Citizen Participation and Public Petitions Committee

10th Meeting, 2022 (Session 6), Wednesday 8 June 2022

PE1865: Suspend all surgical mesh and fixation devices

Note by the Clerk

Lodged on	17 May 2021
Petitioner	Roseanna Clarkin and Lauren McDougall
Petition summary	Calling on the Scottish Parliament to urge the Scottish Government to suspend the use of all surgical mesh and fixation devices while— • a review of all surgical procedures which use polyester, polypropylene or titanium is carried out; and • guidelines for the surgical use of mesh are established.
Webpage	https://petitions.parliament.scot/petitions/PE1865

Introduction

1. The Committee last considered this petition at its meeting on 12 May 2022. At that meeting, the Committee heard evidence from Dr Fernando Spencer Netto, Chief Surgeon at Shouldice Hospital. The Committee agreed to consider the evidence heard at a future meeting.

2. The petition summary is included in **Annexe A** and the Official Report of the Committee's last consideration of this petition is at **Annexe B**.

3. Written submissions received prior to the Committee's last consideration can be found on the petition's webpage.

4. Further background information about this petition can be found in the SPICe briefing for this petition.

5. The Scottish Government's initial position on this petition can be found on the petition's webpage.

6. The Committee may wish to note that a request was made by one of the original petitioners, Graham Robertson, to remove his name as a petitioner, and with the consent of the other petitioners this request has been granted. Roseanna Clarkin and Lauren McDougall remain as the lead petitioners.

Action

The Committee is invited to consider what action it wishes to take.

Clerk to the Committee

Annexe A

PE1865: Suspend all surgical mesh and fixation devices

Petitioner

Roseanna Clarkin and Lauren McDougall

Date lodged

17 May 2021

Petition summary

Calling on the Scottish Parliament to urge the Scottish Government to suspend the use of all surgical mesh and fixation devices while—

- a review of all surgical procedures which use polyester, polypropylene or titanium is carried out; and
- guidelines for the surgical use of mesh are established.

Previous action

I have been in contact with my MSP, and Scottish Government officials who advised that the concerns of hernia and other mesh survivors would be heard along with those of TVT and pelvic mesh survivors. They never were.

I also met with the Cabinet Secretary for Health and Sport.

Background information

Information on polypropylene and polyester mesh and stitches clearly states the potential complications of their use and titanium protacks carry a cancer warning.

We understand mesh must be used in life or death situations, but we want to ensure that—

- mesh is only used when essential;
- patients have alternatives to mesh; and
- mesh is only used with the fully informed consent of the patient.

We want the use of mesh devices and stitches to be suspended while a review of all surgical procedures which implant any form of polyester, polypropylene or titanium products – for example hernia mesh, rectomesh, mesh used in hysterectomies – is carried out and guidelines for the use of surgical mesh are established.

We are also calling for suspension of the use of titanium protacks that are used with hernia mesh, as these carry a cancer warning.

While we recognise and support women with TVT or pelvic mesh implants, the mesh that we are talking about is not the same. It is put into the body differently and used for different purposes.

Annexe B

Extract from Official Report of last consideration of PE1865 on 12th May 2022

The Convener: Good afternoon and welcome to this exceptional meeting of the Citizen Participation and Public Petitions Committee. This is the committee's eighth meeting in 2022.

We have only one agenda item, which is consideration of continued petition PE1865. The petition was lodged by Roseanna Clarkin, Lauren McDougall and Graham Robertson and calls on the Scottish Parliament to urge the Scottish Government to suspend the use of all surgical mesh and fixation devices while a review of all surgical procedures that use polyester, polypropylene or titanium is carried out, and while guidelines for the surgical use of mesh are established.

We last considered this petition on 2 February 2022, when we agreed to take evidence from the Shouldice hospital, in Canada, following representations that we received. We understand that it is the only licensed hospital in the world that is dedicated to repairing hernias, and it has been a supporter of natural tissue hernia repair for more than 75 years.

