Hips, Knees and Sports Injuries - The Best Approach

With Mr Nadim Aslam

Steven Bruce
Good evening and welcome to the Academy of Physical Medicine. Once again, it's great to have you with us as always, and looking forward to this evening CPD, I hope you are looking forward to it not just because of what we're going to learn from this evening's expert, but also because of what we also learn from your contributions. So if I can add a little bit of extra encouragement to keep your questions coming in, and not just questions, your own experience and your own opinions as well, that would be great. Before we start, I thought I'd update you on the APM soap opera, that is to say the move of my clinic from one place to another place about quarter of a mile away. I only bring this up because you probably heard a lot about it in our recent emails. And I had to excuse myself from last week's case based discussion because anyway, we have now completed we have moved into our new clinic. New being the wrong word of course, because it's 1624 buildings so 400 year old buildings come with their own challenges, but we are in the patients are happy the practitioners are happy and we went we started business yesterday having had two days off in the move between the two premises. So it is now all over apart from a few boxes and a significant amount of shouting which will take place between me and my conveyancing solicitors while I try and get some redress for the pain and grief they've caused. Anyway, I'm pleased to have got that off my chest. Let's turn to this evenings CPD I should say thank you for all of those of you who sent in your good wishes during the tedious process that was that move. But let's get to this evening CPD. My guest this evening is Mr. Nadeem Aslam. He is a consultant orthopaedic specialist in the hip, the knee and in sports injuries. And as you can imagine, he has a wealth of experience. He's also a champion of the minimally invasive approach to surgery, which we'll hear quite a bit about in a short while, and I know it will be very dear to your hearts. He's written a whole load of journal articles. He's lectured across Europe and the States. He's trained in the states trained in the UK actually worked with one of the designers with a designer of one of the knee implants about which we'll hear later on. So there's not a lot he doesn't know about that particular particular areas of Orthopaedic Surgery and clinical work. What I'm hoping you'll get from this evening is of course, first of all a better understanding of the latest approach to surgery, which enables you to inform patients better and advise them on what might be suitable for them what the pros and cons are, and refer them accordingly. But also hear Mr. As lambs opinions on rehabilitation. And perhaps we can tempt him to offer his thoughts on how we can stop the patients using his services by advising them appropriately beforehand. Nadeem, great of you to join us. Thank you for coming along this evening. Do you reckon you can help us out with all those things?

Nadim Aslam
Yeah, yeah. Thank you very much for inviting me. We'll try our best to go through everything.

Steven Bruce
Well, I didn't say to people that actually I mean, you know, you are a very busy man. And I know that because it was a struggle to get our pre broadcast chat organised because you were always in

theatre doing endless lists of patients. And I see you've come straight from your clinic today, haven't you? So we're very grateful for you giving up your time. Really?

Nadim Aslam
Yeah, that's great. As you can imagine, after COVID was a huge,

Steven Bruce
yeah, yeah. No shortage of business.

Nadim Aslam
Yeah, so a lot of stuff to get to sort of deal with. But Tommy's good, so good.

Steven Bruce
Should we start off them with the hip? Yeah. Now you make a big thing on the website and elsewhere about your minimally invasive approach. Can you tell us what you mean by that, and how it contrasts with what we've had in the past?

Nadim Aslam
Yeah, I mean, the way that we got involved in this was conventionally when hip replacement surgery was done, yeah, brought forward by Chandi. In the 1960s. The approach was that a incision was made completely from the top of the aisle aircraft all the way down to midpoint of the femur, and all the muscles were stripped around the hip. It may be what if Justin can show us images five, to two, eight, I can talk through that. So if we have image three plays Justin to here, here, what you can see here is that's the basic sort of anatomy of the hip joint. Next image will show you where the capsule starts to come through. And the ligaments there's the pubic femoral ligament, his skill, femoral ligament there, which is strong stabilises the hip and then on top of that, you've got the capsule. So the next slide and then when the next slide, please, just so this this slide demonstrates the nerves that around the hip joint, the femoral nerve at the front, and the sciatic nerve going down round back. And if you go to the next slide, please, Justin. So this is the key slide really, when surgeons conventionally did this operation, they stripped the piriformis muscle, the gluteus medius, minimus muscle, all of those muscles were stripped off the bone. So as a result, once the femur was resurfaced and stem was put in and a socket was put in, you ended up with a lot of instability possible instability in the joint, and it took a while these muscles would have to be then sutured back on. And it took a good six weeks for them to heal back home.

Steven Bruce
To me, I'm surprised it I always assume that actually you bisect the muscle and work through it not detach it completely from the bone. Well,

Nadim Aslam
in in the original hip replacements that were done, you actually Charlie actually removed the trochanter. So he actually removed a solid chunk of the greater trochanter. And then did the hip replacement, and it touched it back on the wires. But a lot of the approaches now stripped those posture muscles, or some of the lateral muscles. So what we found was, we had patients who were in their 40s, who were in their 50s. And they were saying to us that look, you know, Trent 30 years ago, we had to learn our back after surgery for six weeks, we couldn't drive for six weeks, we have to watch out for dislocations for months, you know, things haven't progressed, we need to sort of in

we really want to get back to work quickly or drive quickly. So this led to the development of in collaboration with the nice this and the hospital anaesthetic staff, pre assessment staff have a process, which was a team process, how we could improve the recovery and outcome for these patients. And part of that a small part of that, but important parts of that was the surgical technique. So what we found was rather than go stripping all these muscles, we could actually go between the muscles go onto the neck of the hip, and cut the neck in situ. So we didn't dislocate the joint, we cut the neck in situ, removed it with a corkscrew, which essentially what you would do if somebody had a fractured hip, and then built the hip in situ, both the socket and the femoral component. So I've got I can just show you quickly here. So here's a femoral component. Let me just show you actually here, this is a model where it shows a hip replacement. So the socket is resurfaced the female that the fibre and has the stem which is put in because all the muscles attached around as the functional, we've what we found were the results are very, very interesting. First of all, the bleeding was minimal. We have less than 50 mils of blood loss compared to 500. bruising and swelling was reduced. And we found that the hips are very, very difficult to dislocate, even on the table. So that gave us confidence that the recovery could be speeded up. So we allow people to drive but two weeks, we allow people to lie on their side straightaway. And we found that their recovery range, their pain, swelling, and everything improved substantially. And one of the reasons I think the important one of the important reasons I believe, is the capsule. Because when you develop arthritis, and you're sort of colleagues will understand this is that one of the first things that happens is the capsule starts to contract. So you get a loss of rotation of the joint. So not only controls rotation, but it also has a probably called a proprioceptive function, where it gives positional sense and pain receptors. And then a conventional haircuts removed, so you lose that feeling of balance and proprioception. Whereas with the approaches that we're doing now, we maintain the capsule, put it back in, put it back and touch it properly. And so I think patients feel more confident on the head because they get some degree of proprioception and feed back straightaway. So that's that was in terms of hips. That's how we've sort of moved on and develop things.

Steven Bruce
It doesn't capsule recover after that and regain some of its flexibility or is it having contracted because of the arthritis? Are you stuck with what you then got?

Nadim Aslam
No will the capsule if you did it conventional hip replacement, the capsule will be excised. So what happens in that scenario is that the capsule is excised. Initially you end up with blood which becomes gel within two weeks, which becomes scar tissue startings of scar tissue within about six weeks. And by three months the scar tissue goes Bring like leather to very very quite firm, strong rubbery material to your gain, you'll start to gain stability will act as a contractor, but it will it will sort of give you some stability now, if the capsule is preserved, what will happen is from the beginning you will get some structure which contains the bleeding, the hematoma the swelling and you will also have a structure which which will which will be supple because it's released to a degree, but it will give proprioception and the feedback in the joint to give your patients the confidence that they can mobilise in the joint earlier. And I think the most important thing is it improves this return reduces the dislocation rate and a direct replacement, because as soon as you start to remove the capsule and the ligaments the dislocation rates will be higher which can be higher

Steven Bruce
what is the dislocation what is the comparable dislocation rate.

