuss an aspect of your evidence with a prosecutor, do you feel you are under an obligation to communicate that conversation to the defence?

No, but there is no property in a witness, the defence can always approach me.

But you don't feel it's your job to approach them? It's not my job to approach the defence any more than it's my job to approach the prosecution. But in reality, sir, as a pathologist conducting autopsies, you are usually viewed as being a witness for the prosecution rather than a witness for the defence?

I am called by the prosecution, my evidence is for the court, it does not vary according to who calls me.

I understand that, sir, but in the real world you are viewed as being primarily a witness for the prosecution and not for the defence; is that right?

A
I don't know how the real world views me, but $I$ know how $I$ view it.

Well, I think most of us do know how the world views us, sir, but you just don't pay attention to
it or what?
I have spoken and written and lectured on this throughout the life, throughout my life -Uh huh.
-- and I have always made it clear that a pathologist is an expert witness called to bring his or her expertise to the assistance of the court in the hope that it may assist in forming a just conclusion. He is not a representative of either side and his or her evidence cannot differ according to who calls it, or her. I'm not an advocate.

Tell me this, since you raise whether or not you are an advocate, have you ever formed any opinion as to the practice in this province and indeed in most of Canada where forensic work, the daily forensic work conducted in homicides is carried on by a lab run by the RCMP?

I've never formed an opinion that it is in any way other than -- any way other than impartial.

You are aware, sir --
I'm aware of administrative problems and technical difficulties in the system, but not of prejudice in favour of the prosecution.

So are you aware, sir, for example, of the
problems that have arisen certainly in some jurisdictions in that regard?

A
$Q$

No.
That as a consequence of public inquiry in the United Kingdom the forensic science services were taken away from being under the supervision of the police and placed into a non-profit organization? I wasn't aware of that.

So you don't know anything about the constitution of the Forensic Science Services in the UK?

No. I haven't practiced in the UK since 1956 and I've not been in very close contact with them.

You must have heard of the Forensic Science Service?

No, I haven't.
And are you familiar with the Centre of Forensic Science, sir, in Ontario, that it's not a part of the RCMP?

As far as I remember, it's a part of the department of justice isn't it?

It's part of the Ministry of the Solicitor General.

Ministry of?
Solicitor General.
I'm sorry, I still can't catch that.

Q
A
Q .
Solicitor General.

Thank you. Okay.
Let me read to you, sir, something that the Deputy Attorney General of Ontario wrote recently in a -and it came out, it was publicly released just yesterday, the document, by the attorneys general across the country as well as the federal minister of justice, and this is what the Deputy Attorney General of Manitoba wrote. He wrote:
"The risk that scientific evidence may mislead a court has several dimensions. Organizationally a forensic laboratory may be too closely linked with law enforcement and the investigative function causing scientists to feel aligned with the police." Has that thought ever occurred to you in the context of the RCMP labs that are used in Saskatchewan, sir? It's a general possibility, but I've never had occasion to apply it specifically.

The deputy goes on:
"Forensic labs should be independent from the police. Ideally that means an independent stand-alone organization with its own management structure and budget."

Would you agree with that, sir?
Independence is a relative thing. A forensic laboratory is going to be funded by somebody and if it's not funded by the police, it will be funded by the government, and the same possibilities with political overtones will apply. So you, Dr. Emson, yourself have no worries, no concerns about the fact that the majority of the forensic work for the prosecution in this province is done by people employed by the RCMP?

I have no problem with that in principle. I have problems with the fact that our, most of our work goes to Halifax, a proportion of it goes to Ottawa. The reports received are slow and the distribution to me is variable, but apart from those specifics, $I$ don't have any problems with them.

You don't have any problem with it in principle at all?

You can always state a problem in principle, but everybody is responsible to somebody and everybody is constrained by somebody's budget and I don't know whether $I$ would rather be constrained by the RCMP or the department of the solicitor general. Have you ever -- have you ever -- perhaps I won't
ask that. One of the things, sir, that was recommended at the Morin Inquiry that $I$ want to ask you about is this, that juries tend to place a lot of weight on expert evidence. Do you agree with that?

I don't know. I don't know how anybody knows what juries place evidence on. It's never been reported.

