Transcript

FAIS: Femoroacetabular Impingement Syndrome – Ref 231

Steven Bruce
Good evening. Welcome to the Academy of Physical Medicine. Once again, you're joining us for another 90 minutes of great live learning with others CPD. And as always, I've got a subject matter experts in the studio with me, we're going to be talking about hips. Specifically, we're going to be talking about femoral acetabular impingement syndrome. But as I say, my guest this evening is a subject matter expert. And we'll go wherever the conversation takes us regarding hips. So wherever you want to go, just send us in your questions as normal, and we'll take it down that route. So who's my guest? My guest is Victoria Smith. Victoria is a physiotherapist of 23 years experience. And Victoria is great to have you on the show. I think we're now allowed to shake hands on waves formal, definitely tell me what makes you an expert.

Victoria Smith
Well, thank you for having me on your show to start with. So yeah, my name is Victoria Smith, and I'm a hip specialist physio I work in the NHS and privately as well. And I've basically dedicated my private my practice for over the last probably 12 years to hips. So a lot of time, effort and energy has gone into learning and practising. I worked with an orthopaedic surgeon who specialises in young hips as well. So I have a lot of interest in this topic. Well,

Steven Bruce
because we were talking before we went on air about the crossover between osteo and Cairo's and physios and so on, and how both of us I think dislike any of that sort of hostility that they tried to build into you at college. But there is a there is a lot of common ground here isn't there and lots of osteopaths who will deal with children, they'll deal with all sorts of hip problems. And I suspect that most of us could do would be bringing up to date with the evidence base on what goes on and so on. When we're on the subject of hostility and so on. First of all, I'm thank you for travelling all the way up here from Portsmouth. So of course, there was a bit more hostility in here because you've actually married a sailor. As a Royal Marine, that means it's making it very difficult for me.

Victoria Smith
I'm sort of keeping me

Steven Bruce
I know he's sitting over there in the audience. It'd be barking a bit later

Victoria Smith
on. I think you will be heckling, I think. Right? Okay,

Steven Bruce
so where should we start? You're gonna tell us what femoral acetabular impingement FAI? Yes. Should we call

Victoria Smith
it? Yeah, let's, let's keep it short. So I think it's important to know that you can have FAI anatomy and not have symptoms. So I think it's important that we, we know that because if you have a cam impingement or a pincer impingement, which we're going to come on to in a little bit and describe that in more detail. It doesn't necessarily mean you will develop symptoms. So I think it's important we know what FAI S is, and how to look out for it, how it presents clinically, and sort of risk factors that you may find in the subjective history, which may point you down that sort of diagnosis

Steven Bruce
to me in your long history of dealing with hips. Surely the only people who would know that they heard femoroacetabular impingement would be people who had symptoms because otherwise they'd never be examined or screened for it.

Victoria Smith
Absolutely. They think we know that people can be asymptomatic who studies where they've looked at, for example, footballers, so young population of footballers, and they've done a screen across MRI screens and found that 60% of footballers, tender young footballers have the anatomy, but not all have symptoms.

Steven Bruce
So I guess one of the critical things for us to get out of this this evening is to know which are the symptoms, which indicates absolute impingement, because otherwise we'd be sending people off for screening, we see how they've got the anatomy and we'd think maybe they need to go for surgery or specific treatment.

Victoria Smith
If you have if you by chance come across an x ray. Or maybe you do it in clinical practice. And you see, you know, anatomy leads you to think okay, this is FAI, but they're symptom free, you would not touch that hip with surgery whatsoever. So many if they did have FAI s, but we're managing it, you weekly wouldn't want to jump down the surgery path too soon there are there are factors that we know can influence a good outcome with hip arthroscopy. So, you know, understanding those as well is

Steven Bruce
can we start off them with a bit of a look at what the anatomy would be like in Minnesota and care about problems.

Victoria Smith
So in order to make the diagnosis of FAI, so fair must have the impingement syndrome. It's a triage of symptoms, clinical signs and image finding. So to make the absolute diagnosis, it has to be all three. So you can suspect FAI s, but unless you have the image findings there,

you can't label it as FAI s, but you can certainly treat it like that. So you don't have to have that label. So you don't need to send everybody off for an x ray or an MRI scan. If they're managing or your your what you're doing with them. Clinically, treatment is working,

Steven Bruce
it's going to be useful for us to go through that as we will later because we've got two models in for you to work on this evening one here just to demonstrate the test. And Stefan the other one you haven't actually treated before, but she's got hip problems. So we're going to find out what's wrong with her. Yeah, which will be great, because of course, what people really like to see is how is this really put into practice in clinic? Right. Okay, so now, I have to say, I always make apologies for my poor quality qualifications as a medical practitioner. But of course, when you think about cam and pincer impingement anatomy in a hip, instinctively think, well, the only way you're going to cure that is through surgery. And yet, we're first of all, we've learned that you can have them both and not have symptoms. Absolutely. Would that be in two people with the same extremes of anatomy, one might not have symptoms?

Victoria Smith
Absolutely. And I can actually testify to that myself because I have cam impingement. And I have a symptomatic left side and an asymptomatic right side. And both have significant cam deformity. So yes, absolutely. So you could have same anatomy, the larger the cam is, the more likely you are to develop symptoms. So we know symptom development comes with size of the underlying anatomical variant plus load. So if you're doing an activity where you're overloading the hip in a position it doesn't like so for example, if you had a cam impingement, and you're doing lots of flexion, deep flexion based activities, you're more likely to develop symptoms. Okay. And

Steven Bruce
you do all your deep flexion on the left hand side. Yeah,

Victoria Smith
absolutely. So we also know that your muscle control so if you haven't got adequate sort of deep stability system, then you are again, more likely to develop symptoms doesn't mean you will, but it means you're more likely to potentially develop symptoms in that hit with come morphology.

Steven Bruce
Now, I'm gonna just test you on that for a second. Because you said we know this, just reassure us that there is good quality evidence there isn't it's not that

Victoria Smith
there is evidence, but I wouldn't say the words good quality. But yes, though, again, sort of studies looking at symptomatic and asymptomatic people plus the risk factors. You know, we we sort of know through looking at people who do develop cam impingement, often they have a history of overload in their growing gears. And I'll show you on an x ray, how that can look. So when the growth plates open, the way that the fysisk is angled, can lead you to be more likely to develop a cam. So we can sort of see that on X rays, and you can follow the faces scar and often see where the cam bump is, right? So yeah, if you if you are a teen who does a lot of loaded activity, for example, football, rugby, league basketball, netball. And you do that for around four times a week. So the increased frequency means you potentially are more likely to develop.