Nadim Aslam
So, if you look at it, the dislocation rate is dependent on a number of factors. And the dislocation rate is dependent on preoperative factors such as patient factors, interoperative factors such as where you position the components, and the type of components and post operative rehabilitation, if we assume that the patients that we're choosing for surgery don't have a neurological disorder, such as Parkinson, etc, and the post op rehab is the same. And it's just based on the technique, then the dislocation rates reported are around about three to 5% for conventional hip replacement surgery, but for approaches which preserve these muscles, they're down to about 1%. But no, every hip, or every artificial hip is taken to an extreme position, you know, can can leave her out just because of the way that it can, the hip can impinge on the socket itself. So just just demonstrate that. So here's a hip hip replacement, initially flexion extension is not a problem, but there will be a stage where if you rotate the hip, but it impinges on the socket, and starts to leave out. But that's quite an extreme position. If your capsule and other structures are intact, then they will produce pain at that point, which will stop you going further. Whereas if you've got no feedback, you can leave out the difference

Steven Bruce
once Are you still approaching this laterally. With operational you come in from the front.

Nadim Aslam
Now what happened was, when I started developing this approach, I mean, the first few patients I had, were interested in your approach, which was called the Super path, which is an approach that had come from America. Now, it's not an approach that I commonly did. So I offered to refer these patients to to one or two people in the country who did it. But they were insistent that they wanted the approach done by ourselves. So we then went on a training programme, which involves going to Rotterdam, St. George's Canterbury workshops. And then we what happened was, we carried out a list of three, four patients, with the surgeons who did this approach coming and joining us. And we found that the results were so good, that we continue to now go back to your question, what we're doing is that those initial approaches, we start to do approach from the top of the joint. So we're actually what we were doing was making an incision around the trochanter. So if you if I can just show you a model of a arthritic joint. So that's an arthritic joint. Now, as you say, there's various approaches, you can come lateral, you can come directly on the side, there, you can come from the back, or you can come from the front, we actually what we actually do is cut the hip from here to here in position and come from the top. Initially, we came from the top, which involved X ray controlled but what we found was that was quite, that was a very difficult way to approach the head to now we can't do a minimal invasive approach from here to here, and come from the posterior slightly posterior, which allows us to go in and preserve the piriformis and the other muscles.

Steven Bruce
When you you showed your original slides, you talked about the femoral nerve and you talked about the sciatic nerve and of course branching off and then there are lots of other nerves and they seem to be of course more anterior and posterior. What's the what's the potential damage to nerves through your approach?

Nadim Aslam

Right, okay. So the important the important, the two common minimum basic approaches are posterior and anterior for the anterior what we tried to do, there's a whole risk of damage to the lateral cutaneous nerve of the fire, to your colleagues will know that that nerve goes just above the anterior superior iliac spine gets a sensory nerve, which causes numbness over the lateral aspect of the thigh made worse in a sitting position. So that can be quite painful as it's called myostatin prosthetic and it can be very painful condition. So that incidence of femoral nerve and lateral cutaneous nerve injury is higher in an anterior approach and the posterior approach, we found that the incidence of nerve injury is reduced. So the the quoted, incidence of nerve injury in the posterior normal posterior approach would be about one to 2%. My own experience has been that we've seen probably one in 300. And most of those are what we would call neuro practices. So the nerve nerves, which have been stretched, and develop a conduction block, which will recover, and we normally advise patients that they recover a millimetre a day, and can take 18 months to recover, we found probably about one in 300 cases of that which recovers normally within six weeks variation of that sciatic nerve, so it does split and sometimes it splits above the performance. Sometimes it splits in the piriformis. Sometimes it's split low, which is where it normally splits. So surgeons who release the piriformis, or retract the performers can sometimes, you know, inadvertently cause pressure on the nerve that way. I think most of these injuries are neuro practices. We would advise observing and treating with passive movement. Absolute key is to maintain passive movement to the joint, that the ankle drags the foot drynk for foot drop until the nerve recovers. Because there are a number of patients who we sometimes see who haven't had passive exercises, or range of motion of the foot and the ankle. So by the time the nerve recovers, the joints are stiff. And then it's really impossible to rehab that

Steven Bruce
was really useful for us to know, with a couple of months, several questions have now come in the obvious one, which has been sent in by Matthew, who's for reasons you won't be aware of is also known as Mrs. trellis, probably mainly at weekends. He says, Why doesn't everyone do it this way? Because you must have done this, because evidence suggests to you that it's the best approach. And yet, if we're all dealing in evidence based medicine, everyone should be doing the same thing.

Nadim Aslam
Yeah, it's a common, it's a common question that we get asked now. Essentially, every step in an operation, operation has a sequence of steps. And every step that you do is based on your experience and who's trained you. So let's, for example, say that the front of the most simplest step in the operation would be closure of the skin, that we have looked into this, and we always do a absorbable suture subcutaneous closure, because it's cosmetic, you don't have to take any stitches out, there's no infection risk. But a significant number of surgeons will just use staples. Because it's easier. It's quicker. It's what they're used to. Now, a lot of the surgeons have trained under Chandi. So when when I've changed to train with surgeons who trained with charmy. Now the problem in in Britain is that the majority of hip replacements that were done here, originally, were based on techniques, which involves cementing and a large amount of dissection and removing large amounts of bone. So when people have got used to those techniques, they kind of say, well, the majority hips do Okay, anyway. And if we do a small approach, we can't see anything. So we'll stick to what we're doing. The part of is the older generation of surgeons who haven't seen haven't don't understand the need to change. And then part of is that is technically much more difficult. And nowadays, you have to go I mean, you really have to, it's not like 2030 years ago that in a surgical practice, you can start to sort of experiment and things. You really have to go and cultivate workshops and work out the process to do this. But if you go across to Europe, and you go to

America, these approaches are now 70 80% of the approaches that are coming in. So I think it's a combination of factors that most basements most hip replacements will Do well. So there's a 90% satisfaction in the hip replacement. Knee replacement is a different ballgame is 80% satisfaction rate? So people say, Well, 90%, okay, all right, fine, you have to lie on your back for six weeks. And you know, you have to protect it. But at about nine months, things will be the same. But what we find is that it's that initial return to activity and function, which is what patients want. In fact, we found that the recovery rates for such quick, so much quicker, that even on even patients who are now any age at 90, we do the same approach. Because we've got used to the approach now that we actually find it we can do easier than going to convention approach.

Steven Bruce
When you talk about those percentages in in Europe and America, just how many, how many surgeons trained in this approach are there in this country, or what percentage of operations in this country are of this approach?

Nadim Aslam
So I'm saying minimally invasive surgery has had a bit of a in Britain, it had a bit of a bad name. And the reason was, that about 1520 years ago, the approaches came from America, and surgeons who weren't trained in doing the approaches started doing them. And one of the approaches in particular, which I talked about, when you come from the top into the trochanter, was an approach that was used by a few surgeons, and if you weren't, if you're not careful, it can lead to fracture. So the initial experiences when those approaches came, where there are higher rates of fractures and injuries. And the same applies to uni compartmental, partial knee replacement experiences showed higher complication rates. So they fell out of favour now. Now, I think now, there's a resurgence of these approaches, because now they've developed techniques and expertise to do them to be much more accurate, and that those complication rates have gone right down.

