Academy of PHYSICAL MEDICINE

Hip Replacements

with Simon Mellor

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TRANSCRIPT

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Steven:

Today. We are following on neatly from yesterday's discussion on surgical approaches to the foot and ankle by moving slightly North woods. We're looking at the knee and the hip in particular the hip. My guest today is consultants trauma and orthopaedic surgeon Simon Miller who is a specialist in both areas. We want to concentrate on the hip because he's actually described as one of the most prominent UK surgeons in the anterior approach to the hip, which is a muscle sparing approach and probably very helpful in what he describes as his accelerated rehab. Simon, great to have you with us. Thank you for joining us. Thank you for offering to share your knowledge with us.

Simon:

Thank you very much for having me. It's a pleasure to be here.

Steven:

I have to say that the email I sent out earlier on was a completely different person. It seemed to have a full beard in my, in my earlier warnings where everybody that you were coming in.

Simon:

Yeah. I have to apologize about my appearance in comparison to my internet based publicity shots. Obviously part of my job is in the NHS and recently with the coronavirus lockdown we changed all of our practices at work and I've been on the front line in the NHS for several weeks. And, home of my work meant that I had to be wearing a very close fitting, that they call an FFP three mask, which is, designed to prevent infection obviously. And those masks, they need to fit well on your face. So I had to shave away a lot of my, usual facial hair and am just limited to what you see now. So it's a very different appearance than what I would have usually,

Steven:

It takes me back to my days as a Royal Marine, which is part of the Royal Navy. And there was a traditional expression of sort of astonishment in the Navy, which is shave off and that reflects the order that goes out when one goes to war that you have to shave off beard. So the respirators fit on the and the gas can't get in. But leaving that aside, we always start these things these days with what the hell is going on as a result of the Corona virus epidemic crisis in your surgical activity. Are you back to work yet?

Simon:

So I haven't stopped work. I've still been going to my routine NHS base hospital, but the work practice that we've been doing has been very different. I've been in utilized to run a much-reduced orthopaedic service running the fracture clinics and still maintaining our ward work for our trauma patients, but also providing assistance in the ITU. Very different to the usual work practices that we that we're used to. And of course, we stopped to, of our routine, what we call elective surgeries. So the routine hip replacements and knee replacements that make up a large amount of my normal working week that's all been on hold recently.

Steven:

I saw something today. I think it was an email that came in to me saying that it's been 11 weeks of lockdown. It occurs to me that after 11 weeks the might be a degree of skill fade for you. Does that make it difficult going back to your routine work when you eventually do?

Simon:

I I don't think will be a problem. We discussed before we came on air about all the different changes that we're going to have to introduce when we do restart routine work. And part of that may well be that we have operating lists with a smaller number of cases so that the stresses are reduced but also dual operating. So myself and another consultant colleague working in unison to avoid those sort of potential problems.

Steven:

So would you like to take us through then the whole business of hip replacements and your anterior approach to it? I'd like to put this diagram up here as being my one, one diagram of a hip replacement stuff, which you told me earlier is, is out of date. We don't use spiky things anymore in hip replacements.

Simon:

It's close enough.

Steven:

But the standard hip you, you talk about in your early slide here is this approach that you ever use these days.

Simon:

Yeah. Well, I do. Yes. So, the history of hip replacements, is quite interesting in this country compared to the rest of the world. The majority of surgeons in this country, became comfortable and indeed during my training, the routine was to use, what we call a posterior approach to the hip joint or a lateral or our anti lateral approach to the hip joint. And that's the sort of surgery that I trained to do. And indeed, it's the sort of a surgery that I did for the first part of my consultant career. And it was only about, height or 10 years ago that I became aware of an alternative method to put a hip replacement in. Anterior approach replacement or muscle sparing hip replacement. And I have to be honest, initially I was a bit dubious.