Steven Bruce
When you say loading activity, you just mean

Victoria Smith
loading into flexion or external rotation? Are there two sort of risk factors we think are more likely to enable you to develop a can impingement.

Steven Bruce
So in terms of rugby players, are there positions which are more prone to injury than others? Yeah, put forward.

Victoria Smith
Yeah. So those loaded in a scrum where they're leaning forward with rotated hips. But yeah, so you know, looking at that, that sort of pattern of movement in that sustained position. potentially could mean you could develop a cam. Okay. Don't show

Steven Bruce
some pictures. Here's where we go.

Victoria Smith
Let's have a look. So here we go. Let me just go.

Steven Bruce
Let's hold it down and it'll reactivate itself. user error. Your first line just in place. Here we go.

Victoria Smith
Okay, so there's different types of pincer impingement one is global pincer, so global pins I'll get my model out as well to do like my model. So global pincer means that you have over coverage of the at a tablet or the socket, all the way around. Okay, so anteriorly posterior Li and also superior as well. So this is what a global pincer would look like on X ray looking at the right hip here. So we can see that the anterior and posterior margins of the tablet are are very deep. We've also got a last tabular fossa that actually runs just slightly medial to the earlier with your line here. So that's two ways you can see now an angle we could use to further qualify quantify this is something called a lateral central edge angle. So you would take a line straight through the centre of the femoral head and then you'd run out to the very edge of the Assa tabula. Now in a deep socket, you'd be looking at an angle of more than 40. If it's under COVID, you'd be looking at angle under 25. So you've got that broad normal virus image of that angle somewhere, I thought, no, not the lateral centre. There's other angles on there, but not the lateral central idea.

Steven Bruce
I was looking at that. I was just thinking, Well, okay, that angle depends on surely what angle the femur is hurt. So,

Victoria Smith
yes, absolutely. So so if you have an x ray, where they've over rotated the femur, or it's a little bit over tilted, it can have an impact on what you're seeing. But generally, if you're kind of getting to that plus 40, you're looking at a Pinto. Now, this is more of a, a woman's impingement, really, we tend to see pincers, generally in women. And usually, it's a woman

who's a little bit older as well, later in their years. So the medial head, the femoral head can start to migrate medially, which can therefore deepen the socket further.

Steven Bruce
So just a word for those people watching. We've got a slide deck of 50 different slides for tonight's discussion. We're not going to be showing all of them on the screen here, but we will be sending them out as a handout either, we won't be latest, No, it'll be tomorrow. So you will get these images, and you will get all the bullet points and slides to come out as well. So don't worry, if you're thinking, Oh, crikey, I wish I had that image. And I could look at it, you will get them tomorrow. Hopefully, it'll make more sense when you can see it physically on the paper.

Victoria Smith
So the presentation of this in clinic would probably be somebody who was globally quite reduced in their range of movement, you'd probably see a reduction in flexion more than likely internal rotation and quite possibly external rotation as well, because you've got the posterior wall sitting.

Steven Bruce
What age do you reckon this is going to present? Like, typically,

Victoria Smith
you're probably starting to suspect potential global PINSA 35. Plus, you could, there's obviously people who would have it younger. But generally, it's something in a in a woman that's a bit older.

Steven Bruce
So what's provoking that then because that's, that's not a menopausal age, or anything else where you think something hormonal is changing, suddenly, often it's

Victoria Smith
the medial drive of the of the femoral head, it can be, you can get ossification of the labrum as well. So if you've overloaded that potential part of the labrum, there's no hard and fast research to prove this. But there's sort of theories out there that if you have, if you stand in hip hang, so classically, where you stand like that, a lot of ladies do that. So there's, there's sort of theories that the way

Steven Bruce
I know that as well most of them in the Navy, I actually

Victoria Smith
have seen them a few times. So there's this sort of thing means that the superior lateral migration of the of the head can start to cause overload of the labrum here, which can then ossify so that that's a way you can develop it. So yeah, it's, uh, you know, you could be born with hip sockets as well, it could just be your anatomy your makeup. So yeah, that's global pincer, which is one form of FAI s.

Steven Bruce
Interestingly, and I hadn't even thought to explain this. We've had several people ask what cam stands for doesn't stand for anything, because it's Canada as in Kevin Paul, it just

means in in East centric curve. So it's just a word. That means the fact that yeah, it does not stand for anything. Somebody has asked Kathy has asked whether horse riding comes into the category of overloading this joint

Victoria Smith
we saw I see a lot of horse riders, actually. So I guess it depends on your underlying anatomy, and how your Yeah, how you're sitting, but we tend to see a lot of ladies, especially who are horse riding, and they often have pain over there, sort of TfL muscle. But yes, if you've got underlying anatomy, and you're struggling to get into that position, that could potentially encourage you to develop symptoms. So I wouldn't say it would naturally, you know, be a reason why you would develop it. But I think it can certainly have an impact without doubt, and can be a struggle to get people back horse riding because of the way you set the horses that's the definitely and often people find that they tend to favour one side I more than the other. They are overloading one side or the offloading because of this because that causes often chicken an egg. Yeah, chicken and egg. So it's yeah, looking at those different movement patterns and trying to work to improve that.

Steven Bruce
We've got a question from Pierre now I don't know which peer This is. It could be osteopath, Pierre or it could be physiotherapist, PA. He says interesting comment just now where FAI is developed due to overload. This raises the question about should we modify the activities young people do in their early years during growth, to avoid FII FAI to avoid the potential need for surgery later?

Victoria Smith
So it's a really good question, actually, that there is a lot of research going on at the moment with football clubs, especially looking at this, and they're developing programmes to try to really encourage young children to maintain healthy hips. So looking at specific exercises, and looking at how much load they are putting through their hips. So you know, you could be in an academy and be training four or five times a week. So trying to be trying to modify that. So

Steven Bruce
it's tough for them, isn't it though? Because if you if you take out hitting from football, you take out scrims and tackling from rugby, and you take out anything which loads the hip, you're not left with much other than tiddlywinks. Yeah,

Victoria Smith
I think it's more frequency. You don't want to get involved in that. So I think it's more looking at frequency, rather than what they're doing within training. Because yeah, you wouldn't be able to do any sport if you were, you know, tennis, basketball. So increased frequency with sort of children who are definitely in that growth with, you know, teenagers really.