Steven Bruce
Right? In that case, when when a patient comes to see one of us and says, Oh, I've been told I need a hip replacement by whoever it might be. And we wax lyrical about what we're learning from you. And they say, Great, that's the one I want, how do we refer them? How do they get this particular approach? Or is the NHS great to say, well, you can do that privately or use a potluck?

Nadim Aslam
Yeah, I mean, the majority of patients that I see 95% of patients that I see, interestingly, a word of mouth. So the patients who've had mean, I've had some patients who come from Aberdeen, from different countries, country, and when you ask them a Why have you come to see CRS, they've met patients who've had the surgery, or they're aware of DKA surgery and rehabilitation. To properly in person you're talking about, I would say less than 5% of surgeons do the minimally invasive approaches. I think, if you go forward in about 10 years time, you'll find that the numbers will be substantially higher, because the new generation surgeons are are looking into sort of

Steven Bruce
is anybody is anybody being referred for this approach through the NHS? Or does it have to be private?

Nadim Aslam

No, I mean, I do the same approach through the NHS. And the problem at the moment with the NHS referral pathways after COVID Is this there are substantial delays. So a lot of patients are living in terms of getting things done quicker. But really the answer to your question is yes, I do the same approach through the NHS as privately.

Steven Bruce
I hate to answer this question, but I think it is useful if we can give people our patients a ballpark figure what would they be expecting to spend in order to get your minimally invasive approach?

Nadim Aslam
Well, in terms of what most people what most patients are given by a hospital and what we recommend is a package deal. So that includes the hospital stay, whether it's three days or five days or one day, the implant cost this anaesthetic costs surgical cost medication, physio therapy, rehabilitation, and the package is now around 12,000 pounds. The hospitals that I work at, so there's groups that I work for,

Steven Bruce
and what do you think the waiting list would be in the NHS for hip replacement at the moment? I saw some horror stories in the press the other day.

Nadim Aslam
Yeah, the the waiting list is well above a year coming up to two years. Now the problem is they are subcontracting out work. So what happens in the NHS is they can't cope. They send work to people who are not busy, but it's a bit of a Are there any BIA whether you're you do find some you know they're all surgeons coming to treatment centres from abroad. We're able to do the work. But, you know, in terms of NHS hospitals, they're extremely busy at the moment, in terms of because the backlog has been huge. The other problem that we're facing is the complexity of these cases has gone up to people who've been waiting around, ended up with joints, which would have been relatively easier to sort out. And now the femoral head has collapsed, or the joint become contracted, or loneliness, was what we're seeing some patients and literally got inflammatory conditions, and the joints have dissolved away. So you're going from relatively easy reconstruction to now to a much more aggressive operation.

Steven Bruce
I'm sure I'm sure I'm not alone in your audience this evening. And thinking that if you are if you have impaired mobility, because you've got a hip problem, and you'd have to wait a year for that to be rectified. And then you've got to spend several weeks laying virtually Mobile on your back, there are all sorts of other potential health problems that come with that other than just problems of mobility.

Nadim Aslam
Yeah, I mean, there's a real, there's a lot of patients I'm seeing in the situation that you're describing. There are real problems, because a lot of the my elderly people who've looked after their spouses, they've looked after relatives who unfortunately have COVID, and or passed away. They've got substantial problems of their own. And they're deteriorating not only from a physical point of view, but from a mental point of view, there's a huge temptation and severity, the severity of pain that some of these patients, it's incredible. You, you see these patients, and they're literally shaking with pain, some of them, and their relatives eventually said, look, you've got to get it down,

forget your husband, and they've come in now, then, what I always say to patients, and what the evidence suggests is that the the fitter you are, and the more rehabilitation you've had prehabilitation, which we call before your surgery, the better your outcome will be. And I always just always say to patients that you'll have the surgery, the surgery, essentially like a trauma to the body. So soon as you do an operation on most of these patients, and you go see them two hours later, they all look fine. But what happens is that over the next 24 hours, the body suddenly realises what you've done. And then it puts a significant strain on the heart, the chest, and the body used to size to a degree of cardiovascular conditioning. That's the that's the search the response, which then you can call control problems for patients. And the key thing about hip replacement surgery is that the severe pain that they have before the surgery is instantly instantly goes after hip replacement. A knee replacement is a totally different ballgame. But people come in with severe pain, the severe arthritic pain instantly goes after hip replacement. And it's balanced. The superseded by a dull ache on the side of the hip, without severe pain completely good straightaway, unless, unless they've got associated spinal problems. This is not clear. Which is which is one of the cases that we would recommend injections into the hips. If there's any inspired if hip pain does not refer to the iliac crest, it doesn't normally refer to the sacroiliac joint, and it doesn't normally refer below the knee. If you have got significant pain at night, and the pain is radiating below the knee, or if they've got any neuropathy or neurological symptoms, I would have a high index of suspicion there's a coexisting back problem. And in those cases, we would recommend hip injection, before proceeding to surgery to be absolutely clear on the degree of pain from the hip joint referred from elsewhere. And I and I would say 10% 10% of patients 10 to 15% of patients don't have hip pain with severe hip arthritis, but they can have knee pain. And it's not uncommon for us to see patients who've had arthroscopy on the knee keyhole operation, some even have have joint replacements on the knee. And at a later stage, it's been found out none of those have helped the pain has continued. And the problem is higher up in the hip joint. And it's the it's the obturator nerve which refers down towards the knee. Yes. So what then

Steven Bruce
is your your diagnostic process with a new patient in your clinic? Bearing in mind that the audience has seen me and not like you'd have the luxury of being able to put in injections to the hip to, to eradicate that possible cause

Nadim Aslam
in terms of assessment. So basically, the key is to assess the patient in terms of an accurate history. So location of pain to most patients who have arthritis of the hip, especially if they've got superior arthritis at the hip on the top of the femoral head, let me it's quite important point. So I'm going to show you that because when you do in most patients who develop arthritis, the arthritis develops at the top of the joint there. Now that will show on an x ray, that the space has been lost, and they will complain of growing pain, almost universally growing pain, you do have a subset of patients where the arthritis is not is not at the top of the joint or at the bottom, but it's right in the centre. Now these patients are interesting because they basically have what we call medial sort of polar arthritis just on the on the ball deepin. And they usually have quite a good range of motion. And they don't normally report groyne pain, they will report either true contouring pain, lateral pain, because they've doctors are working stronger, or not infrequently they report pain deep in the buttock at the back. So I think clinical exam, so the history is important. If a patient reports significant pain at night, and the pain is worse at night than on walking that rings alarm bells for me, because that indicates that the pain is being produced in the hip joint without actually loading the hip joint. And that huge sound usually indicates to me there's a problem going on, within the back your

facet joints, or other location. If the patient complains of neurological symptoms, below the knee, instantly, I'm thinking in my mind, have they got stenosis, have they got, you know, a degree of sciatic nerve impingement. Then, based on that, after the history is taken, the clinical examination becomes very important because most people, I mean, I've seen a number of people with knee symptoms who've come with knee pain. And soon as they walk, they have a Trendelenburg gait. So what happens is the abductor muscles, the gluteus medius, and minimus, muscles are weak, and they start to throw their shoulder over the affected side, as soon as you see a Trendelenburg gait. In somebody with knee pain, you have to exclude a problem in the head. And there's not uncommon, especially in adolescent children, that between the age of 13 and 15, that they will present with knee pain, and they can have a slipped growth plate. But going back to the adult situation which which the that scenario, the slipped growth plate with knee pain, and an adolescent is one of the commonest causes of orthopaedic litigation in that group. Now

Steven Bruce
going, because it's a because the diagnosis is missed.