Simon:

I thought, well, why do I need to know a different method to do a hip replacement? I'm quite happy with the technique that I use now. I have a nice big scar on the side of the thigh. At one side, detached muscles and tendons. I can have a lovely big view of the inside of the hip joint, which allows me to do the operation to my satisfaction. And the patients are in a bit of pain after the surgery, but we, give them painkillers, and they may well stay in the hospital for four or five days, but eventually things settle down in the majority of cases and just rarely when, the muscles or the tendons don't heal up, there's a risk of complications, limping or, the risk of dislocation of the hip. And then I was invited to, to go to Europe, watch a surgeon performing anterior approach, hip replacement. And as I said before, I was a bit dubious about this. It was interesting to watch, but I

didn't know whether it was actually, necessarily, beneficial to do. But the outcomes to me were quite clear. And when I realized what a difference it made to my patients and their journey, when I was very keen to pursue that and develop anterior hip replacement myself,

Steven:

I'm guessing from what you say then that, that the scars are a little bit less significant from your anterior approach.

Simon:

Yeah, so this is a standard sort of scar about six or eight inches long that you would get with a standard hip replacement, maybe a natural approach, hip replacement. If you were doing a, a posterior approach, a replacement, the top end of the skull would probably veer slightly to the left towards the buttock area. But that's the sort of routine scar that we've become used to seeing after a standard hip replacement. And in fact, once you have opened up the skin, there's an awful lot of soft tissue damage. If we go to the next slide, I've got a couple of pictures showing the dissection with a standard posterior approach. So that you can see The view on the left hand side shows that the operations involved opening up or splitting, open the gluteus Maximus muscle and folding that muscle to the backwards.

Simon:

On the, on the slides your viewers can see an orange and a green line running down the back of the thigh. That's the sciatic nerve. Obviously, therefore, at risk of damage at the time of surgery. And to the right of those structures, a whole bunch of small muscles which glue onto the thighbone itself. You can see on the slide, there's one label that says greater trochanter. And all those, that line of tendons that you can see gluing onto that, bit of bone have to then be folded back or detached from the bone in order to gain access into the hip joint itself. And then the slide on the other side shows the subsequent stage of the operation where a new socket has been put into the acetabulum. A metal STEM with a ball attached to it has been implanted, in to the top of the thigh bone. And you can see on that slide that those short muscles which have been detached and folded away, they then have to be reattached to the bone. And then a long-prolonged process of sewing up all this damaged muscle tissue for a standard hip replacement.

Steven:

In your slide you talked about, you know, when the muscles don't heal properly, then there's a greater risk of dislocation, which makes sense. But how often do things not heal properly when you take this approach?

Simon:

Thankfully the complications with hip replacement surgery have become more and more rare with posterior approach hip replacements If those short muscles don't reattach and heal then there is a significant increased risk of dislocation and some authors do identify that a posterior approach surgery has a risk, a slightly higher risk of dislocation compared to other techniques. Another method, a traditional method of putting in a hip replacement using what we call the anterolateral approach involves spitting and detaching a muscle towards the front of the hip joint called the gluteus medius muscle. And there's more of a chance of that muscle not healing up well. And patients with a poor function of the gluteus medius will tend to lurch or limp forever after otherwise

successful hip replacement surgery. And we call that a Trendelenburg gait because they don't have the abductor function that that muscle should normally provide. And so the pelvis is not controlled well as they take a, a single leg stance during gait.

Simon:

No, I was going to say in comparison to the technique that I saw all those years ago in Europe, which I now use routinely, for the majority of hip replacements is called anterior approach, muscle sparing hip replacement and has been coined as the Beachbody hip replacement. The, the scar for this is it the front of the hip, the scar may well be a longitudinal scar, but also we can use a transverse what we call a bikini scar, bikini incision, which is very cosmetically. It gives a better cosmetic appearance. Yeah. And the, the really useful points about this technique is that once I've cut through the skin, there is no muscle damage. There is no tendon damage. The surgery involves me moving muscles out of the way, rather than damaging them and through that route getting to the hip joint, once I'm at the level of the hip joint, the actual surgery is fairly, typically similar to the sort of routine hip replacement surgery.

Simon:

There are some slight differences. The patient lays on there back during the operation rather than on their side. Because of that. So it makes it easier to assess leg length, which is one of the issues with hip replacement surgery. And also I can use x-ray during the operation. I routinely use x-ray during the hip replacement and that really gives me reassurance that I'm being very accurate with the alignment and positioning of both the socket and the metal STEM during the operation. And we, we know that good long-term function for your hip replacement, that there is a significance to the alignment and the position of the implant, which will help with long term function of the hip.

Steven:

What's the, what's the downside of this? Does it take longer to perform an anterior approach replacement?