And one of the things recommended by Commissioner Kauffman, Dr. Emson, is that jurors should be specifically instructed that when experts testify, the jurors should not be in any way influenced by the aura of scientific infallibility. Would you agree with that, sir?

If $I$ thought anybody now believes science was infallible, $I$ would agree with it.

Well, it's easy to be sort of humorous with your answers.

No, it's not humour.
Don't you think, sir, that there is a tremendous danger that a jury listening to you after 50 years of pathology may feel that you have an aura of infallibility and that your opinions, therefore, should be followed? Has that never troubled you, sir?

A
I'd like to think so, but after the jurors have listened to my cross-examination, I doubt whether any of them ever think I'm infallible. My problem with jurors is first of all knowing what does influence, and secondly, trying to translate a complex scientific report into lay terms comprehensible to somebody with neither medical nor scientific training. My problem with jurors is not that they believe everything $I$ say, but getting them to understand what $I$ am saying. So let me read to you a recommendation, sir, it's recommendation 5 of Justice Kauffman's, and it reads as follows:
"Where hair and fibre comparison evidence or other scientific evidence is tendered as evidence of guilt, the trial judge should be well advised to instruct the jury not to be overwhelmed by an aura of scientific authority or infallibility associated with the evidence and to clearly articulate for the jury the limitations of findings made by the experts. In the context of scientific evidence this is of particular importance, that the trial judge ensure that counsel, when addressing the jury, do not misuse the
evidence, but present it to the court with no more and no less than its legitimate force and effect."

Would you advance that as a good recommendation for this province, sir?

No. It's far too general a statement. Hair and fibre evidence is notoriously and very much a matter of individual opinion. Other forms of scientific evidence can be presented as numerical values such as blood alcohol levels which are known to correlate fairly specifically with human behaviour and to lump all scientific evidence together in a grab bag like that is quite inaccurate.

So you don't think that that kind of instruction for the evidence of a pathologist, sir, in a criminal trial, is -- at least if the pathologist's evidence is in contest -- I mean, obviously, for example, the fact that there's 12 stab wounds in this case has never been put into issue -- but if a pathologist is giving evidence that's in issue, sir, and his expertise is in issue, do you think that's a helpful kind of instruction for a trial judge to give, or do you think you just leave it to the jury to sort it out
for themselves?

I think that one of the problems in pathology, as I've mentioned before, is the distinction between fact and opinion and that a set of facts such as a set of injuries or bruises can be -- or a haemorrhage into the brain can be subjected to different opinions as to that causation and $I$ think a number of the cases on which I've been called for the defence have hinged upon this: That the autopsy findings have been competently done and are not in dispute. The interpretation of them can be variable.

Time of death, for example?

Notoriously one of the hardest things in the world to determine.

MR. LOCKYER: All right, thank you.

Mr. Commissioner, if $I$ can be excused, I have to catch a plane.

COMMISSIONER MacCALLUM: Certainly. Mr.

Beresh?

MR. WOLCH: Sorry --

COMMISSIONER MacCALLUM: Oh, sorry, Mr.

Wolch. I forgot you switched places.

## BY MR. WOLCH:

Thank you, sir. Doctor, I'm David Milgaard's
counsel and you'll be pleased to know that Mr. Lockyer and $I$ discussed this matter at quite a bit of length before and decided he would go first and $I$ wouldn't duplicate hopefully what he has done, so I'll be fairly brief.

Doctor, can you help me a little
bit on the question of the assailant being
right-handed? Just -- I'm not going to take you
to documents, but what was the basis for you
forming that likely opinion?

It's a question simply of a presumed assailant and victim facing each other and the assailant administering these marks which I've described as slashes across the neck which go, in general, from above on the left to below on the right, and that is the natural approach of a right-handed person, but it depends on the assumption of a particular relationship and stance between the victim and the assailant and is only an opinion. The wounds are fact. The interpretation of them, as I've just been saying to your learned friend, is an opinion. So that would be, if they are facing and the knife is in the right hand --

Yes.
-- it would be going from the assailant's right to
left?

A
$Q$

A

Q

A
$Q$

A
$Q$
A

A If Your Lordship, you imagine yourself behind somebody who is facing away from you, grasping them with your left hand and drawing a knife across them --

COMMISSIONER MacCALLUM: With your right
hand is what you demonstrated.