Nadim Aslam
Diagnosis is messed up the diagnosis, the pathognomonic. The typical way to make that diagnosis is if you look at the patient, and you put them on the bed, and you look at the legs and you look at the feet, the side where the hip has slipped, the gross pay to slipped, the foot is externally rotated, it's almost it's almost diagnostic of the whole condition, you'll see that there's a huge external rotation because when you get if this is the growth plate, when you get slippage on the growth plate, what happens is the leg rotates out to that slippage happens, you get external rotation to the foot. And patient often is is complaining of knee pain. It's been a sports injury, I've been dreaming, maybe related to an endocrine condition, it's usually children are slightly more projects that we say, adolescent, sometimes hypothyroid problems, and they've during sport or an incident suddenly get knee pain and they can't wait. They're on the hip. Now that's that scenario, coming back to the adult scenario, where the Trendelenburg gait is important. And then the assessment of the case looking at the position of the foot is important because what your colleagues will find is that when you develop when you start to develop arthritis, one of the first thing that happens that happens is that slide that I showed you, where then we just take this here, the capsule fibres go forward like this around them the one of the first things that happens is that you start to get external rotation because the capsule at the back contracts, then you start to get external rotation of the foot and lose internal rotation. That's one of the one of the signs of early arthritis of the hip, early arthritis of the shoulder that you get a capsular contracture, loss of loss of internal rotation. For you start to see external rotation of the hip to that scene on examination, sometimes you can see a shortening of the hip, but I think a significant proportion of the population have asymmetry and leg length anyway. So that's quite it can be difficult. But you get long group which have painful restricted hip movements with a capsular contracture, which is entirely clear, that's a clear cut group, they'll have painful restriction and they'll lose external rotation. If you flex the hip up to 90 degrees, and you compare the degree of internal and external rotation, they'll have a contracted stiff joint, which will reproduce groyne pain, the problem, the group that often get misdiagnosed or missed or not, not don't normally get the the people underestimate the severity of their pain is the group that have arthritis on the inside of the hip joint, because that group booked about referring to the back the buttock, that group, if you rotate the hip, the hip movements are actually quite free. Because the capsule doesn't contract in that situation is more of a group central grinding. And in that group is quite interesting because that type pattern of arthritis, I found is associated with a large number of patients who develop true contouring pain. And although surgeons and people call that bursitis I don't think that pain on the

lateral aspect of the hip is of a scientist. I think it's related to the gluteus medius and minimus muscles, and they're having to work harder. It's almost like a tennis elbow.

Steven Bruce
I've heard other people say that drug enteric bursitis. Is overdiagnosed you're kind of backing that. Do you ever see it?

Nadim Aslam
Well, I think the majority of cases that are diagnosed as true contact pursued because the bursar is very small. So the majority of the cases that are diagnosed as a trick and if I can, if I could get Justin to bring back the slide there, the can't remember the final slide we looked at is lateral sided, hip pain, and I call the term greater trochanteric pain syndrome. That means pain over the greater trochanter, an image that Justin showed us. And you'll see there is there's the tendon of the piriformis and the gluteus medius minimus tendon attaching there. Under 30 of these cases, I believe that you can sometimes have traumatic tear or partial tear of the gluteus medius amendments, but 30 of those are tendinopathy. And by tender knock on the block, what we're talking about is a process where we've got degeneration in the tendon. And as a result of that degeneration, we're getting abnormal micro vascularization with sensitive nerve endings going in. And the if you look at there's a there was a trial done looking at patients who presented to practitioners with lateral sided hip pain, and they were put into three groups. So one group was doing nothing. The second group was steroid injection. And the third group was a specialist set of exercises by the Osteopath, a physiotherapist based on, you know, centric stretches and working on the abductor muscles. And what that trial found was that if you did nothing at two years, 50% got better anyway, because they found out if you did a steroid injection, it helped with your pain for around one or two months. But two years, there were still 50% of people affected. But the most effective intervention over two months another year was a dedicated structured exercise programme based on physiotherapy, osteopathy and so on. And I think acupuncture also has an important role in that situation because acupuncture, what it does is what if you if one understands the pathophysiology of tendon? What's happened is it's become degenerate. It's developed micro vascularization with sensitive nerve endings. But what the acupuncture needling does is it causes scarring or fibrosis which kind of seals up and breaks down the sensitive data. And certainly, you know, it's not uncommon. Patients with hip arthritis have lateral sided hip pain. And the important thing for The practitioner to to understand, is this a primary problem? In? In other words is, is the problem? Is the hip joint normal? And the problem arising from the muscles around the side of the head? Or is it a secondary problem in that the hip is so stiff that muscles are trying to force it all the time. And they're becoming, you know, inflamed and, yeah. So yeah, so I don't think I think bursitis is a is a inaccurate term in most of these cases.

Steven Bruce
I've got quite a few questions that have come in. While we've been talking, Nadine. In fact, some of that became in quite some time ago, Carrie asked an interesting one, she said, with these new hip replacements. So what you showed us with this approach, can this be done to replace as a revision of an old an older, different style of hip replacement or not, and what's the life expectancy of your hip replacements.

Nadim Aslam

So I mean, the life expectancy of a hip replacement, whether you do a minimally invasive approach or an open approach, nowadays, we would say there's a 95% 90 to 95% 10 year survival, which means that 90% to 95% of hips will last at least 10 years. So what we found over the years, as the hip replacements have done better than what we thought we used to say to people, you can't have it till you're 60, because after 10 years, you'll need another one. But what we're now finding is that these hips, if they're done accurately, can last 20 years, 25 years. So the approach, I believe the approach doesn't significantly affect the survival of the implant. Coming back to the revision stage, I think the revision situation is a difficult situation, because you have to be flexible in a revision situation. So if you've got severe damage, and depending on the individual case, there's a lot of bone loss or the implant is infected, then you have to be prepared, I think, to really do quite an extensive sort of wash out debridement and release, if it's a straightforward revision, for example, that the socket liner of the socket has worn, then you could do a you know, lesser approach to place that now, so, you in order to, if you look at most hip replacement, so, then I tend to use my preference in a younger patient, in fact, most patients is to use ceramic because the bearing so conventionally, hip replacements are similar. So conventionally, we use polyethylene plastic on the socket. And then a socket, which I use uncemented, Charlie used to cement it soccer. Nowadays, the bottom sockets are on the cemented, they coated, you can see here, they're coated by coating, bone will bond compound to, to, if you're if you avoid the initial complications, which are infection, dislocation, and you're 1020 years down the line, and the socket, whereas in these modern cups, you can just remove the liner and keep the cup in place, and then insert a new liner in. So that's a relatively straightforward revision. If you've got a whole thing that's failed, then you'll need a bigger exposure. And then on the femoral side, the reason for most revisions is that the stem has become loose. So that's either because over a period of millions of cycles, lots of wear articles have been produced from the plastic, which has led to the loosening or it's a failure of the stem to actually bond to the bone, which can be a biological failure due to infection, for example. So in the revision situation pre prepared for extensive approaches. There's no difference in terms of life survival of these implants, and it's much better than we thought.

Steven Bruce
How do you go about replacing or revising if the problem if it's a stem problem rather than the socket? Can you just take it out stuff some more glue in and stick it back together again?