Simon:

There's always a learning curve with any technique. Ah, I've been routinely doing hip replacements through this technique for several years now and my own time span for doing an anterior approach.

Simon:

Hip replacement is maybe 10 minutes longer than a posterior approach hip replacement. There are points in the operation which take a little bit longer, but there are other points which are much quicker. Specifically sewing up at the end is much, much quicker because all the muscles just flop back into place. And then it's just a question of stitching up the soft tissues and the skin. So there are pluses and minuses obviously. I train surgeons in this technique. And what's difficult is taking a surgeon who has become accustomed to a standard posterior approach and it is quite a seismic shift for them to try and understand the nuances of the exposure and the anatomy through a new technique. It's actually easier to take a junior surgeon and train them up in the technique. Somebody who hasn't got to set in their ways.

Steven:

And so what are the current criteria for coronavirus affects this, but I mean, normally what are the criteria for taking someone on, for hip replacement?

Simon:

So in the clinic the decision making remains the same. Whether I'm going to do a posterior approach or an anterior approach hip replacement, the primary question is, does this patient fulfil the criteria for having a hip replacement? And for me, that's based on a standard history examination and imaging, findings. So, what I would usually suggest is someone who has daily significant pain from their arthritic hip. UI take care to exclude other causes for hip pain. It's part of my history taking, but if they're getting significant pain despite taking regular analgesics, especially if they're getting rest pain or night pain, they're being kept awake at night. They're limping significantly because of the hip pain, maybe using a stick or a cane and they are having difficulty with day to day life. Their quality of life is significantly reduced and they've tried all alternatives including physical therapy, whether it's physiotherapy, osteopath therapy, chiropractor therapy. A lot of my patients who have maybe had injections into the hip all in an attempt to try and manage their symptoms, but they've become aware that they have little choice in the matter. It's either live with the pain and the suffering versus having a hip replacement. So the primary decision making in the clinic that this integral question is, are your symptoms bad enough to have a hip replacement?

Steven:

How is that dependent on the patient themselves? That sounds a peculiar question, but we talked before we came on air about Andy Murray for example. When I had my knee replaced, I'd put it off and put it off because surgeons said don't have this until the last minute, but it was the best thing I've done because it meant I could get back to exercise. And in Andy Murray's case, obviously he's a very relatively young Chap and, yet he's had an intervention on his hip. Does the NHS, accept that younger people who are very active can still go for this even if they're not in disabling pain

Simon:

Absolutely. I think it always comes down to a two way conversation at any decision to go ahead with a hip replacement is a, a decision based on a between myself and the patient and agreement on both sides. I'm not going to offer somebody a hip replacement if I don't feel they're going to feel that benefit from having a replacement. And equally on the other side of the equation, I have a number of patients who will come to see me in the clinic with symptoms and signs and x-rays consistent with significant hip arthritis. And yet once we've discussed the pros and cons of having a hip replacement, they will say, well, thank you very much. I'm pleased. I know what my options are for now. I'd like to live with it. I like to stay as I am. I don't want to have a hip replacement and it's not my job. It's not my role to alter their viewpoint.

Steven:

Claire was asked a question given that you're not cutting in through any of the muscles or ligaments on this is there any danger of damage to the femoral nerve in an anterior approach?

Simon:

No, we stay away from the femoral nerve. Any one nerve if it's really at risk during this particular sort of operation, it's still actually called the lateral cutaneous nerve of the thigh. And the initial

dissection for this operation it runs in the interval, what we call an inter nervous plane is an interval between two muscles at the front of the hip, which is the sartorius muscle running medially and the tensor fascia latae muscle running laterally. And in that the interval between the two muscles runs a sensory nerve called the lateral cutaneous nerve of the thigh by putting our incision a little bit further lateral than the actual interval itself, then moving soft tissue medially, we try to avoid damage to that nerve. But it is a potential. There is a risk of damage that no, which in that sort of situation would end up causing numbness on the lateral side of the thigh, bearing in mind standard approach, hip replacement, one of the main risks is damage to the sciatic nerve. And clearly that's a mixed motor and sensory nerve. Much more significant. Problems would arise where you to damage the sciatic nerve during standard hip replacement surgery.

Steven:

Right. Mary's asked what happens to the trochanteric bursa during a a hip operation.