Steven Bruce
So I guess you you are in a key role, you're in a really key role when a parent brings a child to you and says they hit problems. And you think this is what's happening here, you're basically having to say to the parent, this young child who you think is going to be a rugby star in the future needs to, or football or whatever it might be, you're gonna have to stop that child from doing this activity, either as much or

Victoria Smith

I think it's modifying according to symptoms. Yeah. So for symptom free, then I would, you know, say that's okay. But if they're developing symptoms, it's looking at why they're developing symptoms, are they overloading? Is their frequency too high? Do they have any muscle strength deficits that actually are putting more load through the joint? So can we address those can we keep that joint as healthy as we possibly can, without taking it with a child who loves sport,

Steven Bruce
I'm just gonna see if I can get this tweaker working so that you can operate the slides. And the Tweak is not working. So well, that work. Okay, so here we go. So where are we going? We're gonna go back to FYI.

Victoria Smith
So yeah, this is actually quite a nice slide to demonstrate the difference between the two, which I think is important. So you can see, we've pincer, basically, it's over coverage of the s tablin. And with a cam, it's reduced what we call femoral neck and head offset. So it's a reduction in this nice sort of spherical shaped ball that we should have. And you can have, it can present slightly different, you can have a very big slope. So this would be the Faisal scar here. So often, you see that come exactly where that scar is there due to that overload. Or you could have more of an angulation. So you could have an angulation, which would be

Steven Bruce
basically there's gonna be a bump where there shouldn't be a bone, which as the femur rotates, or moves in some direction, it's going to bump up against the Labour Day. So

Victoria Smith
it's premature contact between the the proximal femur and the acetabulum. And that's, that's the the issue. So it's just that you're coming into contact too soon. Um, you know, people can go all the way through their life not knowing they have it, maybe they haven't done any activities that would potentially put them in the position where they're causing that overload. Or maybe they just, I don't know, Lucky. But, yeah,

Steven Bruce
you've said it with the global PINSA that that that overgrowth there could be all around the acetabulum. Can you get that sort of Kim overgrowth all the way around?

Victoria Smith
You can get so you can get a ring

Steven Bruce
of a show that one to the camera a little bit better, or you

Victoria Smith
can get a ring all the way around, but often it's anteriorly. Yeah, so more than likely, it's until you because of the nature of how you've overloaded so in flexion, or external rotation, generally you develop it anteriorly but yes, you can sometimes get it all the way around, but more likely at the front of the hip.

Steven Bruce
Questions for you. VSP says What does pincer mean?

Victoria Smith
It's basically it's a Pinto. So like a crab, you've got the

Steven Bruce
it's like a claw. This is just completely you've got

Victoria Smith
don't forget we have the labrum sitting here, which is that horseshoe shaped suction cup, if you like, and as you go into that movement, that impingement movement, you're going to hinge the labrum between the two and and that's often what causes symptoms. So the labour the labrum has been He's quite well in have a lots of nerves in it innovative, innovative, that was the right word, wasn't it? Yeah, it was a little bit of, you know, stage fright there. So it's very well,

Steven Bruce
corrected physiotherapy.

Victoria Smith
And, yeah, so it can start to become painful. So what can happen with that constant repetition of impingement is you start to separate the condo label junction. So where the acid articular cartilage from the isotype room meets the labrum, you start to get separation, and then you can start to get delamination of the articular cartilage, which can then cause issues with the underlying bone. Cartilage isn't innovated, so it's not going to be causing symptoms. But the bone obviously can if you start to get overload in the bone that's that can cause and I

Steven Bruce
guess you don't need to bug around with the shape of the acid tabular more the femoral head before you start getting problems because it's not gonna rotate smoothly, is it? Absolutely precise movement, but I've been told that it was Pierre, the physio, the physio that was with us. And Pierre says, Could I ask you your view on some hospital? We're gonna get controversial, I think. He says, Can I ask you your view on some hospitals no longer offering surgery for FAI, and opting for conservative management as surgery or conservative are not significantly different when it comes to developing OAE?

Victoria Smith
Absolutely. So research out there shows that both of effective surgery and conservative management and our hospital actually was one of the hospitals that did stop it. But now actually does offer arthroscopy for the past five years, I think it is we do

Steven Bruce
we always offer conservative treatment first, absolutely should

Victoria Smith
be Yeah, so you should always try to manage the hip conservatively. If it fails, and the person doesn't have any risk factors that suggest that an arthroscopy wouldn't work. So if you have quite significant degenerative signs in that hip, then you would want to really consider whether an arthroscopy would be offering anything because it's joint preservation surgery at the end of the day. So if you have signs up away in that hip, then it's probably not likely to work. Although the surgeon I work with uses joint space narrowing as a definite

guide. If there's joint space narrowing, then it's unlikely to work. But if there's a small amount of focal control change, then actually is that because of the impingement. So therefore, we're changing that work. I think it varies on the person I've seen. Some people do extremely well with arthroscopy, and get back to sport. I've seen some people do horrifically with arthroscopy. I've seen the opposite. Some people do very well, with conservative management people you think I you know, would we get there, but they have. So I think there's no right and wrong with it. I think it should really be taken on that person. And whether it's the right thing for them.

Steven Bruce
This is this is a really valuable lesson in terms of communication with patients, isn't it? No, I don't. Most of the consultants that certainly we've had on this show, orthopaedic consultants are very good at explaining the pros and cons to patients. But, you know, I'm aware of some who are less effective in their communication. But, you know, as a primary contact practitioner, you know, you could be in a position we could be in the position of explain to patients, well, you know, these other possible outcomes, and there's no guarantee either way.

Victoria Smith
Absolutely, absolutely. So I think, yeah, there's the studies do show that, you know, surgery can be beneficial, but I think the, the, the amount of people that do well, it's yeah, it's potentially questionable, I think, as well, it's finding a surgeon who does this a lot. So, you know, if you go to a surgeon who does for a year, they don't really know what they're looking for potentially. Whereas if you have a surgeon who's done 2000 of these operations, and actually looks at the labrum, so if there's a label a label tear in there, ideally, you want to repair that label, tear, not just resect it so it's, it's finding someone who really knows what they're doing, and and trusting them. What often happens as well as the cam gets decompressed but quite often, pincers able to go unnoticed. So if that doesn't happen to you to get both at the same time, and absolutely have mixed Yeah, you have mixed impingement. So it's addressing all the factors that are causing pain in that hip. So it has to be someone who knows what they're doing. And there's a lot of them. It can't just be a you know,

Steven Bruce
chicken and egg. Isn't it always feel sorry for patients? Because, yes, it's great to have a surgeon who's done 2000 procedures, but he still had to do his first one at some point that Yeah, absolutely. Absolutely no questions for you. Lawrence asked this ages ago. Would this result in adductor probe abductor problems or Trendelenburg gait patient,