Nadim Aslam
Yeah, well, it depends depends on what the cause of the problem is. If the cause of the problem is that the femur SIBO M has not bonded, then you can just remove the stem, clean the bone and place another stem in which can be cement, it's probably best to then cement the stem in because we've already had a failure of integration of the stem mechanism. If the big problem the big problem in joint replacement surgery is infection. And I always say to patients, and doctors and practitioners that if the wound has not healed, two weeks off to surgery, there is a problem. And if the wound is still leaking, and the new specialists are seeing patients or two weeks and the wound has healed, then there is a real possibility that there's infection there. Once you get an infection, the problem with infection is that once you get infection, it sticks to the bone. And it sticks and more importantly, it sticks to the implant. So it's very, very difficult to get to the organisms and the bacteria without everything and in that scenario, you have to literally remove everything put in a temporary hip or a space that then gives six weeks of intravenous antibiotics and come in and redo the operation is rare. The risk of infection is 1% and 3% in the knee, but it is a substantial problem. We try to sort of minimise and avoid

Steven Bruce
anything patients can do to assist in that process.

Nadim Aslam
Yeah, so basically, what are the risks for infection so the risk for infection again, you can divide that into preoperative factors, surgical factors technique, the operating environment, and then post operative factors. The preoperative factors, which dictate infection based scar, diabetes, if you've got poorly controlled diabetes, if you're, if you're on steroids, high dose steroids, polymyalgia romantical, rheumatoid, if you've got poorly controlled inflammatory conditions, if you've got psoriasis, or eczema, which is poorly controlled over the joint, that's associated with a higher infection risk, if you're on blood thinners, and you're prone to bleeding, that can be associated with a higher risk as well. Those are pre and then nutrition. You've got patients who are whose nutrition is poor, both in terms of protein muscle bulk supplements, then the again they're going to be find it very difficult to fight off any form of inoculation at the time of surgery. The two main things which in 1976, which almost eliminated infection in Orthopaedic Surgery, were the introduction of clean air theatres, in laminar flow, and then and the use of antibiotics. Those took the investment Charlie for the 1960. When Charlie first did his hip replacement, the indication for hip replacement was you had to be in a wheelchair. You had to be on morphine for two years. The patients were basically coming to wrightington Hospital, in real morphine for two years unable to walk. And the infection rates of those hip replacements were 20% 20% was the infection rate at that time. And it was pure coincidence that the Clean Air theatres were developed, because what happened was Chandi found that these infection rates were so high B wanted to develop airflow system in the theatre. And he actually contacted a company which worked in a brewery called Howarth Brewery Company. They used clean air filter systems for making beer or fermenting beer. And they had warehouses which are huge warehouses full of air systems. So they were invited to wrightington Chinese said, this is a small area, I want you to bring that for me. And they almost sort of knew who was sceptical that they'd be able to deliver that they almost laughed, I've been thinking, look, we're dealing with warehouses, this won't be a problem. So the first operating theatre was, in fact, a tent. It was almost like a tent and called a hearth enclosure and wrightington with airflow things, which reduced the infection rate almost instantly from 20% to five. So you might have been,

Steven Bruce
you might have come across this, it's a book but it was based on a couple of studies. I read it six or nine months ago now. But it was about the effectiveness of checklists in improving all sorts of outcomes. But one of the studies behind it was a medical one. And I can't remember the author, I can't remember who conducted the study, but essentially it was in America, they said right, when you're doing surgery, here's your checklist. And it's not the surgeon who does this. It's the probably the lead nurse or Ward sister, whatever they were called in those who goes through the checklist and make sure that everyone is wearing two pairs of gloves and has wash their hands and has done all the basic stuff. And apparently, it dramatically dropped the infection rates in theatre, but it was really resisted by a lot of people because they thought we don't need a checklist to tell us these things. They're obvious, but in virtually every case people were missing some stages in those theatre processes.

Nadim Aslam

Yeah, I mean, what what happened was the checklists that were developed were developed in A situation that we use commonly for the across the screen. Yes, I that's used all these checklists,

Steven Bruce
but only only surprisingly recently, relatively recently started using checklist, isn't it? You thought I've always done it.

Nadim Aslam
Yes. So what happened was I think there was a crash pilot crash. Somewhere aircraft crashed somewhere then there was a medical emergency at that site. And what they found were things were all over the place, no organised structure, disorganisation. The pilots found this incredibly strange, they said, we have 100 checklist that we did before we start the aircraft. And this is dealing with a fatal almost surgically critically ill patient. So they introduced the World Health Organisation, introduced the checklist that you're describing, essentially now happens before every case, there's a team brief. Everybody's introduced everybody and each patient is discussed in terms of what are the implants available? Or the what antibiotics are they on what allergies are on? Are there any specific steps in the operation? Any particular implants or equipment that's retiring required? Is x ray required? What's the anticipated blood loss to be required urinary catheter, do we have any important steps that we we need to take into account and so the address the surgical site marked as the consent appropriate as the COVID Min COVID has increased the complication rate in joint replacement surgery by 20 to 40%. So, if you have COVID, and you have a joint replacement, or if you have a joint replacement and you develop COVID infection, your risk of complication goes from goes up to 20 to 40%. For folks, and a large number of those risks are the respiratory vist, or, more importantly, thrombosis risk, because one of the important things that people are not picking up, which I think is the main reason that people have a high mortality with COVID is that is the fact of the blood coagulation and the thrombosis risk, because the majority of these people dying after joint replacements who develop COVID are dying from a pulmonary embolus or thrombosis of the major vessels. And so these checklists were introduced, there was resistance from surgeons and various people, but now they're integrated and it's compulsory part. And it's used to reduce limb reduce errors from human factors to minimise errors and minimise, minimise variation. And it's been a very it's been a while.

Steven Bruce
Of course, in retrospect it seems blindingly obvious, but as you say there was some there was some resistance. I've got a whole load of questions which I will not be forgiven if I if I didn't get through some of them. Nadeem Morag says how new is the approach that you're using?

Nadim Aslam
It's not it's not the approach that I'm using has been used in America for over 10 years. For 510 years tear, it's used by surgeons last 510 years, but it's not commonly used. But it's not a new novel approach. I've tried various approaches. And I've kind of I was quite lucky that I was able to work on cannabis, which helped me understand the anatomy, and allowed me to sort of develop approaches without putting patients at risk. And what I found was that what I've done, what I've kind of done is taken the good parts out of all the approaches that are unaware of minimise the degree of soft tissue damage without affecting the ability to put the components in, in properly. So the mini minimally invasive posterior approach, which is now which I've settled on, is not a uncommon approach. It's been done through for 510 years in the world.

Steven Bruce
As I said, there's a lot of people watching who rather like me are thinking surely all surgeons practice on cadavers before they ever go on a live body, don't they?

Nadim Aslam
No, no, no, some common brush. Yeah, most most surgeons who are trained, they usually trained to do supervision on during operation so they do parts of operations. So your trainer, you'll end up doing the incision, or the approach. Then one day you'll do the socket. weeks on you'll do the the femoral component and the whole thing is put together a training programme was covered is very expensive. So training is not commonly done. But unless you then go on to develop some specific techniques, but it's certainly not the most people learn on the job as it were.

Steven Bruce
That's why it's always best to get a surgeon who's been doing it for a while. Regarding dislocations, which you mentioned earlier on, you said that the dislocation rate is lower if you don't have to damage the capsule. Caroline has asked why? Surely it must be possible to invent a deeper socket or a tighter enclosure to prevent dislocations all together.