Simon:

So through a standard approach you divide you, incise through the trochanteric bursa. And that seems to heal up relatively well without too many problems. But over my 15 years as a consultant, I've had a couple of patients who've had standard hip replacements and have then gone on to develop lateral sided trochanteric pain syndrome which can be troublesome, with the anterior approach We never go anywhere near the trochanteric bursa That's a structure that's a lot further lateral than where, where the dissection takes place.

Steven:

And Eveland's asked about how common a hematoma is after hip replacements and how long the pain from it should last.

Simon:

That's a really good question actually because hematoma is a potential problem after hip replacement surgery. Not only can it cause swelling and pain, but it can be a potential site for infection as well. So we're very anxious about bleeding. At the time of surgery. Hematomas do sometimes occur. The majority of the time it's just a hindrance to the recovery. Of course nowadays we're probably seeing slightly more hematomas than we used to. Why? Because we are taking more precautions to prevent blood clots. So it's now a routine that all patients will have some sort of anti-blood clot medication after both hip and knee replacement surgery. And the downside of that treatment, whilst we're protecting their health and wellbeing and avoiding a DVT or a pulmonary embolus, we're probably increasing the risk of having a hematoma.

Steven:

I've got a question are replacement articular surfaces, the same area as the original ones, or are they oversized to try and extend working life before they eventually wear out?

Simon:

Again, a fantastic question. It comes down to the, what we discussed before about the development of hip replacement surgery. The fascinating changes in hip replacement design over the last four or five decades. The forefather of modern hip replacement surgery was sir John Charnley working near Manchester and back in the sixties, he settled on a low friction arthroplasty design where the

articular surface, it was a a metal ball in a polyethylene socket. Quite similar to what we use now for a number of more elderly patients. The ball itself was 22.225-millimetre diameter. It was that strange size because he was in Imperial measurements back in those days. Nowadays the standard hip replacement, the, the ball and the socket will often have a size dependent on the size of the patient.

Simon:

And it may well be 28 millimetres. It may well be 32 millimetres. It may well be 36 millimetres in diameter. And thankfully because of improvements in the structure of the materials that we use, the size of the actual bearing surface. Now it doesn't seem to have an adverse effect on the longevity of the implant. Even 10 or 15 years ago, we were worried about using larger diameters. It would be nice to use a large diameter because maybe you reduce the risk of dislocation but you get more wear from a larger diameter using old materials. But the modern materials that we use and specifically for a lot of my patients nowadays, that means that a high density polyethylene socket, with a ceramic ball there is a very, very low rates of wear or debris formation from that bearing surface. And we can reassure patients today we'll see a good long life span from the implant and the, the size of the bearing surface, the diameter of the ball of the socket that put in it doesn't seem to have that much of a bearing On the longevity of the implant,

Steven:

Which were the hip replacement implants, which had the problem with Debris I think they had to be that we stopped and it was at ceramic.

Simon:

No, so, no, so there's a, some 30 years ago we had problems with people trying to manufacture copy implants. So for example, the charnley hip replacement, which had had a great track record 3m you've probably heard of 3m, they, they make you your printer now. So they wanted to diversify. And a few decades ago they came up with a design of hip replacement and a 3m hip looked a bit like a charnley replacement, but had a terrible track record and had to be withdrawn from a sale. And of interest, that was actually the instigator for in this country, setting up a national database for our hip replacements. So nowadays, all hip and knee replacements the information about the implant, that the date of implantation is all added to a national database. And that's been fantastic in helping us as surgeons to see signs of early failure of newer designs of implants, and then do something about them before the problem becomes more widespread.

Steven:

Okay. What is the normal longevity of a, of a joint these days?

Simon:

So the, the, the standards advice to patients is that if they have a hip replacement, they should be expecting over 95% of their implants will last for at least 10 years and between90% and 95% will last for at least 15 years. And that's obviously a historical data based on implants that were implanted 10 or 15 years ago. And we're hopeful that the implants were used now with you know, very good quality polyethylene's and ceramics. We will hopefully see much increased longevity.

Steven:

Okay. Getting back to your anterior approach, someone's asked a very pertinent question, you said you don't always do it. What are the indications for having to take a, a lateral or posterolateral approach to the hip?