I am delighted to welcome Dr Fernando Spencer Netto, the chief surgeon at Shouldice hospital, and I thank him on behalf of the committee. Dr Spencer Netto joins us virtually—of course, all of us are appearing at this meeting virtually, so we are collectively all virtual.

We have an apology from Fergus Ewing MSP, who is unable to join us today.

Members would like to explore a number of questions with you, Dr Spencer Netto, so we will launch into that. However, I will begin by saying that Scotland has been very much at the forefront of the international discussion on transvaginal mesh repair procedures. Considerable angst and trauma was caused to an incalculable number of women, many of whom were told that they were imagining their suffering and that there was no option other than the mesh that had been fitted. In seeking to remedy that, the Scottish Parliament passed the Transvaginal Mesh Removal (Cost Reimbursement) (Scotland) Act 2022, which will facilitate women travelling to wherever specialist services are available for the removal of that mesh—including to the United States, where specialist services are available in Missouri.

Consequential to that, we have received this petition, which seeks to extend the interest in and potential impact of alternatives to mesh treatments in relation to hernias. The committee is incredibly intrigued and interested in experience from Shouldice hospital, so, by way of an introduction, could you tell us—and the many people who are watching today's meeting and who will be interested in the

discussion that we are about to have—about the work of your hospital, so that we can better understand it from your perspective as its chief surgeon?

Dr Fernando Spencer Netto (Shouldice Hospital): Thanks for having me here. It is a great opportunity to clarify some of your points. The first clarification is that the use of mesh may be very different from one area of the body to another, so whatever I address today will relate only to abdominal and groin hernias. I cannot say anything about vaginal mesh. I understand that it was a matter of discussion and that lots of gynaecologists think that it is related to the problems.

I do not know whether Shouldice hospital is the only one that is dedicated to hernias, but I know that it was the first. There are several clinics in the US that also do only hernias, but I do not know if they are considered hospitals.

We do about 6,000 to 6,500 procedures per year; it depends on the year—Covid meant that the number decreased a little bit in the past few years. I would say that we do 99 per cent of procedures without mesh, and we get good results. We deal mostly with hernias in the groin area, and mesh is used on a very small number of procedures in that area; it is used on less than one in 1,000 inguinal hernias. Our recurrence rate—which is given by auditors, not by us, through review of follow-on care of patients—is the lowest in the Ontario province by far; it is about three times lower than the hospital with the second-lowest rate of recurrence.

The Convener: I fully understand the difference, and that is why we are interested in pursuing information on hernias. It is quite different from transvaginal mesh, and the use of mesh in hernia repairs is far more widespread and has been done over a much longer period.

I am interested in your experience as someone from the leading hernia hospital in Canada. An issue that came across to us was that clinicians were opposed to the idea that there was an alternative treatment to vaginal mesh. You have obviously specialised in your process and can demonstrate that you have had excellent results. Is that widely accepted as a clinical practice by clinicians across Canada, or is there any resistance to the idea that there is an alternative to mesh as an appropriate route forward with hernia repair?

Dr Spencer Netto: [Inaudible.]—some evidence that there is a higher rate of complications than with tissue repair. It is relatively recent to this discussion.

Some time ago—it is still valid—the European Hernia Society said that the standard technique for groin hernia repair was to use mesh. We do not agree with the reason that it gives for saying that. It thinks that it is easier to teach new surgeons that procedure. That is the reason why the society says that that should be the standard or Initial approach.

There is a resistance in Canada and other parts of the world towards not using mesh. It is difficult to pinpoint one factor for why mesh became so widely used.

Physicians in other specialties are intrigued by or fascinated with new technologies and, if someone says that they have a mesh or different type of device that is a lot more resistant than human tissues, and if you have an opening, they seem intuitively to think that, if mesh resists more than human tissue, the repair will be more resistant if a mesh is used.