Victoria Smith
not necessarily that that is something that, you know, potentially they could have, but it's certainly not something we would use to say, okay, that that would be FAI s. But there's no reason, you know, you could potentially have have a gluteal tear with this as well. So you can have concurrent pathologies going on. So if they had gluteal issues, maybe you know, they'd, you know, they did a lot of position positions where or where they they didn't have good gluteal strength, potentially they could develop gluteal issues, but research sort of shows that in terms of strength, in women, flexion is often restrict, you know, limited and adduction and external rotation in women alongside abduction, if their pay if they're in a lot of pain, but men are all of those. So, clinically, I often see, you know, from my perspective, I often see people with gluteal deficiency,

Steven Bruce
okay, we've learned has asked, well, he's commented he says, I seem to remember as a surgeon in the UK, who offers a service whereby CT scans are sent to Belgium, where they build a 3d model of the patient's hip, which is then used in the UK by the surgeon to carry out a very precise surgery. Have you come across this before?

Victoria Smith
No, certainly not where I work. The procedure where I work is X ray always first. And then MRI scan. Sometimes CT scans are used if there's, if there's kind of a query whether there's any dysplasia involved, because having a dysplastic hip is a bit of a risk factor to arthroscopy not working so well. And the surgeon I worked with would do an investigation under anaesthetic anaesthetic, so would inject the hip and then to try and calm it down. But at the same time would take the hip through various ranges of motion under X ray conditions to get a more of a dynamic view. It's all very well having an MRI scan, but it's, you know, it's not a dynamic image. So therefore, we can identify whether there's any pincer impingement going on, and at what point that impinges

Steven Bruce
vert, I think, I don't know for sure if this is the sort of procedure you're thinking of, but we interviewed an orthopaedic surgeon than in London, it was three or four years ago. And he was talking about building a CT image of the hip, but he was actually fracturing, fracturing the pelvis and moving adjusting the pelvis. Yeah. Pio, PIO, thank you, which is three displays. Yeah. For displays. Yeah. And somebody will tell me who the surgeon was and what the name of that broadcast was. It was. It's funny how now I've got a physiotherapist on my side who's telling me about my own broadcast in the past. Damn, that must make at least 4050. He's specialised. So Johan, we're looking him up on the on our website. And you'll find a lot more about that. And it was interesting.

Victoria Smith
Yeah, he's great. So we tend to refer any patients we have with dysplasia up to see him up in London. Okay. Right. So why don't we move on so maybe it's me to be definitely use error can

Steven Bruce
be with the slide on one piece just

Victoria Smith
because we don't normally get Yeah, we don't need to look at a normal hip. I think it will

Steven Bruce
play with that. And I think it would probably make it work first time there. It's the it's going one way but not the other, which is very annoying. Can you move on to his Justin,

Victoria Smith
you've got a camera up that would be simply getting this thing. Right. Okay, so here we have a cam, and also some AI. So in painting, which I'll talk you through as well. So if you if you have a look at the femoral head, you'll see it's not spherical. And you'll see this reduced offset between the femoral head and the neck so it should start coming down around here. And if you look at the Faisal scar, follow it along you'll see that's exactly where it can bump is. And the same on this side as well. If you follow it along, you'll see so this this person as you can quite a good story about this person because he is in his 20s and footballer. He'd

been to see lots of different health care professionals. All three chiropractor, osteopath physio with hip pain, all three of them had given him forced flexion and lots of stretching. To stretch it out though. He was diagnosed with an adductor strain, which is quite a common finding. We see people diagnosed with either adductor strain or hip flexor tendinopathy. So he was given all these different treatments and every everything made him worse. And then he landed up in our clinic, and we were like, yep, you've got cam impingement. So he was very restricted into flexion and internal rotation. Shouldn't so every time he flexed he was getting this. The, you know, contact between the femoral head and his tablet. And but what made him more interesting was he also had what we call sub spinal impingements as well. So he had double whammy. So he had this area here. So just slightly below the API s. Yeah. If you can see, it's quite low. So this can be a primary issue. And it's often associated with what we call a retroverted acetabulum.

Steven Bruce
Why is that different from a PINSA?

Victoria Smith
So no, that is, yeah, that is that is, if you like, forming a pincer impingement? Yeah, absolutely. So it's your classic impingement pins from pin drinks. It's not actually the acid problem. But you're right, it that isn't mixed impingement because some pins. So the API S sub spinal spinal impingement often is associated with retroverted acetabulum, which I'll talk to you about in a second, which is another form of pincer impingement. So it's a bit of a minefield. So yeah, he actually had surgery on this hip. And this hip has responded really well to conservative management. Okay, yeah.

Steven Bruce
So I've been asked if you could just point out the significant bits on that slide. And just if we can bring up the view with Victoria, actually pointing at this monitor that will be helpful. So on this, this side here, which right side is it?

Victoria Smith
Yes. So in a normal hip, you would have more of a spherical femoral head, so you would come around, and then it would start to dip down around here. So you'd have a nice head neck offset, we call it, but in this hip, it's, it's more like a sort of a pistol grip, we call it often, because it's a bit like a pistol grip you'd hold on a gun. So it's more like that. So this is the significant part here. And then the Faisal sky, you can see here. So this is the growth plate that's obviously healed. It's closed. And you can see as we follow that along, we can just see that this is where the largest part of that reduced offset is. And on this side, we can see the same there's the fires your scar, and if you follow it along, you'll see it there we go. So that extra, it's

Steven Bruce
actually quite subtle, isn't it? It's not

Victoria Smith
It's very subtle. Exactly. I think it's something that you you kind of learn by by looking at so and then the AIA s, we can see is here. So it's almost dropping down into the AST tabular making. As you said, Steven, pincer impingement there. So,

Steven Bruce
yeah, okay. Okay. So next, we had the combined slider, I

Victoria Smith
think, yes, I think this is the one with the retroverted acetabulum. If not, I'll go back to this one. Because

Steven Bruce
that's good. Yeah. So this is whether you do that, we'll just undo that.