Simon:

Yeah. Again, a good question. When I was starting to do this technique, I was very much cherry picking people that I thought would be suitable for the technique to make my life easier. Generally slimmer patients, patients whose anatomy that, the shape of the thigh bone top of the thigh bone and the shape of the socket made it a little bit easier to do the surgical technique and that's changed over time. So now the anterior approach is my routine technique for doing a hip replacement and there's a small percentage of people that I still find I have to use for a posterior approach. If they're morphology, doesn't mean that they're suitable. Specifically if somebody has a very large abdomen and a big apron that hangs down in front of the groin making the skin and that in that area, perhaps, a little bit less poor quality skin, then that's perhaps not a great idea to go ahead and do an anterior approach, hip replacement for that person. And I would probably prefer to do it, a more traditional posterior approach because of the risk of infection.

Steven:

Okay. I mean we have, obviously people are asking about recovery time from operation and I imagine you're going to come on to that at some point. Very shortly. I don't know if you need to talk about this slide here. Is this just giving us an indication of how you perform your anterior approach?

Simon:

Yeah. This was taken from an article that I had published in the mail on Sunday a few months ago. It's just a diagram to show how we set up for doing an anterior approach hip replacements. It shows that the patients are lying on their back during the operation which as I said before, allows me to use x-ray during the operation to identify the position of the implantation of the both the socket and the STEM. And that once we've made the incision and identify the capsule around the hip joint itself, it's just a matter of routinely incising the capsule to expose the joints. We remove the ball, that makes up the natural ball and socket joints. Uwe then use a sort of a, hemispheric cheese grater. What we call a reamer to prepare the inside of the boney, acetabulum to allow us to implant the new artificial socket and then make a hole down inside of the thigh bone. In order to implant the metal stem that you see on the bottom right hand side of the diagram, and that STEM can be either a jam fit, and that the STEM has a special crystalline coating that the bone will then grow onto. We call that an uncemented Implant or in patients who are a bit older, maybe with the degree of osteoporosis, we'll actually use a special bone glue to glue that metal STEM into the thigh bone, ho securely fix it into place.

Steven:

It's not interfere at all with blood formation. You know, taking up a white space in the femur.

Simon:

No, the implant actually is quite short this diagram maybe suggests that the implants are a lot bigger, but you're only going to lose a small amount of bone marrow has absolutely no effect on the body's ability to generate new blood cells.

Steven:

And I'll take it the socket is glued in place.

Simon:

The socket is almost always uncemented actually. So we use a hemispherical design metal socket, which is a titanium alloy, which has a crystalline coating on the outside. And we under size the preparation of the bone so that when we hammer the socket into place, it's a jam fit inside the bone. And then within a matter of a few weeks, the bone actually grows onto the surface of the socket securing it into place. And if there's ever any concern about how secure that socket is, when the socket has a few holes in it. We can actually, pass some screws through the titanium socket, to secure it to the bone to add fixation.

Steven:

Now have to, I've tried making dovetail joints before and I can never get the angles right on these things. It strikes me that getting the angle right on this is critical is that you do that by x-ray comparison with the original law.

Simon:

Yeah, you're quite right. So the, the traditional hip replacement surgeon will use every available anatomical landmark that he can see during the operation to try and get the alignment and the position, especially of the socket just correct. The benefit with the anterior approach is I have an X ray machine and I can see as I'm coreing out, the insides of the socket, I have an X ray machine showing me where the, the reaming is taking place to make sure that I've met my anatomical targets. And then the same thing when I put the metal cup in and impact into place, I watch how the socket sits inside the bony anatomy to ensure that I have recreated what my preoperative template so I know exactly that. I've put my socket where I want the socket to be.

Steven:

Josephine's asked about the possibility of what she says are called three D replacements. I guess she means three D printed replacements in the future. Is that, is that something that's going to happen soon?

Simon:

We already have that available actually. If people have very abnormal anatomy which makes the the use of standard size implants challenging then we have the alternative to make three D printed implants which you can then implant through the same technique. Thankfully it's very rare that we have to rely on something custom made. Although custom made may to, the casual observer, sound better. You have to remember that every time you use a custom made implant you're doing an experiment in some ways because you don't know exactly what the data is for that implant. You don't know what the longevity for that implant is. If you use for what we would call on off the shelf implants. So that's an implant that has been manufactured in standard sizes and it's been on sale for 10 or 15 years. We have 10 or 15 years of data to support. It's you

Steven:

Robbins asked whether you always retain the greater trochanter during hip replacements. I guess with your anterior approach, you don't even go near it, do you?