In laboratory studies, studies with animals and experimental studies, even in initial patient studies and follow-ups, it is difficult to pinpoint some of the complications that happened with mesh after the procedure. A few of the complications that happen with mesh are related and long term. For example, the mesh retracts and causes pain and sexual dysfunction and sometimes pain at movement. Probably the most important complication is pain related to inflammatory tissue that is around the mesh.

In general, I would say that, if well done, a hernia repair with mesh would be relatively efficient in regard to holding off the hernia but has other complications. It is also a lot simpler to do than a tissue repair as at Shouldice. That is where we do a reconstruction of the groin from the inner layer into the upper layer. It takes longer to train the surgeon and it takes longer for the surgeon to perform the procedure in comparison with an open mesh repair.

The Convener: I know that you are not seeking to draw parallels, but, from our experience, I think that the use of mesh in the transvaginal example was underpinned by issues of cost and the fact that it was a much simpler procedure than the alternative.

You referred to the European Hernia Society. The British Hernia Society, in expressing its scepticism and its justification for mesh as the principal and preferred route, says that the sutures that are required for the alternative—the tension-based repair procedure that you pioneer—are not resilient enough. How do you respond to that? How do you deal with that?

Dr Spencer Netto: That was based on studies from the 1980s and 1990s. Those looked at the molecular structure of hernia tissues in a patient that had hernias. Those people have a different disposition of the tissues. Their collagen is a little different. It is genetic most of the time, so it will not change. That compounded the use of mesh.

My response to that is our results. There are a few other things happening in the world. As you may know, the world is fighting an obesity surge. At Shouldice, if someone comes for an operation, we ask the patient to prepare themselves. Because we have good results and people want to have good results, we have the luxury of being able to ask them to lose weight; otherwise we cancel the procedures. If they smoke, we suggest that they stop, but they do not always stop and it is not a sine qua non for us. However, drugs and alcohol should be reduced for people to have an operation here. We are a fairly small hospital in regard to structure but, as we have a well-oiled machine, everything goes fine.

However, we have some requirements that sometimes an independent practitioner does not have. Let us say that a surgeon has a patient who is mildly obese, with a body mass index of 35. If an independent practitioner asks the patient to lose weight, so that they can do the surgery, the patient might go to another physician or surgeon. Because Shouldice has the structure and results to back us up, the patients want very much to have the repair here, so they will say, “I am going to do whatever they want.”

We do a few basic things to prepare patients for surgery. Because of many things, including commercial pressures, we need to have the patient’s weight down—if not, they are going to have to look for another practitioner. It might go in that direction.

It also counts that we just do hernias, so we are quite familiar with the area. I have always thought that, in a lot of areas of surgery—including trauma surgery and complex surgeries such as pancreatic cancer surgeries—patients do better if they go to reference centres, which do more cases per year. I think that it is the same thing with hernia. Because hernia is the most common surgery on the road for general surgery, I think that we should encourage the idea of centres of excellence, because their experience provides a counterbalance.

We also have a few requirements for the patient to undergo the operation. All those things make a difference, as you can see by the fact that, when our results are compared with those of other centres that do the Shouldice repair, our results are still better. That is said by independent investigators, not by us.

The Convener: Thank you; that is very helpful.

My colleague, David Torrance, will ask our fourth question, which explores the controlled trials and the low recurrence rates. He will ask a couple of questions that follow on from what you have just said.

David Torrance (Kirkcaldy) (SNP): Good afternoon from Scotland, Dr Spencer Netto. You have impressive results with regard to low recurrence of hernias. However, systematic reviews of randomised controlled trials, which are the gold standard for robust health intervention evidence, show that hernia recurrence rates are lower for mesh repairs than they are for non-mesh repairs. I know that that does not apply to you, so what are you doing that is different from what other hospitals are doing?

Dr Spencer Netto: Most of that difference is to do with our preparation of the patient. We get them to the correct weight and we control the comorbidities before the operation. However, we have been criticised because our results are too different from those of the other people that do the Shouldice repair around the world. We will

publish something about that in the near future. We control the patient prior to the operation—that is what we do that is different.