Victoria Smith
Well, I hope it was maybe, maybe, okay, I'm getting better at this sort of thing. So this is a combined cam, and pincer, so what we're seeing here is a retroverted acetabulum. So basically, all sockets are slightly angled forwards, and the front wall should be slightly less than the back wall, okay. But what can happen is you can get that to be slightly different, you can get over coverage of the front wall. And it doesn't necessarily have to be less good at the back wall, but you get more coverage at the front wall. So in effect that sockets now pointing backwards. Okay, so we can see signs of this on an x ray. There's the ischial spine there and there. So if we look at the model, there's Yes, your spine. So it's actually more medially facing if you think there's more coverage here. So the sockets facing backwards a little bit, this is this is going to be more majorly, so you can see it on the X ray, you have to be a bit careful with using that as a diagnostic because of the position of the pelvis, like we said earlier. So if the variations, yeah, if you've got if you've got more of an anterior tilt, naturally, you'd probably see it or if you are positioned on the on the X ray table in more of an anterior tilt, you could potentially get a false positive there. So that's one sign of retroverted as tabular, the other is what we call a crossover sign. So if you look at this PIP here, this is the anterior wall of the outer Tabular. And this is the posterior wall. So what should happen is the posterior wall should sit laterally to the anterior wall. Yeah, but what we're seeing here is a crossover. So we're seeing that the posterior wall crosses behind the anterior wall here, the lower down that happens, the more retroverted the typing amiss, okay, so, what we've got here is a pincer caused by the over coverage of the anterior s Tabular. And then we've got a cam if we follow that Pfizer your scar again, we'll see that little bump there. So we can see we've got a mixed impedance, mixed impingement. On this,

Steven Bruce
I'm just gonna have to have a quick chat to the gallery at this stage. Because I'm being told that the slide is this to smaller picture for people to see clearly what you're pointing out. And the only reason I can think of that is that we were not zoomed in on the monitor itself. So I'm hoping that on the basis of this, Justin will do something about that. Or Ellie, the camera lady will do something about that. But for the people who are giving me this information, there's nothing I can do about it from my seat here. So we just have to work on that. We'll zoom in on the edits.

Victoria Smith
Yes. So crossover crossover sign is the acid problem, and it's your spine visibility with these your spine is the other thing we're seeing there. So this person would likely present clinically, with potentially reduced flexion more external rotation than internal when we're looking at the profile of the hip. So because of the way the orientation is of the socket, so yeah, so that's another. So there's, there's quite a lot out there, isn't it a bit of effort is it's not just lots to look at,

Steven Bruce

and it's helpful to know most, and I know you're gonna tell me about angles, aren't you? Yes, I

Victoria Smith
am. So yeah, alpha angle, so the alpha angle,

Steven Bruce
and they're having to do this in the gallery, because of the controls that we practice with this ages ago.

Victoria Smith
Okay. So this is the alpha angle, you can play in film, or you can do it on which we call it an x ray. Or you can, you could do it on a an MRI scan. And basically, you're taking the the angle between the midline of the of the neck of femur, and the femoral head neck junction, so where the circuit where it starts where the head starts to come away from that circle, okay, so it's probably not the best picture, but you would normally see the bone carrying on here. So that's where you would draw the line. So it and that's, that's indicative of a cam. So what is the alpha angle? So if it's around 60? Plus, yeah, that's a sign of a positive cam. We used to say 50. But

Steven Bruce
we're not gonna do that in our clinic. So well, we were gonna rely on radiologists to come up with this.

Victoria Smith
You can't you know, if you've got the software, so to do it within your X ray programme, you could you could have a go in and look at it and you know, there

Steven Bruce
needs to be pretty damn good to be able to get those angles, right.

Victoria Smith
Yeah, I think there's a degree of user error or whatever. And also, depending on the X ray, the person who's taken the X ray as well. So yeah, it's it's, you know, it's a, it's a way to to have a look, if it was huge, you'd you'd spot it straightaway. But if it's subtle, you'd probably need to move on to an MRI scan to get more information.

Steven Bruce
Okay. Those are some questions here. Lawrence has asked whether repetitive falls onto one side might cause either of these lesions.

Victoria Smith
Probably wouldn't cause it but could cause an underlying morphology to become symptomatic. So that's what I would say we we often see someone who's been symptom free, had a big fall suddenly develop symptoms. I've never had symptoms before. And you see anatomy that suggests FAI, so I think it's more likely to be a reason why they would vote symptoms than actually cause the morphology.

Steven Bruce

Yeah. And I have to explain this to all of my guests, but the system has a habit of naming some of our questioners in a rather random fashion. If they didn't give us our names, that's what we use and fancy humanoid says that he or she has a 15 year old girl patient born with a dislocated hips, and has a shallow so tabula with narrowing cartilage, as classic prints or symptoms, has not responded to steroid injection, acupuncture, classic of osteopathy or pressure point work, running out of ideas, please help.

Victoria Smith
So if they've been born with a shallow socket, it's unlikely that they've got hintsa Unless they've got a a is because they're as tabular Ms. Shallow, so the two are quite different. So I would certainly start looking at if Are there any activities that she is doing, which potentially are overloading so is there any sort of repetitive movements or any deep flexion or probably, you know, internal rotation maybe. And a lot a lot of times with displeasure, it's actually looking at that active stability system. So obviously, we know the passive system is reduced because they've got a shallow socket. And we need to build up that support around the hips. So looking at sort of deeper deep stabilising exercises, which don't cause pain are often key with a stability issue, but that's different to FAI s. You can have the two go hand in hand, but you usually tend to get more of a cam with a dysplastic hip if you've got the two together. But yeah, if you've got a shallow shallow socket, you're unlikely to have an unless you've got a NASA tablet, or sorry, a labourer and that's ossified but unlikely in a year. possum,

Steven Bruce
okay, do you think we ought to go have a look at a real person and then run through what we might see in clinic and then see if we can distinguish between the two. Okay, have a glass of water. We'll nip over there. Have a quick slot. Okay, let's, let's go across the other side so here we have Susie.

Victoria Smith
Hello, Susie. So Susie, you don't have any symptoms in your hip, do instal now. And you've, you've come here. So let me demonstrate what we look at in a clinical setting within a hip. So I'm going to put the pillow over there for you actually, because I prefer working that way. It's personal choice. So if we're looking at testing for FAI s, one of the tests reduces what we call Faraday's tests. So flexion adduction, internal rotation, sort of just what he says on the tin.

Steven Bruce
was the opposite of famous test. Absolutely,

Victoria Smith
yeah, we do, we use both. So I always start with a log roll, it kind of gives me an idea of what the capsule feels like. So you know, just having a feel of how that how springy that hip is, when we rotate, it gives me an idea as to what unlikely to sort of find as I move up, and I will check leg length. But you know, it's not always relevant to that. So moving the hip hop into flexion. So we have a good look at the range of motion with with flexion. Now, if you put somebody who's got a cam in there, or a pincer impingement, you're probably going to find that actually, they're, they're limited.