Simon:

No. I mean I can feel where it is on from within the incision. I can feel the, the inner surface of the greater trochanter but the actual trochanter itself is untouched and not visualized. You know, we don't, we don't see it with this particular technique.

Steven:

John has asked, what is the pain generating portion within the joint?

Simon:

So all of the structures within and around the hip joint have sensory nerve fibres. The capsule that surrounds the joint, the muscles and the tendons that are outside of the capsule. And inside the joint itself, the bone has, nerve endings and obviously the articular cartilage surface as well. Although not richly innovated, if you wear away that articular cartilage, the underlying bone which becomes exposed has sensory nerve endings. And that's why when you develop arthritis with bone on bone contact, it becomes painful. And yeah, so any of those structures can be a source of pain generation.

Steven:

Helen's, just going back to what I was saying earlier on and I obviously was miss remembering whatever I'd said about failed hip replacements in the past. She said, wasn't there an issue originally with levels of chromium in the blood following metal hip replacements?

Simon:

Yeah, so we talked a little bit before about Andy Murray. And your viewers may be aware that he recently developed hip arthritis. He had problems with his hip for several years. He found it difficult to carry on playing professional tennis. And after numerous failed attempts to try and control his pain without having surgery, he ended up having what we call a hip resurfacing operation. It's not exactly the same as a hip replacement. And one of the big differences is that a, whilst it retains more bone than a standard hip replacement you're relying on a large diamond, a metal versus metal articulating surface. And what we do know about those hip reservicing's now is that a number of patients, will, then develop problems with metal ions from them. The, the cap that is put on top of the thigh bone and the metal socket, they are cobalt Chrome and the cobalt and the chrome ions get generated from the bearing surface and then can use local damage to the soft tissues but also get into the bloodstream. And can have are distant issues. Some people feel that there's a concern that they can cause cardiac, normalities later on in life. And that's why for the vast majority of people we've moved away from metal on metal articulations I think Andy Murray is a very unusual sub category of patient having hip surgery.

Steven:

Yeah, I was going to ask them, what do you think his decision making criteria were for that? Is it, is there a greater chance of him returning to high level sport with that as opposed to any other intervention?

Simon:

I think any decision concerning his return to sport, I mean, he has to be reassured that he had hopefully the best chance of a stable hip joints which would allow him to be competitive, on the tennis court. You know, the amounts of movement the twisting the bending the turning, it's very different than what most people would do with that artificial hip joint. And the bonus of having a hip resurfacing is that you do have the very large diameter for the, for the ball and for the socket, the diameter effectively mimics your natural hip joint diameter and so that potential to reduce the risk of subluxation or dislocation was probably paramount in the decision making process. With regards to his hip.

Steven:

Talk about what Andy Murray might do with his hip brings us neatly on to rehab after a hip replacement. A quick look at that slide there.

Simon:

So on the left you can see an example of a standard anterior approach scar with a slightly longitudinal scar running down the front of the groin. But for a number of patients what I'll do is a transverse incision. I really don't know the on the right hand side there's a picture of postoperative picture of some of that set up anterior hip replacements. Then there is a thin red line that you can see in the crease of the groin, which is the incision, which has healed very nicely. And that gives a very nice cosmetic appearance. And so for some patients that's a useful alternative, but really for me it's not necessarily the scar that is paramount.

Simon:

It's actually what happens after the surgery and this is what really triggered my viewpoints change all those years ago when I saw what you could achieve with anterior approach hip replacement, bearing in mind, as I said before, the traditional hip replacement if I went on a ward round the day after surgery, my patient would usually be lying in bed with intravenous fluids, maybe an oxygen mask, a blood pressure cuff, maybe doing some gentle exercising in the bed. And then the next day trying to stand up with a Zimmer frame the day after that, moving onto crutches or sticks and maybe four or five days after the operation, hopefully planning to be discharged. What I've got next are a couple of videos which may be worth showing. This first gentleman is a patient didn't an anterior approach, hip replacement on.