We also use a less aggressive method of anaesthesia; we use sedation and local anaesthesia for everyone. We do early ambulation, so patients start to walk on the same day that they have their condition seen to. We also do early rehabilitation, including an exercise programme that starts in the hospital. I think that, together, all those measures to prepare the patient contribute to their quick recovery; it is not just about the surgical technique and doing the stitches.

I do not know whether you have seen our facilities on our website. Shouldice is a little different from general hospitals; not everyone has the luxury of there being nice green fields outside. In the summer, the patients can walk around, which stimulates the ambulation that we want them to have in the post-operation period.

David Torrance: You apply selection criteria, such as weight loss, before admitting patients to Shouldice hospital. What is the rationale behind that? Are those selection criteria really important to your success rate?

Dr Spencer Netto: I think that they are. First, we are a small hospital, so we cannot take allcomers. We cannot take patients who might have more complex medical needs, such as those who might need back-up from cardiology or an intensive care unit. That is one aspect. That said, when our results are matched with those in other places in Ontario with regard to severity of disease in patients, they are still valid.

Regardless of groin hernia size, that is the main group of people whom we eventually do not take. However, if the patient in question is too obese and wants to undergo weight loss, that is okay. Sometimes there are patients who need to lose, say, 50 pounds; indeed, there have been patients who had to lose 100 pounds or more to have the operation. Sometimes we also change the estimated ideal weight a little bit.

One of the suitability criteria is the patient's medical condition. If they have a chronic condition, it needs to be stable before they can have the operation. With obesity, though, it is questionable whether we can do tissue repair, because the operation is a lot more difficult: the incision has to be bigger, the wound can get more infected, there can be more hematomas and, frequently, one complication will lead to another. That is why we always try to get patients to the correct weight. Unless some very specific things happen, most of them reach the correct weight—or at least get very close to it—and they have the operation. I am 100 per cent sure that that makes a difference to the final result for individual patients.

David Torrance: Thank you very much for that, but what I am trying to get on the record is whether you think that, if those criteria are not in place in a general hospital setting where repairs are being carried out, the procedure will not be as successful.

Are you saying that mesh repairs would not be suitable for the patients who do not meet the criteria?

Dr Spencer Netto: Yes. If patients do not meet the criteria for mesh repair, the results are worse. I have talked about groin hernias, but perhaps I should say a little about ventral hernias, including umbilical, epigastric and incisional hernias. It has been proven that, for that group, weight is the major factor in the recurrence of hernias, whether or not mesh has been used. That is well defined, and we therefore think that weight control is very important in hernia operations, unless it is an emergency case.

David Torrance: Thank you very much for that. I have no more questions, convener.

The Convener: Following on from that, I invite Paul Sweeney to reflect on what has been said so far and then to ask our next set of questions, as well as any question that might have occurred to him.

Paul Sweeney (Glasgow) (Lab): Thank you very much for taking part in our inquiry into the use of surgical mesh, Dr Spencer Netto. Chronic post-operative pain is clearly a substantial issue for many hernia repair patients, regardless of the type of repair that has been undertaken. What causes such pain?

Dr Spencer Netto: The definition of post-operative pain has changed a little bit: it now means having three months of continuous pain, but in the past it was defined as pain that disrupted activities for six or more months. As a result, we are now having to figure things out and redo our statistics—initially, though, the figure for those affected was 1 per cent.

What is not well defined are the variables. One significant variable with regard to mesh repairs relates to the fact that several nerves pass through the area in question. Fibrosis related either to the mesh or, indeed, to the surgery without mesh is one of the causes of those nerves becoming a little trapped, which causes pain.

There are a few cases in which we cannot detect the reason for the chronic pain. When the pain is caused by the nerves, we call it neuropathic pain, which is relatively easier to treat than nociceptive pain. We do not know the exact reasons for nociceptive pain, but we think that that involves damage to small nerve terminals that it is not possible to see with the naked eye. However, it can be very debilitating.