Steven Bruce
So not depend where the cam on the pins.

Victoria Smith

But usually they're anterior, because what what we should probably talk about is where you get symptoms as well. So we have this hip condition, generally people present with groyne pain, it can be what we call, see sign pain, so it can be sort of, they tend to do that it's in there, that's quite a good indicator that it's actually hip joint pathology. Sometimes they say it's just in there, I can't put my finger on it. Very rarely, it's laterally, sometimes we've got a bit of posterior pain and can sometimes scroll down the leg a little bit. But generally, it's this or this that you think, Okay, could that be the hip joint that's driving those symptoms? So we always look at the range of movement of flexion, and see whether that's provocative. So someone who's got a cam, or a Pinto in there is likely to go, oh, I don't like that.

Steven Bruce
And of course, what you're provoking is those symptoms you've just described, not some other,

Victoria Smith
I'm impinging their hip. Yeah, so I'm putting my hope into a position they don't like. Then we look at the rotation of profile, so how much movement they have internal rotation and external rotation. So looking at external rotation, and then internal this way, you want to be seeing a reasonably balanced what we call balanced rotational profile. So you want to be seeing, you know, pretty much the same both ways, maybe slightly more, one way than the other, it's okay, but around 3540 45 degrees each way. To give you an idea as to what's going on in that hip, if you found somebody had lots of external rotation, so their hit was coming round here. And not too much internal, you might be thinking, Okay, do they have retroverted, acetabulum, or femoral head because you can get a retroverted femoral head as well. So that might be kind of just painting out those, you know, putting those that clinical picture together.

Steven Bruce
Notice those things with the hip in the neutral position as well. You can do,

Victoria Smith
yeah, but the sort of, you can have a different it's because of the capsule and the ligaments around the hip. So you obviously in flexion, they're, they're less taut. So you can tend to get more out of that one. But yeah, you can you can see somebody who sits with their legs right out and then you can't really roll it in. So

Steven Bruce
what would the end feel on that be like it's clearly tight glutes is gonna be the same thing. It's gonna be solid, is it? Yes,

Victoria Smith
it's gonna be solid, no, nowhere for that to go. Yep. So. So we look at the rotation of profile, and then we'd move into five days test. So flexion, adduction, and internal rotation. And this is what we call a sensitive test. So it's ruling if it's not positive, it's ruling out the chance of the hip joint driving the, the pain, okay, so it's not it's not specificity, its sensitivity. So snout and spin is quite a good way to remember that. So it's Yeah, ruling out the chance of the hit being the driver if it's negative. So that's quite

Steven Bruce
a nice to see. The issue of sensitivity. The fact that it's positive doesn't necessarily mean you've got

Victoria Smith
FAI is absolutely it could be it could be something else. It could be dysplasia. It could be a way but it's ruling in the likelihood that yeah, out that is not that. So then we would take the hit. I tend we tend to take the hit round and into what we call a Faber's and position. What you can often find if they have a cam, is they often say, ah, that's gonna that's clunk, it's gonna go it's gonna go it's gonna go as we bring round into this position. So that's you often it can be the femoral head, just almost hinging and dropping itself

Steven Bruce
back into the field. It's likely to clunk or to dislocate or clunk

Victoria Smith
is what they feel or that kind of feeling of, oh, I don't like that it's gonna that's gonna hurt. But you often hear a clunk and they or they fit, they describe that that's just clumped, and then you're in favours. So, again, Faber's is it's not that good at ruining in or out really, you know, we use it for a lot of different things. But if it's if it provokes the pain in the groyne, then you know, it's the is possibly the hip joint. So they're the two that we tend to use mainly, but it's, for me, I think it's putting together the clinical picture from that subjective examination as well. What are their eggs? What are their uses? Where is their pain? What's their history, like, and then, you know, putting it all together. The other thing you can see when you flex the hip is sometimes you can see. And this is this could sort of help direct treatment sometimes is when you when you flex the hip, you're looking for a nice smooth glide. So a nice AP glide. And and what you can often see is as they take the hip hop, that glide doesn't happen. So actually, Susie, I said to earlier, did you ever call children? Yes, Which side did you carry children on this side. So what can often happen is, is women often carry the children like this, or people who stand in this position, often use that precision of glide, inflection, so you can see, if I hold Susie's hip there, I don't if you see that on camera that feels different. And if if Suzy just flexes a hip, it's actually she's actually getting a bit of a side shift up here. So sometimes in a symptomatic hip, actually, just trying to work on that precision of movement can help but you've got to be careful, you don't irritate the hip, because obviously, it's a position we're coming into, that can be irritable. But often, if you feel as you lift the hip hop, actually, they're hitching through their pelvis. If you stabilise the anterior part of the hip and actually bring that hip into flexion over your thumb, they often say that feels better. The other thing you might find is when you flex the hip, sometimes if they've got a rope retroverted metabolome. Actually, if you take them into external rotation, and abduction, little bit, you get more movement, because you're following the natural profile of their hip. So that's quite interesting, because that also is something you would use, you need to think about when you're giving up exercises, or modifying their activities in everyday life. So I have a patient at the moment who squats a lot with his job. He's got huge cam lesions, and just by doing his squats in this position actually has taken away the majority, externally rotated, rotated. So we're working more into that how he's here feels more comfortable to move. And when I assessed him, it was locked here. But he had loads more of more movement into that position. Okay.

Steven Bruce
I mean, you've talked about the factory for about five years, five years. Fabulous. People talk about hip impingement test. Is there a reliable test for hip impingement? No,

Victoria Smith

no. So this is what we would use to rule the hip in. And then you Thomas Thomas test is it's, there's one study that showed it was had good level of specificity for hip pathology. But that was one study. So

Steven Bruce
So, excuse me, if Thomas if a Thomas test is going to be specific, let's say for this sort of pathology, yeah. What, what are we going to see that's different from what we also use the Thomas test for, which is,

Victoria Smith
yeah, absolutely. You would see pain. So you as the femoral head migrates anteriorly that would reproduce symptom, so

Steven Bruce
would we also see that shortened flexor?

Victoria Smith
Potentially, potentially, yeah, you could do the two absolutely can go hand in hand. So you could still have you know, overactive TfL working, and yep, so you could see both Yeah, definitely.

Steven Bruce
Okay. All right. Are we done with Suzy?