Nadim Aslam
You can, you can the dislocation risk has to be based on constraint, it's a it's a fine balance between constraint array motion. So for example, let's say for argument's sake, you had a socket. So let's say for argument's sake, and you just get a socket. So you had a socket, which was like this, that you had a liner, which the head actually clicked into which you can, and that's called a constraint socket. And that's absolutely fine. You know, if you're 85, if you've got Parkinson's, and you've got nerve problems, because for the most part, you're not going to, you're not going to take the hip to an extreme. But if you're a young patient, what happens is, every time you take it to the extreme, rather than the force being dissipated by a bit of movement at that junction, the whole construct is being so constrained there will lead to rather than a bit of dissipation of force ahead, it will lead to the whole implant being pulled in applies to the knee, you the most constrained knee is a hinge joint, so the hinge the knee is hinged itself. So it's fixed together, but the forces that are dissipated onto the bone, and then you will be associated by this thing. to So when hip resurfacing was developed, which has now fallen out of favour, which was when in the hip resurfacing head so here's, here's a fibre one we prepared earlier, to in a hip replacement. The bone is cut from here to here, the head is removed. No hip resurfacing is an operation where the head was basically prepared and a metal socket was placed on top of it is what Andy Murray has had. It's something that's fallen out of you know, it's not in common use anymore, because a high failure rate, because you had a metal head and you have

Steven Bruce
something Andy Murray quite used to it, I thought, yeah. Sorry, Andy Murray fans.

Nadim Aslam
Yeah. But what what that meant was that you had a large head, and then you have a lot larger, you had a socket. So the larger the head is, the more difficult it was to dislocate. But there are the problem with having larger heads as you produce more wear than the wear is produced by the surface area contact on the plastic. So the larger the head, you have more wear.

Steven Bruce
So basically, it's a trade off.

Nadim Aslam
Yeah, the question being asked is a good question. But it's a trade off, do you want earlier loosening to one constraint? And I think there is there is a situation where you've got Parkinson's or neurological people with dementia, elderly people where you will go for this situation where that you're going for constraints, okay, rather than the risk of dislocation. Okay.

Steven Bruce
I wonder if you're going to give Steven some advice, not me, someone else. He says he's a recent 53 year old lady with significant limitation of hip movement, X ray and MRI scans and to consultant opinions, once a severe away of the hip, second away of the hip and additional injury. And she's waiting 18 months for surgery. But diagnostic information had no benefit. Diagnostic injection, so he had no no benefit. So I couldn't read the question. What was your suggestions for him in terms of advising this patient?

Nadim Aslam
If the if the MRI scan is shown, so if the X ray shows substantial damage, and the MRI scan has confirmed that, that is likely that a substantial proportion of the pain is coming from the hip joint if rative clinical examination shows that the hip movements are contracted and the pain is in the groyne, then it's likely that the hip is still the source of the pain. If they've got no associated spinal symptoms, no neurology, then the question then is essentially the question being asked is that the hip has been injected and is not covered to the pain. Now, if your examination is still showing that the pain is in the hip, and the contractors, there's no spinal symptoms, I still think there's a high index that the pain is from the hip and is not infrequent, but these injections don't work. So First, I'd like to clarify who's done the injection in it was it done under X ray control was dye put in was it done by the treating surgeon or was it done by a radiologist or radiographer. And secondly, I would probably repeat that injection myself. So you can be absolutely clear by putting dye in that you're in the right place. Now, it's not uncommon that patients who have an injection have, they're normally given local anaesthetic and they're given steroids, there's not uncommon that I've seen it very often. But you painful a patient comes into the room, you inject the hip, and they get off the bed, and the absolutely brilliant, the pain is gone. They're walking around, everything's fantastic. At the end of six hours, the local anaesthetic wears off, patients pain returned, pain comes back to see you in two months. And they don't remember they don't recollect the six hours where their pain went. All they remember is that the pain came back the steroid for whatever reason hasn't kicked in the normally we say to patients that the injection will wear off in six hours. In some cases, the steroid will kick in at the same time and other cases, your pain will get worse. And their storage should kick in within one to two weeks. So this is this could be a situation where that patient, and we give them pain diaries, specifically for this reason, the pain would have been relieved straightaway. But the steroid hasn't kicked in the work because the arthritis is too severe. And all they remember is that arm in pain, and it's not worked. So I'd like to clarify those points because in the absence of spinal symptoms, with a positive with a strong index of suspicion of examination of stiffness of the hip, in which confirms that I think there's a substantial chance the pain is from the hip and the and the injection should be repeated and a clear description of pain relief and timing should be taken.

Steven Bruce
Yeah. Okay. I know, some people have asked already that we move on to the knee. But I've got so many questions left about the hip. I'm just wondering whether we'll just stick with us and make sure everyone's questions are answered. And then perhaps I could impose upon Mr. As lamb to come back and do us another session on the knee and sports injuries and so on. We're gonna get him on camera now is nodding on camera. So we've we've constructed

Nadim Aslam
the knee is fascinating, because we can talk about completely replacements partial.

Steven Bruce
So I would love to Yes, I have a personal interest in those. So we've spent a lot of time on. So please forgive me. I said, we talked about hip and knee but there's a lot of interest in the hip. And I'd like to exhaust the the questions if I can. Lawrence's How soon after surgery. Can the patient wait, Bear? I knew you were talking about D cases earlier on. Do you do those? For hips?

Nadim Aslam
Yeah, I mean, I went Kodak, the first ever decades hip replacement for spiring for BMI. So what? What led that development? The answer to the question that the patient or the your colleague has asked is you can wake best straight after a hip replacement. If there's no concern about the fixation of the implants, then you can put full weight barrel on straightaway. The only reason why wouldn't you wait there for the the Oh, the only reason you wouldn't wait there fully, which I think is wrong thing to do is if you have concern, your fixation was not right, the fixation of the stem is probably going to be okay. This, you think that there's a hairline fracture, and then you have to be careful for six weeks on the socket, you sometimes worry that the socket has not fitted into the stablon. Well, and therefore you've put some screws into mentor, but you're worried it may move in those situations, you can adopt a approach that you say don't put any weight on there will be no, this is what orthopaedic surgeons get confused, is what we know is the way that the mechanics work around the hip joint that you actually put more force through the hip by going non weight bearing than you do by partial weight bearing. So it's a misconception that you putting putting no weight through a hip is better than putting How does that happen? Well, it happens because the way that the forces work around the hip, and it's called a joint reaction force, it's the way that the forces work. The muscular forces work. They combination of the abductors combination with the tension around the hip, that when you put your foot down and I'm not talking about full weight bearing, but I'm talking about putting your foot down slightly, you dissipate some of those forces to the ground. Whereas the tent if you Don't put weight down all those forces and stresses going into the hip joint. And if your colleagues have got a scale, it's quite interesting actually, that is very interesting how much if you stand on a scale, and you just put one foot on it and see how much weight you can put in, it's quite interesting, actually, because just by putting your foot onto the scale, just gently, you're putting about 20 to 20% of your body weight through 20 30%. So, so I always think it's better to partial weight there than to non weight bear. Coming back to the day case situation, I wanted to I mean, a lot of people are in in America. At this moment. 70% of joint replacements are done as daycares. So, outpatient surgery, so patients come in the operation is done. And then they're sent home 70 80% of surgery is done that way. In Britain, less than one 2% is done at the moment. And what we wanted for us the importance of decades surgery was it to in order to get a patient home on the same day, you have to be at the top of your game, basically. But not only in terms of surgery, because that's a small part. But in terms of the efficiency of processes. So you have to have the

patient conditioned, they've got to be re pre harped on what they're having, they've got to be motivated, you've got to have the pain control absolutely perfectly. So you don't put morphine in the spinal, you don't give them opiates, which will make them sick. You put them to use a short acting spinal, you get them out of bed straightaway, you give them a glycaemic drink, you keep the blood pressure maintained, the physios will be with them within half an hour, soon as the spinal wears off, not waiting till the next day and use it. So essentially, the X rays done all the way down from theatre, the whole process is have to be absolutely on top of ethics. So that's why we set out to do that. Because we thought, right, let's optimise things and see if we can achieve that what we found was that we managed to do before COVID came in, around about four or five patients with literally came in the morning had that surgery, they're walking, and they're going home by five o'clock. In fact, one of the cases I did went home on a Friday, we've done during the day case, and the next day, he actually went to theatre involving opera. You know, somebody caught him watching the opera asked him what was going on. He said, I've had my hip done yesterday. So we don't recommend that sort of that sort of rehabilitation. But it was interesting to me that he was able the next day to go to opera.