Paul Sweeney: Thank you for that overview. Systematic reviews comparing mesh and non-mesh repairs have found that post-operative complications, including the chronic pain that you define, are generally lower for mesh repairs. Why does the Shouldice hospital's written submission indicate an alternative view of the evidence? Can you explain why its written submission varies from the systematic reviews?

Dr Spencer Netto: Tissue mesh repairs are related to less chronic pain but, on the other hand, they are generally related to more recurrence. Recently, there was an

interesting publication relating to umbilical hernias that covered several thousand patients. It showed a 2 per cent recurrence of small hernias with tissue repair but just a 1 per cent occurrence of chronic pain; and a 1 per cent recurrence with mesh but a 3 per cent occurrence of chronic pain. In some cases, there is a trade-off, and you can incur a little bit more pain with the use of mesh. The incidence of chronic pain using mesh in the groin is a little bit higher, because there are nerves passing there, as I mentioned.

It is hard to control the pain. More research and understanding is required on the part of physicians. We know that remodelling of the area and addressing inflammation are important, but it is difficult to do that. We do that by addressing the range of motion very early on by using specific exercises that mobilise the joints—that is mainly for groin hernias. However that is not a perfect method. We need to understand more about that to make a formal recommendation but addressing the range of motion helps a lot.

Protecting the nerves is our policy—we do not cut the nerves to alleviate chronic pain, which other people do. Again, there is a trade-off between having a low incidence of chronic pain and a lack of sensation in an area. We think that it is better to preserve the nerve. We do not want to do something that is unnecessary in an operation. However, some people who use mesh use that strategy to avoid the patient feeling pain in the area.

Paul Sweeney: Thank you for that insight.

The Convener: One of the issues that we faced in Scotland in relation to the removal of mesh in the transvaginal area was that that operational procedure required a huge amount of skill. The glib view, before all this was examined properly, was that it might be possible for some clinicians from Scotland to simply sit in on a few procedures to gain the necessary skills. However, that did not prove to be the case, which is what led to the legislation in Scotland that is facilitating the transfer of women to wherever the skills exist.

In due course, we will have a meeting with the Scottish Government minister with responsibility for this issue. For the moment, though, Alexander Stewart will explore the potential transferability to Scotland of the skills and experience of the staff of the Shouldice hospital, and of its preferred model.

Alexander Stewart (Mid Scotland and Fife) (Con): As the convener has indicated, we are interested in finding out how surgeons in Scotland could learn from the skills, training and techniques that are used in the Shouldice hospital. What additional training and support would be required for them to fully understand what you are doing, so that they could use your approach to benefit patients in Scotland?

Dr Spencer Netto: That is a difficult question, because there are some cultural issues. If it was possible, a group of surgeons who were interested in doing, or being leaders in, hernia repairs could be selected to come here. Potentially, that could be done, although there would need to be conversations about that. People could watch what is done here and we could eventually send someone to provide guidance over there.

However, as I mentioned, if you develop policies for patients who undergo hernia operations, as we have done here, that might facilitate things. If a patient goes to surgeon A, who says that they need to lose weight, but then the patient goes to surgeon B, who does the operation, and there are eventually complications, that does not help too much. If you do the same procedure a lot of times, you will improve—that is a no-brainer. Those are some potential areas of development.

It is possible that techniques other than those used at Shouldice could be employed, too, in accordance with local training, or people could visit us to look at what we are doing to see whether it would be possible to incorporate the whole technique. We will have suggestions in that regard if you are interested in using the Shouldice technique. Some of us can spend some time helping with that.

Alexander Stewart: Surgeons in general hospitals are not as skilled in non-mesh techniques. Do you expect recurrence rates following non-mesh repairs to be higher than the rates for those who are treated at Shouldice hospital?

Dr Spencer Netto: Yes. I expect that to be the case if our guidelines are not followed. If they do not get the patients to lose weight, I would expect the rates to be higher. We just do that so that the skew increases a little. If there is a different situation with the groin that a colleague in another room knows about, we can call on that person.