Victoria Smith
I think we are we would always check abduction as well. Actually, it didn't mention abduction, so stabilising the opposite that the contralateral hit, and then taking it out and with a pincer you're more likely to see a little bit of a global pincer, you might see you know that hard end feel a bit sooner. But often, they have good abduction, and isn't massively restricted. So yeah, I mean, there's Craig's test which could do probably, but it's not it's not hugely reliable, I don't think and it's a little bit fiddly to do, but I don't think that's necessarily really that we ever heard of it. Quick Test is looking at the version to the femoral version or as tabular version. So I can go through it if you want to mention, it's gonna ask me a test. Yeah. So I'm, if you, engineer for me, so again, we're looking at rotation a profile in, in prone. So what you would do is you would find the greater trochanter. Okay? And then you would move the leg to the position where the greatest country's most parallel, okay to the

Steven Bruce
so you've currently the cameras might be to see this, if they're showing from above, you've got your thumb on the posterior,

Victoria Smith
I've got I'm gripping the Yes, so I can't see it. So I'm gripping the the greater trochanter. And you're looking at where the foot rests when you're in that parallel position. Okay. So it's, it's hard on a larger person, okay, because you can't grab that. And you're looking at where this is. So

Steven Bruce
if we picked Susie deliberately, exactly perfect model.

Victoria Smith
So, you know, if the, if you're if you're in eight degrees of internal rotation, it's likely that your hip is potentially more retroverted. But if your past so you're more like 15 degrees, then it's potentially that you're more antibiotics. So just a clue not a different photo. Yeah, I definitely wouldn't use it as a defining, wow, this person has. Actually, sometimes your rotation or profiling in 90 degrees flexion can be equally as next to these kind of, I think studies show that if you have an increased BMI, this, the 90 degree test is is more likely to sort of give you an idea. Thank you. Oh, that's great test. Yes. Go look it up.

Steven Bruce
Thank you. No problem. So shall we dispense with Suzy now by Susan, because I know we're gonna get Caroline on the table.

Victoria Smith
So Caroline does have hip pain don't Yeah, yeah. Good evening. Good evening. Kind of a lie down. Yeah. So Caroline's had hip pain for six months, haven't you? And it's it started in your groyne. And it just came on suddenly? Yeah. And do you awake at night with it as well? I do. Yeah. So night pain can often be a sign that you've got some sign of outside a bit of change in there. So it can be you know, inflamed and sore. So it just appeared. And prior to that you had normal movement, you were running around living life.

Steven Bruce
Absolutely. Absolutely. So it was six months or six months. Right? Thank you.

Victoria Smith
So if we look at Caroline's always, that's something as always look at the asymptomatic hip as well, first, that's, that's good practice. So you can see, okay, what would potential norm look like? Yeah, but you can get hit the matching, you can have a, an anti verted hip and retroverted. Very rare, but you can. So if we look at a normal profile for us, you've got a nice balance of you've not got more one way than the other. And I'm expecting this not to be positive. Or it might be any pain. When we do that. I'm doing it a bit cack handed this way. But there we go. Okay. So hip that's completely asymptomatic. So if we look at this hip, and we take her up into flexion. straightaway, she's painful and it's reduced. Okay, so the amount of movement if we move her into this position, we'll see we get a little bit of extra movement there. So you're more comfortable there? Or is it still soft? I'm sure. So, which way feels better? So going that way? Or taking the hit this way? Actually, yeah, it feels better, your face looks better. So you can get really good. Some people don't like to show pain, and some people over show pain. So So looks a bit better, a bit more comfortable over there. And then we can look at this rotation of profile. So we've got it's balanced, but it's a bit less than the other side. But I'd say actually is a bit more going this way. And there is nice, pretty balanced actually. So you're okay with those is any one way more painful than the other? Can you see how she's hitching there as well. She's trying to get away from that movement too. So as I rotate a hip she has, she's hitting more painful. So you might want to actually stabilise that to get a more true representation of how much movement she's got. often see that people hitch so you think wow, she's got loads of internal rotation, but actually if you stabilise your franchise, yeah, that's so if we do stabilise you, she's got more external.

Steven Bruce
Then by stabilising you're just putting some downward pressure on

Victoria Smith

I am just putting a bit of an AP kind of glide there just to stabilise and stop that from happening. It's exactly the same as Susie's hip flexion. So as he flexes his hip, she went into that kind of hitch there. So we can be learned patterning or it can also be trying to avoid that painful movement. So it could be either we know it's going to be painful and new to do or fat is. So I'm sorry. So we're going to flex adduct and then internal rotate. And that brings on your symptoms, isn't it? And that's an integral.

Steven Bruce
What is it bringing? Or what is this? Where is exactly, exactly so yeah, so it's right across the sort of grind or crease. Yeah, so

Victoria Smith
it's likely, but it's the hip driving line symptoms. And then as we bring Caroline back around this way, yeah, doesn't like that. So again, we're getting that AP glide through the hip. Now as I put some force through here, so again, that can reproduce that that pain so it's, it's, you know, it's aggravating those sore tissues.

Steven Bruce
You get the clunk that we talked about.

Victoria Smith
You know, I didn't feel do you get clunking hip?

I do get a clunk and kick. But interesting. Yeah, they're

Steven Bruce
all interesting.

Victoria Smith
Yes, asymptomatic signs. And then abduction. Now what we did notice we'll had a quick look at Caroline earlier was what you watch and see is when this sort of thing has been ongoing for a while, and six months is a long time. often I see people who've had pain for five years because they'd been bouncing around the system. And and then you know, they come in and absolute. Oh, my word. What we did see with Caroline was when we look at the pelvic and hip dissociation actually on that right side, she's got lovely she can really dissociate between the pelvis and the hip, it moves into move independently of each other. With this side, actually, when we bring it around, everything's coming. She's She's what we kind of called gripping. She's she's not really relaxing this leg, so everything's coming together. And this can be some occur a protective mechanism, but we often find this and the pelvic floor can be associated as well. So we can start to get with the pelvic floor. Obviously, the pelvic floor and the hip are linked with a couple of muscles, so piriformis and arbitrator internists, they they are part of the pelvic wall and also, the adductor fascia has attachments to the levator Ami. So huge connections in there. And, and it's important that that's acknowledged, is someone who's got a bit of a grippy hip.

Steven Bruce
I've been asked by the audience, when you were stabilising the pelvis earlier on, you said you were applying as AP or Pa pressure, where exactly was your hand,

Victoria Smith
so I was just really over the crease. So where you when you flex, and you get that? The crease. So where you'd get that crease when you flex up the hip? There's a little bit of science with it. Yeah. I mean, if you're too high, you wouldn't get that stabilisation. And if you were too low, again, you wouldn't be able to control. So you'll find where they naturally crease is where I tend to put that it's not really a pressure, it's just more of a fix, if you like, but yeah, important that that's often something that I see people who've been referred into me and that, you know, they say our internal rotation is huge. So it's quite important that you just look out for that, you know, when you're when you're assessing.