Simon:

And it's of note to say that for me an anterior approach, hip replacement. There's no age categorization. This guy is if I remember rightly, he's getting on for late eighties and this video clip we can run to the video now, this is less than 24 hours after he's had his hip replacement. And what you can see is that he's walking up and down the corridor and he's not using a stick or a Zimmer frame or a crutches and really no real signs of limp either that, and that's despite being of an age where a lot of people would expect that recovery times would be a bit longer. Maybe the next video clip would be a useful one to show as well. So again, this lady, she had a hip replacement just 14 hours before this video was taken.

Simon:

It's a right hip and if we run the video loop, hopefully it will run at a normal pace. Again, no sticks, no crutches. Unfortunately, the video link is running very slowly, I'm afraid. Yeah. You will have to believe me when I say that, in fact, she was walking at a normal pace without any signs of a limp, but it's difficult to see on this particular video. But she'd actually not even had physiotherapy yet At this stage, the lady you can see opening the door for her is actually her physiotherapist and I beaten her to it. I'd seen the patient and got her walking, before the physiotherapist had even come in to see her. And this is not an unusual scenario. After anterior hip replacement surgery, perhaps we'll just click onto the next video. Which again shows somebody who's less than 24 hours after their hip replacement. And this lady was a bit unsure about what she could manage. So on this video she stands up and she's a bit gingerly. She's a bit worried whether she can put weight on it and then she struggles off and she heads off out of the ward and she's waving bye bye. I can go home. Now. These sort of outcomes? Are not unusual after anterior approach. Hip replacement.

Steven:

I think you've got one final one here.

Simon:

There are a couple of them. They all tend to show the same sort of thing, but I wanted to make it clear that the videos that I show, are not abnormal, and I should stress as well. I've had permission from every patient that I've videoed. You know, I've told them that I'm going to use them during talks that they've given permission to allow the videos to be used.

Steven:

Would we be allowed to share these on our websites afterwards for people or is that going beyond what they agreed to?

Simon:

Wow. I wouldn't know that actually, well, not to maybe

Steven:

The slides, but not the videos on the website.

Simon:

Yeah, that's, that's a good idea. But you know, the, these sort of video clips I wanted to stress that they're not the best of the best of the best. After anterior approach hip replacement, they're the norm. And I've had a number of patients who are ready to go home. You know, they have the operation mid day on a Monday, and they're ready to go home on the Tuesday afternoon,

Steven:

Which begs the question, which has been sent in by numerous people. Why is the anterior approach not the norm?

Simon:

So in a lot of areas around the world, it is the norm. The first hospital I went to in Belgium where I saw this technique you know, some 10 years ago it was the norm for all patients to have their hip replacements. And for patients who had fractured hips, they all had their surgery through this anterior approach, muscle sparing technique. It was just the norm. It was the way the trainees were taught. And that was just routine in this country. This surgical technique is a development of a technique that had been used in the past or something that we call the Smith Peterson approach, which is a true anterior approach but a much bigger scar. But it was perceived this country that the technique was more difficult. It was more challenging and the other techniques were therefore preferable but around the world in other areas.

Simon:

This technique was standard. And what we've seen over the last 10 years with, education the number of surgeons offering this sort of surgery has, has increased significantly. You know, from just pockets it's in Europe and a couple of surgeons in the U S it's now taken off in a big way. There are a lot of surgeons who have learnt the technique and use it as their routine in US and Canada and Australia throughout Europe. In our country. We've been maybe a little bit slow to pick up on the technique, but it's increasing in frequency here as well.

Steven:

Maybe I'm missing something here. But given what you said, that you're not having to cut through muscles or ligaments, you're just pushing through to one side, what is it that makes this more difficult than a lateral approach?

Simon:

So the downsides for the surgeon are you get much less in terms of a view of the surfaces that you're operating on. With a standard posterior approach or a standard anterolateral approach. The scar is bigger, the exposure is bigger, and the visibility of the landmarks, that you see during the operation is much more apparent. With this technique you've got much more restricted view of the inside of the socket of the surface of the thigh bone, but with the use of x-rays I find that it's, yeah. Equivalent.

Steven:

Okay. Mary's asked about horse riding. Is it possible for a 60 year old hip replacement patient to go back to horse riding after this?