Alexander Stewart: Would a ban of the use of mesh in hernia repairs be a good thing? Would that change some of the dynamics?

Dr Spencer Netto: In some situations, there is no possibility other than to close the opening with mesh. Sometimes, the hernias improve, and surgeons' knowledge of how to treat hernias also improves. The stats from today are probably very different from the stats on patients who were operated on five to 10 years ago. In relation to hernia repairs, it is not possible for there to be a ban, because, in some situations, using mesh is the only way to do a good repair.

Alexander Stewart: Thank you.

Paul Sweeney: In a previous evidence session, Dr Terry O'Kelly, a senior medical adviser to the Scottish Government, advised us that the Shouldice technique

“will not be applicable to non-inguinal hernias; it might also not be appropriate for patients with larger defects, or for very degenerative tissues.”—[Official Report, Citizen Participation and Public Petitions Committee, 6 October 2021; c 21.]

Do you agree with Dr O’Kelly’s assessment?

Dr Spencer Netto: Yes. The Shouldice technique is specifically for groin hernias—inguinal hernias—which account for 85 per cent of our patients. However, our general policies and methods relating to losing weight, early mobilisation and the least anaesthesia possible are for everyone. I agree with Dr O’Kelly in that regard.

Paul Sweeney: That is helpful.

The Convener: You just referred to the situation in which the use of mesh might still be appropriate. It occurs to me that the reason that mesh has been relied on by some is that the nature of the hernia suggests that the tissue walls are not sufficiently strong to withstand the subsequent pressure.

You have explained the preparatory criteria that you have for people you think it would be appropriate to operate on, but when it comes to—how can I put this?—what you find internally, are there times when you look at what is there and think, even though the patient has taken all the necessary action, the tissue wall might not be sufficiently strong to withstand the procedure? Does that happen from time to time, with the result that you have to fall back on an alternative?

Dr Spencer Netto: Yes, that happens, but it is not common. Recently—two years ago—we had a patient who was a young man in his 30s or 40s. There was no indication that there would be a problem, but the tissues just melted with the stitches, so we needed to use mesh.

That can happen with inguinal hernias, but it is a bit more common with other kinds of hernia. With inguinal hernias, it is really uncommon. Sometimes a person who has an inguinal hernia can have an associated femoral hernia. Because of the anatomy, those associated femoral hernias can be a little hard to deal with, so we sometimes use mesh.

The Convener: Out of interest, is there any difference with regard to the application of the procedure, the success rate and the outcomes, depending on sex? Does it matter whether the patient is a man or a woman, or is the procedure equally effective?

Dr Spencer Netto: Any repair of inguinal hernias is easier to do in females. Through the canal, there is a round ligament that we can section without problem. In males, we cannot do that, because if we do, we will kill the testicle. That might not be the best approach, because we do not want someone who comes in for a hernia repair to lose a testicle.

The opening that it is necessary to leave is a potential site of recurrence. We know that.

The Convener: With regard to that rather uncomfortable thought that you had in relation to men, does that happen from time to time?

Dr Spencer Netto: Yes.

The Convener: It does.

Dr Spencer Netto: There is a risk to the testicle in many hernia operations. The risk of losing a testicle is between 1:800 and 1:1,000. [Inaudible.]—use of mesh.

The Convener: The issue that we have had reported by so many people is what happens as a consequence of the use of mesh. In addition to my involvement in the whole question of mesh, I have been a member of the cross-party group on chronic pain. One of the obvious consequences of the use of mesh is the number of people who have presented, post-procedure, with life-crippling, intolerable pain. What is the post-operative life experience of the patients who undergo the procedure that you promulgate?

Dr Spencer Netto: We still have some patients with chronic pain—the figure is about 1 per cent. As I mentioned, it can sometimes be really hard to pinpoint exactly what the cause is. It is sometimes to do with characteristics related to the nerve. In such cases, there are specific medications that we can prescribe, and there are some procedures that we sometimes do, but sometimes it seems to be nociceptive pain. People in that position sometimes need to change profession, because they can no longer do heavy lifting. The incidence of chronic pain is a little bit lower with our procedure than it is with the use of mesh.