A
Then the wounds will run from above on the left to down on the right.

COMMISSIONER MacCALLUM: That's what I wanted to be sure you were --

BY MR. WOLCH:
Yeah. So what you are saying is basically, and I know there can't be certainty in this, but in all likelihood, regardless of positioning, the assailant was right-handed?

It appears to be the probability.
That's all I'm asking. Now, another fact, Doctor,
that you talked about, and $I$ must confess, every
time I stand outside in the cold I think the same thing, 40 below zero weather, do I take it that you had always some doubt that this could have happened outdoors?

A
It appears to me to be an improbability to perform a sexual attack under those conditions, but I am only aware of what $I$ see at the autopsy. I was not called to the scene, I do not have the circumstantial evidence that all the acts were performed in the same place, so that is my -- and that is not a matter of professional expertise, it's a matter of personal experience.

Q Or lack of same?
A
Well, stepping outside on a minus 40 morning in the dark to go to work, it is difficult to form the idea of a sexual assault at that time.

Yeah, true.
And that is the only thing. If -- I am not in possession of all the evidence and if the rest of the evidence points to the act having happened at that time and place, then that is what was presented. I'm only a piece of the jigsaw. And you might agree with me that as we stand here or sit here indoors, we can't even imagine what that feeling of 40 below outside feels like when you are there?

I can imagine it very well. It was happening a couple of weeks ago.

I waited for a cab, I know. In any event -- now, is that something that you would have discussed with the police or the prosecutor?

I might have raised it, but as I say, they are in the position of having all the evidence, I'm not. That's not part of my job.

Q
And Mr. Lockyer did touch on this, and maybe I will a little bit. Going to the scene or knowing more about what's alleged or what happened,
wouldn't that be useful?

A
It's what's recommended in all the textbooks, it's what's put down in all the textbooks, and in Saskatoon it doesn't happen. Now, a part of this is because, as $I$ say, some of my cases are from 200 miles away, but there is no pattern in the city practice of the pathologist being called to the scene, and in fact if $I$ were to be called to the scene on a significant number of occasions, I would want to re-examine the fee structure under which I'm doing so.

Oh, no, and that's quite fair.
There is no set-up and there never has been in the almost 50 years I've been in this city, there is no set-up for that and there never has been. Now, that's a matter for the organization of the law, not primarily for me.

Now, what if $I$ or back then Mr. Tallis had come to you and said, Doctor, can you come down and look it over with me and give me some help, would you have felt obliged to go, not to go? What's the relationship?

A
$Q$
A

A

25

Mr. Tallis would have been involved at that point.
I apologize.
The people who were there were the police and the coroner.

Or later I mean.
Re-examining a scene later is probably not very much use when it has been thoroughly gone over by the police and investigated for trace evidence and the rest of it. I have on occasions, when $I$ was on sabbatical practice in London in the east end in 1985-'86, I was sometimes asked to visit scenes by the police, but it doesn't happen here.

But $I$ would like to focus a little bit on defence counsel. If defence counsel came to you and said, you know, Doctor, this temperature business and the clothing and disarray and everything else, I want to talk to you about that, would you normally talk and sit down and -There's no property in a witness.

I appreciate that, but would you as a matter of course just do it? Would you check with the prosecutor first, the police first or would you do it?

I would probably state to the prosecutor first that $I$ had been approached by the defence, and I
don't know what the technicalities of the law are in this respect, they might both wish to be present at the same time, but $I$ don't think the prosecutor can place any limitations on what $I$ say to a defence counsel, but it might be wise under, if these circumstances occurred, to establish with both sides of a case what they wanted and what was reasonable.

Except that if the prosecutor wanted to talk to you, you wouldn't check with the defence first? No.

So --

Because I'm in general being called by the Crown, and in fact $I$ expect to be called by the prosecutor before a case to discuss any -- his or her idea of the presentation of the evidence. But why do you feel you have to check with the prosecutor --

I don't have to check with the prosecutor. Why would you check with the prosecutor if the defence counsel said $I$ want to have a private conversation with you, confidentially between you and I?