Simon:

Yeah. I've had a number of patients who have asked this in the past and you know, I always say to patients that as far as I'm concerned, you have no restrictions. What you do after your joint replacement surgery is up to you as long as you don't understand the risks., the short answer is yes, you can go back to horse riding, but I would caveat and say there is horse riding and there is horse riding. When patients say to me, can I play tennis after the hip replacement? Yes, of course you can. But there is tennis and there is tennis, there is singles where you're playing like Andy Murray. And then there is doubles where a group of four individuals have a nice chat across a tennis court with a few rackets and a ball involved.

Simon:

And the mobility and the exertion is very different. So for each patient it's important to understand, you do what you feel comfortable doing, you understand the risks and therefore you take that on board. And you know, I can't control what the horse does after you've had a hip replacement, but if, horse riding is your thing and that's what defines you as a person far be it from me to change what you want to do. I have a lady who had a hip replacement a few years ago and it was only, she was in her, 80's and it was only when she came back to see me afterward that she told me that she was happy that she'd been able to get back to surfing. And I said, really? And she said, yes. I go down to Cornwall every year on a family holiday and I surf and she'd gone back to surfing in her eighties. And that, that surprised me, but why not?

Steven:

Yeah, I suppose. I mean, the one thing that would worry me is that with surfing, but also with horse riding you are on top of half a ton of hay stuffed bone and muscle and you can't predict what it's going to do, if you're doing tennis or jogging or cycling,, you're in control of what happens to your exercise. You can feel the pain come on are there particular movements or activities that you do warn people against? I think external rotation was one that used to be a problem for hip replacements wasn't it?

Simon:

Yeah. So with a standard hip replacement technique where muscles are damaged and may not heal up particularly well, that then represents a potential weakness point. And so for anterolateral approach,

Simon:

External rotation of the leg may well allow the ball to pop out the front of the socket for posterior approach surgery. If the structures at the back of the hip haven't healed up well after the operation internal rotation may allow the ball to pop out the back of the hip joint. That's why traditionally after hip replacement surgery, patients were advised about not sitting on low chairs, having a seat raise on their toilets, avoiding lying on this side for the first few months after surgery with anterior approach surgery, this has all gone out the window. I don' give any restrictions to my patients. If they want to have a toilet seat raise and use it, that's fine. But there is no prescriptive advice about what they can't do.

Steven:

And I suppose we've got a couple of minutes left. So this may just be maybe the last question or maybe the last of two. Peter's asked about, people needing hip replacements revised. He says, you know, people come back to the therapist years after a hip replacement and they're worried that it might need replacement. What are the characteristics, signs that there are revisions required?

Simon:

So I mean, revision hip replacement surgery is a very big and complex subject. Most patients will be aware that old hip replacement is running into difficulties because it hurts. The typical scenario with a failing hip replacement is that you started to get debris formation and loosening of the implant. And when an implant becomes loose within the bone, then that movement that then is allowed between the metalwork and the bone. That's painful. So patients are aware, they get start up pain,

they get pain when they're walking, they're limping. And these are indicators that the hip replacement is running into difficulties.

Steven:

Okay. a question how often when you open up a patient, do you find that they already have a trochanteric buritis or soft tissue injury and glute medius tendinopathies

Simon:

Very rarely. Very rarely. I mean, I absolutely accept that there'll be a number of patients who will present with two pathologies. They may well have , hip arthritis and hip pain, which is actually sacroiliac joint or a prolapsed disc or trochanteric bursitis. But in fact amongst the patients that actually end up attending and going through with hip replacement surgery then it's quite unusual to find, abnormalities you just occasionally will open up the hip joints and find that there is a tear of the gluteus medius muscle. We see that more frequently. In the more elderly patients who maybe have broken their hip and then when they come for their emergency surgery to have the, the hip joint replaced because it's broken. You open up the soft tissues and discover that gluteus medius has frayed and collapsed and fallen away. And it's interesting in fact, because those patients may not have mentioned that prior to their fracture they had any symptoms, which is unusual.

Steven:

Interesting. So that's been wonderful. Thank you very much. I mean, it's really kind of you to share your knowledge with us like that. And I know that we had masses more questions, which we don't have time to ask now. And maybe one day we'll be able to coach you back in again and get you to answer the rest.

Simon:

Oh my pleasure. Steven. Thank you very much for having me.