Steven Bruce
Isn't there a considerable pressure on the NHS to do this? Because think of the impact on waiting lists if you can take three days down to one. I mean, it's

Nadim Aslam
it was pressure there. This is exactly what's being developed at the moment you see, and what we call Enhanced Recovery protocols. So we've now these protocols are coming into the NHS, that early discharge, don't give opioids minimise risk of get physiotherapy straightaway get people up. So your hip replacement involved hospital stay for two weeks, you know, about 10 years ago, 20 years ago now. You know, they're down to sort of daycare surgery. But I think there's one important thing. Two things one is the American system means that people often go into rehabilitation places, for example, hotels, because it's cheaper to take do the surgery, put somebody in a hotel than pay 700 pound a night and acute hospital. The other which I think is important is that most people on the night of their surgery will will be okay. Because see them in the evening. They all look absolutely fine. So the Americans, they get them out then a lot of them will struggle with pain and discomfort and the rest of it. There's always a bad day. But people just absorb that. Once you keep people in overnight, and they go down that inflammatory phase and the dark are hard to get them out. Yes. Then you won't be able to get them out for two days.

Steven Bruce
But there's no increase in risk by dismissing people a day after a day they

Nadim Aslam
I mean the American studies say there is no increased risk. Because you can't do that for everybody. So you basically have strict criteria to monitor and there's a backup 24 hour backup the nurses were happy to take any calls and see you back in. So So I think in the correct lease lected people who are suitable the risks.

Steven Bruce
Adams asked a technical question about infection. He says what's the mechanism exactly which substances or cells stick to which tissues when you were talking about infection sticking to implants.

And does that does the infection affect the bone and soft tissues and kind of infiltrate into the surface of the bone?

Nadim Aslam
Yeah and the infection the main cause problems sources the infecting organism is the skin. So, the commonest cause of infection is stuffy epidermis or Staph aureus, which are normal commensal organisms normal, you know, normal organisms on the skin. So, we you we try to minimise that by giving doing swaps of staph aureus MRSA before surgery, giving people washes. If anybody's patients are MRSA positive, which is a form of staph aureus, which is resistant to penicillin, that's a contraindication until it's eliminated for a joint replacement. Now, once you get contamination, the majority of people in everybody over the floor gets a degree of inoculation during surgery, but most people have a strong immune system, the contaminant, the inoculation, is hit hit by the antibiotics we give for 2448 hours. And it doesn't go on to develop an infection. Unfortunately, in a small subset of patients, which may be diabetic or steroid, or whether there's been excessive time taken for the surgery, excessive tissue damage, the infection, the staph aureus, which is the infection in most cases, then becomes a deep infection. Now, what then happens is it forms a biofilm, that protective film around it, so it will attach to the initial biofilm is formed on the implant, whether it's the socket or the stem. Now, the analogy that I give to patients is, if you imagine a nest of ants, and the ants are bacteria, you can have a nest of bounce under a brick. And you can fire a hose pipe on that brick. And the water's going to go everywhere. Let's say the water is antibiotics. But the the ants are going to remain the brick. Soon as you remove the brick. You've got millions of ants running everywhere. And you can fire the hose pipe or will you hit the ball to the same analogy happens the bacteria go on to the implant form the biofilm so you can give as much antibiotics as you want. But they can't penetrate because they're hiding in the metal. So you have to take in that situation. There are two situations. If an infection develops within six weeks, to three months, there is now an option which we call debridement. And implant implant retention is called a dare, then that situation, the surgeon can go in, keep the implants in, wash everything thoroughly deprived to take away any granulation tissue plus whatever, and then give six weeks of antibiotics. And depending on the organism, there can be success rates of up to 70%. If the infection becomes established, then the infection will start to involve the bone possibly, they certainly will involve the soft tissue because you'll get an inflammatory spend to get pass, you'll get the tissue involvement, soft tissue, if the infection is prolonged as long standing, then you can get an infection of the bone. And in those situations, you won't be able to eradicate it unless you remove the implants that that's where you have to go in, remove everything debride everything put in antibiotics, spaces and cement, and then leave that in for six weeks to eight weeks until the blood tests go back to normal. And the blood tests that they monitor other series active protein and the white cell count. But when they've normalised after about two months of antibiotics, then the surgeon can go in and replace everything. So the the way that the infection is approached nowadays is all of the inoculation at the time of surgery was correct one thing, there is a there is a group of patients who essentially have a hip replacement replacement and you absolutely find no problems. But they then develop whether it's within a year or five years or 10 years, a septicemia whether they develop that from a tooth abscess, or they develop that from a urinary tract infection, or they from infection anywhere in the body. Once you get an infection anywhere in the body which gets into the bloodstream and you've got high temperature and you feel unwell. Then unfortunately there's a high incidence that will deposit on the on the metal And that's the other way that infection develops, then you start to get weird organisms, such as the urinary tract organisms Ecoli all the organisms that come from the bowel, but most infections which happen at the time of surgery are stiff skin contaminants.

Steven Bruce
Regarding the stems, w 5.6. I think he's W seven on furlough, if I remember correctly, so your furlough time is coming to an end Diablo 5.6. He says do the stem loosening is occur less in natural bondings into coral like stems generally the ones with the holes in the Monday?

Nadim Aslam
Yeah, I think I think conventionally people always think that cemented stems are stronger. Because in Britain, I mean, to give you an example, in Britain 10 years ago, 90% of stones were cemented now it's about 5050 in America 95% of stem cells uncemented. and in Europe, though, cement was something which was introduced in Britain by Charlie, we've continued. In America, Europe, almost universally uncemented stems are used. Now is a misconception that is cemented STEM is stronger than an uncemented. Because when you have an uncemented stem, you get biological fixation. So the bone actually grows into the stem to the micro porous structure, that if it happens, that is a much, much stronger bond to to take out an undocumented stem, it will rip a lot of bone off because the bone is integrated breast cement essentially like a grout. So, you know, some of these times you can just knock out relatively easily from the stem, and then the sorry, the stem from the cement, and then the cement that has to be sort of taken off of the bone. So the best bond is a biological bond. Just some patients some surgeons say well, I don't really want to use it uncemented stem because it's hard to get out. But my feeling is well you shouldn't be you. Let's hope you don't need to take it out. Because yeah, you're putting it into stay longer.