Because it's an unusual circumstance and because I am not aware of the technicalities of the law as
to whether there is anything that prevents or limits this. not questioning your independence or your integrity, but surely there is an appearance when you will talk to the Crown attorney any time, but defence attorney, if you talk to the Crown first and it's okay or he agrees, that you are on the Crown's side?

No. I have tried to say that the only reason $I$ would consult, in the relatively rare
circumstances where $I$ was asked to talk with the defence attorney, is to establish what my legal position is in this. I am not aware of the particularities of the law and $I$ do not know if there is anything that restrains or restricts me in so doing.

Okay.

That's why I would ask. I don't want subsequently, having talked to a defence attorney, to be told that I've done something wrong in law. Okay. But wouldn't it be wiser then to check with your own counsel --

I don't have a counsel.
-- or get a counsel to give you independent advice as to who you should talk to, --

No.
-- not one of the sides?

No. I don't see the necessity of being
independently advised on this. I would trust the Crown and the defence to work it out between them. I may be unduly trustful, but $I$ would.

And you think maybe the Crown attorney should be there when you talk to the defence?

That is a matter for the technicalities of the law. I don't know.
$Q$

A
$Q$

Q

Now, would anybody, and I'm thinking maybe of the Crown or police, have talked to you about what might have happened here or how it happened, why the clothes are as they are with a knife wound through the coat and not through the dress or what actually happened, did anybody discuss this with you or --

I can't remember it, but it was a long time ago. I don't think the specifics were discussed with me, no.

Let me very quickly put a suggestion to you and tell me if this would make any sense to you. Gail Miller leaves her, where she lives at approximately 20 to seven, she walks up O Street. Larry Fisher, who knows where she's going, has a car down the lane, waits for her to come by the lane, drags her into the lane, assaults her in the car in the way he always does, she runs out of the car, he chases and kills her. Is there anything in your medical findings that wouldn't be consistent with that?

No.
Pretty simple isn't it?
As you put it, yes. It's a valid hypothesis.
Are you aware a car was seen there at the time?

A
$Q$

A

Q

A

Q

A
$Q$

A
$Q$

A
$Q$


## 

I believe there had been some suggestion of this in the media reports, but $I$ don't read them very thoroughly.

And a man going in front of the car?
I have not read that.
But that theory does sound pretty reasonable? It sounds like a valid hypothesis. I don't know whether it's supported by the other evidence. Has anybody shown you the similar acts that Fisher had and how he had attacked other women?

No, but that's why $I$ wrote that letter to the chief of police really suggesting we should look at Fisher's modis operandi.

Well, $I$ won't do it now, Doctor, but I might in closing commend you, if you wish, or you have time, to take a look at the victim in this case named Ethel Steel.

I'm sorry?
Ethel Steele is a victim in this case, she's a victim of Larry Fisher.

Yes, uh huh.
And there are photographs, she's an exceptionally brave lady, and if you look at the photographs, you might wish to as a matter of professional curiosity, and compare her wounds to Gail Miller,
if you are interested.

A
I would be quite willing to do so. I have always wanted, hoped $I$ could see some of the wounds on Fisher's other victims.

You might if you have a chance, I'm sure Commission Counsel will assist you, if you would look at the photographs of that poor lady and compare it to Gail Miller and you see the marks around the face and the mouth of both victims, it might be of interest to you as a professional and might explain the clothing and why the position of the clothing and everything else, it does make a bit of sense. I leave that to you if you wish to do that.

Well, it would certainly be of interest to me, but I have to leave it to His Lordship and counsel as to whether or how this is brought into this inquiry.

MR. WOLCH: I'll leave it to them too, but I do thank you. Thank you, Mr. Commissioner.

COMMISSIONER MacCALLUM: Mr. Beresh, it's
seven minutes from quitting time, so we'll adjourn now.

MR. BERESH: Please.
COMMISSIONER MacCALLUM: 10 o'clock
tomorrow.
(Adjourned at 3:25 p.m.)

OFFICIAL QUEEN'S BENCH COURT REPORTERS' CERTIFICATE:
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Karen Hinz, CSR
Official Queen's Bench Court Reporter
$\qquad$
Donald G. Meyer, CSR
Official Queen's Bench Court Reporter

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