The Convener: That is very interesting.

Dr Spencer Netto: That is challenging for me and for the people who work here. It is a lot worse than a recurrence—we can fix recurrences. Chronic pain is a lot harder to fix; sometimes we can fix it and sometimes we cannot.

The Convener: I want to understand a couple of things in relation to healthcare systems in different places. First, how big a department is your facility, and how many procedures are you routinely expected to undertake?

Dr Spencer Netto: There are around 10 full-time surgeons; we may have a bit more because some are part time, but together we are 10 full time. The hospital has 89 beds, but patients do not go home immediately—on the same day—as happens in other hospitals; they have one or two days after surgery for rehab and pain control.

Most of our pain control is with anti-inflammatories and a normal period of analgesics. Five per cent of our patients receive opioids after surgery, and less than

1 per cent get an opioid prescription when leaving the hospital. Again, that is because of all the measures that we take.

The Convener: I want to understand one final thing. How is the procedure financed in the healthcare system in Canada? Obviously, we have a national health service here, so everything is part of a national healthcare plan, but in relation to the patients who present to you, what is the financial underpinning of the procedure that is undertaken?

Dr Spencer Netto: We are a privately administrated hospital, but we mostly see patients on the provincial health insurance plan, which is the Ontario health insurance plan. It pays for the hernia procedure.

The Convener: Is that a public plan?

Dr Spencer Netto: Yes.

The Convener: That is helpful.

Dr Spencer Netto: When patients come from other provinces in Canada, we find out from their provincial Government whether there is a difference in cost; if there is, they pay the difference. Sometimes it is more expensive than here, and they would pay the difference; sometimes it is cheaper. Patients who come from the outside world would pay for the surgery; they would pay out of their own pocket and may receive the cost back, depending on their insurance.

The Convener: In response to Alexander Stewart's earlier question, you very generously said that conversations could potentially take place in the event that there was interest in Scotland in trying to gain experience of all of this. If we raise that potential conversation in our evidence session with the Scottish Government minister who is responsible for this area of healthcare, what would be the appropriate way to explore that further? Would it be for the Scottish Government to make contact with Shouldice hospital to see whether a conversation could be initiated?

Dr Spencer Netto: It could be—that would be through Mr John Hughes. However, I do not know, because it has not been done before.

The Convener: I understand that.

Dr Spencer Netto: You need to figure out how it could be done. In relation to your previous question, which I kind of missed answering, we do around 25 to 30 patients per day on a regular day, which means around 500 to 600 per month and around 6,500 per year. Eighty-five per cent of those patients are inguinal hernia patients.

The Convener: That is a considerable complement.

As colleagues have no further questions to ask, I thank you very much for a fascinating opportunity. It is amazing what the world's worst pandemic has led us to

being able to explore across the world more easily, as we have become familiar with this virtual technology. Otherwise, it is not a conversation that we would have thought to have or been used to having.

On behalf of the committee, I am incredibly grateful to you for the time that you have given us and the evidence that you have presented.

Is there anything that you would like to say that we have not touched on?

Dr Spencer Netto: I thank you for the opportunity. My take-home message is that a centre for hernia repair makes sense, because hernias happen very frequently. It may vary a bit from what we do here, because of local characteristics, but that is okay; you need to see what works better for you. It may not always be the case that following the complete recipe that we follow would be good for you. The easiest way would be to find some leadership in hernia repair and start talking with them, and eventually you will have enough to completely dedicate a hospital unit or part of the hospital service to hernia repair.

The Convener: I thank you again for your good humour in dealing with us amateurs in this field of experience. We are very grateful.

That concludes our evidence session. For our next consideration of the petition, we will hear from the Chief Medical Officer and the Minister for Public Health, Women's Health and Sport, Maree Todd.