Steven Bruce
Indeed. Thank you. Marian sends in a case of hers so she has a patient a lady in her 50s diagnosed with significant arthritis via MRI on passive extension her hip joint locks has a massive clunk before returning to neutral. She says is this presumably due to the anterior shortening of the capsule

Nadim Aslam
right okay, so claim clunking of the head is it can be classified into two situations. There's orderable clunk and there's a visible clunk the visible clunk group are usually younger patients, teenagers 20s 30s Who will stand and they will rotate their pelvis and you will see the most alarming thought and you'll see something clunk and they'll say to you know, can dislocate my hip and what they're doing and get get a great counter. What they're doing is what they're demonstrating is tightness of the iliotibial band. And it literally flips around the trochanter like that. It may not look too dramatic, but I'm doing it there but when you see somebody do that standing but there's a big massive muscle which flips around that so forcefully is literally a CLUNK CLUNK, that's known as a snapping tensor fascia Lata treatment for that stretches in a release, what you're describing is the second cause of a clunk in a joint which is non arthritic, you can get clunking from the label tab, and usually as the alias says tendon. And usually that clunk happens over the anterior aspect of the hip. And this is like a deep, sort of deep clunk, not visible, it's a deep dole clunk, which happens over the anterior aspect of the hip. And I think it's meant when you're extending the hip or you're flexing the hip issues in the iliopsoas tendon, give feedback, clunk. And the capsules unlikely to give you that clunk. There is a differential that, you know, you may be an osteophyte, but that would be extremely painful. Or it could be a clunk, that's happening because of the label tear. But again, you know, that's unlikely and extension, the most likely thing is that the iliopsoas tendon, which is the main hip flexor, this sub laxing over the front of the hip,

Steven Bruce

and that's what's giving it that sense of locking at the end of motion as well is that the block is going to force its way past that tendon.

Nadim Aslam
Yeah, it can do it can give you the impression of locking or giving way or pain inhibition.

Steven Bruce
Marian, I hope that's helpful for your patient. I think you did answer this earlier on I'll ask this, what's called just to

Nadim Aslam
come back to Marian. The way to diagnose that, if you actually wanted diagnostic information is to get somebody to do an ultrasound and do that manoeuvre. Because it'd be quite clear if somebody ultrasounds the front of the head, and takes it to where you're saying they'll see the planet.

Steven Bruce
Very helpful, thank you.

Nadim Aslam
At the same time, inject it because you might as well treat the problem is clunking a local anaesthetic steroid injection, we'll deal with the problem as long as it's painful.

Steven Bruce
I'll see you later for the partnership of said, if you have to cut open the joint capsule, which is the majority of surgery in the UK? Is there a greater chance of dislocations or complications there? You answered that earlier on. But I thought you said it was because they remove the capsule not simply because they cut it.

Nadim Aslam
Yeah, I think you have to bring the capsule you have to go through to approach the joint to the question is hard. What do you do with the capsule, I think if you repair it to a degree, and you repair the structures, it's associated with the nerve dislocation rate. If you size the capsule, then eventually you will get scarring and you'll get the blood going to gel to hematoma to leather to tough, rubbery fibrous tissue over three months, but is associated with a higher dislocation risk. So ending on how surgeons do the operation some dismiss the capsule, they don't think much about it. Others, you know, cobbling it together, see, I believe that the capsule is important in proprioception. So I believe that it gives you feedback to the brain. And why these patients feel more confident on the head. This because that structure, which has got receptors is giving them the confidence that their joint is okay. Whereas if you remove it, I think part of it may be the mechanical effect. But I think it's the proprioceptive effect to the brain more important.

Steven Bruce
Thank you. Once we had a case based discussion, and one of the cases being discussed was a lady whose age I can't remember, but she had a dreadfully arthritic hip, but she was reluctant to go for surgery because she was terrified about general anaesthesia. Victoria has asked would you generally use a general or would you go for spinal for hip operations,

Nadim Aslam
the gold standard now the gold standard by far for patients is to have a spinal problem is a lot of patients worry that if they have a spinal that they're going to be awake, and they're going to hear the the hammer and the chisels and the drills and so on. Now, almost invariably, after a spinal patients often get given sedation, to they're not aware of anything. Now, why is the spinal better the spinal is regarded as better for a number of reasons. One is that it will effectively give you total pain relief. So everything below the waist will be known. And that's consistent for about six hours, eight hours, so you have no pain whatsoever. Second, it will dilate the veins. So it leads to a reduction in blood pressure, dilation of the veins, which reduces the risk of thrombosis and also reduces the risks of problems with high high blood pressure. So there's the three four reasons a spiral is much better for pain control for DVT, thrombosis risk and for management of blood loss during the surgery. Okay, we would record the status, the gold standard

Steven Bruce
is probably not right. And that's actually very useful, particularly for whoever had that patient last week because I guess everybody imagines if they're going into this sort of surgery that they're going to be knocked out. And I don't know what the risks are from general anaesthetics these days, but nevertheless, they must be higher than from the spinal blocks.

Nadim Aslam
I mean, the risks, the risks may be low, but then the problem is once you have a general, you feel nauseas, you feel tired, the general anaesthetic can knock you for six. So your recovery rates are much lower, and the pain control is not better. Because what are your fine when you're asleep? Soon as you wake up, it's very difficult, then to get on top of the pain. So you need to give them opiates, which have their side effects. And so the spinal you don't need to give those opioids.

Steven Bruce
Fascinating stuff. You mentioned label tears earlier on. Lucy has asked her whether you see these very often and if so, can you give us a bit of info about those?

Nadim Aslam
Yeah, I mean, there was a group of patients who sometimes you know, in their 30s or 40s have normal X rays, but they have catching pain in the groyne. Often when they're driving, often when they're turning or twisting. And they almost destroy a very deep sharp pain in the groyne. So those patients gyms have what we call a positive impingement sort of test. And they often describe the pain like this, they don't point to the pain. So if they've got pain in the hip, right, most people say My pain is there, my pain is there. But they say it's there. It's like that it's a C shaped distribution. It's in the middle, you know, or can't pinpoint it, it's worse than I'm driving. It's worse than I'm turning. And they're describing what's happening there is they're getting a bit of impingement, the hip on flexion is catching some. Now the problem is, label pathology is common to if you take 100 people, you do an MRI scan, you will see labrum tears in a substantial number. And the vast majority of those are sent out aren't the cause of the pain. So very occasionally, you get somebody with a good joint space, and they have a label to her which is picked up on an MRI arthrogram. And they respond, you can do keyhole surgery. And they do well. But as soon as you've got signs of arthritis, treating Labour Law, cartilage tears in the knee, are not predictable, because you can you treat the labrum, but you'll end up with another problem. So the problem with imaging is that the basic imaging of a hip X ray or knee X ray is more useful in many ways. Because if you're seeing arthritic changes in

that, that usually means that you've got a clear cut diagnosis. If you carry out MRI scans, you start to see all sorts of things. And the analogy that I give to patients is you've got a second car, you're driving your screenwash finishes, what do you do? You open up on it, you fill it with water, close the bonnet carry on. Now if I didn't tell you that your screen was finished, I said, Look, there's a problem with your engine and open the bonnet. There diagnose 200 problems are there Mr. screenwash, because the most simplest to be very careful interpreting MRI images without clinical examination, especially when it comes to labelling pathology.

Steven Bruce
That in Thank you, I can tell by the clock above immediately above your head is now nine o'clock. We're out of time. I hope I hope you will forgive me for not moving on to knees. But I equally I'm really hoping that you'll come back and do knees with us another time that in because this has been fascinating stuff and a lot of really useful stuff. And we didn't even get on to rehabbing hips. But perhaps I can get some pointers to who we might get into talk about that separately from from yourself at some point. Really kind of need to give it some time this evening. And I appreciate that. You know you you're working very hard, both in theatre and in clinic and giving up time for us is is a real privilege. Thank you.

Nadim Aslam
Thank you. Yeah, it's been very, very good. Actually, no problem. We'll do need some time. We'll do whatever, whatever. Thank

Steven Bruce
you. I'm glad you said that. And you are now on record. as having said it, we had just a very small shade under 400 People watching so this is as I said to you earlier on. This is a popular subject and it's a good number for a live broadcast. Thank you for that though, and we'll see you again at some point in the future.