Steven Bruce
I suspect a lot of people are going to be thinking, and I've got one question here certainly, about differentiating between cam and pincer label problems, OAE problems? How are we going to do that? When do we know what we're reading?

Victoria Smith
So a lot of the so with a label issue, you would often get giving way and locking. So if the labrum is getting in the way of the hip joint, you would see that as a mechanical sign. I think the main thing to think about with label pathology is why have you got it, you're unlikely to get labelled pathology on its own unless you've been involved in an accident. So you fall downstairs, or you've been in a car crash, or some kind of sporting injury where your head was forced rapidly into position it shouldn't be in. Otherwise, there's a reason why you've got a labral tear. So it's usually related to underlying hip pathology. So whether that's FAS or whether it's dysplasia, but there's a reason why you would develop that. So it's likely that people with FAS, potentially have labral tears. But the question is why? That's the main thing to think about is so I would think more along okay, what's the issue inside this hip then

Steven Bruce
does that does that then mean that somebody who's got FAI s is scan, they see a label tear, they get treated for a labral tear, but actually, we still not addressed the underlying problem.

Victoria Smith
That's the big yes. If that happens, then they were likely to get better. So that's again, why you would want to go to if you're having surgery, somebody who really knew what they were doing within that hip, because yes, if they had the labrum repaired, but not the reason why they got a labrum tear there, it's going to come back. And sometimes it's what I was saying earlier that if you miss a pincer repair, the labrum, your pain, your tears gonna come back again. So it's really important that we understand why you have that and not just the fact you have a label.

Steven Bruce
This is going to be a label tear. In the absence of some sort of trauma. It's just it's going to have happened Because of this genetic

Victoria Smith
reason why Yeah, yeah, exactly that that constant overload of the labrum has caused that tear. So it's important when you're looking at differential diagnosis, just putting labelled tear, really, it doesn't really have much weight behind it, you sort of thinking, okay, with our way. It's looking at the subjective. Signs, rarely. So how old are they? So if you've got somebody who's, you know, I'd say, hate to put myself in this bracket, but 45 kind of put us you're thinking along the lines of okay, is this away, certainly differential. At that age, it could be

both. But as they get older, it's more likely to be away to someone who's got reduced flexion. And internal rotation, more likely to have a way. So for that, you treat that accordingly. If if somebody was had a history of, you know, a lot of laxity, so a lot of giving way, they can move their hip when they were young to lots of party pieces. You'd be thinking, okay, maybe there's some displays, you're in there. So again, it's looking at those. Yeah, those sorts of subjective questions, really, with a way often they find they can't do their shoes anymore. They put the shoes and socks on the shoulder, shoulder toenails. That can happen with FAS, certainly when it's irritable. But it's usually an ongoing kind of pattern as suddenly can't do it. But yeah, looking at those differentials can really help you hone your, your potential diagnosis down.

Steven Bruce
Okay, and so what's wrong with terrorists? What's wrong?

Victoria Smith
Let me just get my MRI scanner. So I would say that certainly, as we spoke earlier, Caroline is the hip is without driving the pathology. So So I think, you know, it's very likely that she's got some underlying hip impingement potentially. No, well, you know, potentially could be a way. But or could be a bit of a mix of both. But, yes, it would be what what I would do without going down the image, if we wanted to stay away from imaging would be to okay, go right, let's look at what we're finding. So, you know, are there any strengths deficits? Are there any movement patterns we can look at that may be aggravating it? What are activities like and sort of questioning that daily activity? So what do you do on a daily basis? Really, I find really drilling down into that day, can really help you teach people how to

Steven Bruce
do on a daily basis can

I do on a daily basis as well, I do some Chi Gong, very gentle Chi Gong, because I can't do yoga at the moment. I can't get into my yoga position. Yes, absolutely. I can't get down on the ground. But I go for a walk every day.

Steven Bruce
Qigong, tai chi.

Victoria Smith
Yeah, glad you asked that question.

It was almost like I've worked back from yoga and couldn't manage it. So I think it's like the very, very beginning and your your work as a hypno Clinical Hypnotherapist. So what I've managed to do, I mean, that the what the pandemic has done has meant a lot of my work is now online. Okay. I have standup desks for those. So I alternate between standup desk and sitting What do you prefer? Stand up. But obviously, if standing up for too long, I get really sore. Yeah, feet, and this leg gets very, a real sense of tenderness along this path.

Steven Bruce
Yeah, so you got self modification of activity here? Because it's because it's comfortable. What would you be advising.

Victoria Smith
So I'd be looking at how they do those activities. So I think, looking at how she sets looking at how she stands and see if there's anything we can do to address any issues. They're just going to

Steven Bruce
cheer her up by saying, well, you're never going to go back to yoga, there's not going to be plenty of

Victoria Smith
modified yoga. Yes. So I think with yoga, I've got a teacher, a yoga teacher is a patient at the moment she's got one of those x rays might be hers. And she was going to have surgery on a hip, but the symptoms reduce really well with conservative management. So I said, I would advise against it spoke to the surgeon, he said definitely don't have it done. So she's now practising yoga, she's really well, because we've managed to take her out of those extreme positions, and she just doesn't go into them anymore. But we had to calm a hip down first. So I would say it's not a question if you can't go back to it, it might be that you can go back to it but a modified version and go okay, well, I can't do that like that. So I'm gonna do it like this instead. So it's learning learning, and that's the job of you know, your healthcare professional to help you work those path that's

Steven Bruce
interesting. There was it's not clear cut as you could I don't know how often you're wrong about this, but you obviously got a lot more experience than most people in your specialty. Yeah. So

Victoria Smith
usually you can you put all those sorts of Clinical Findings subjective findings together. You're right. Is that uncomfortable? Although I did recently, have you been receiving no.

I'm actually saving up them

Victoria Smith
so often often sitting is provocative, especially if sitting in position where the hip so the knees are higher than the hip. So again, you're impinging. So it's looking throughout the day at what those positions of impingement are. Are you doing them too much? Can we reduce that? Can we change that? Relaxing the leg as well, the Caroline,

Steven Bruce
she's currently held for primary school teachers, isn't it? There's little seats of

Victoria Smith
interest in the case study I have got if we if we if we get to I don't think we will. She was a primary school teacher and modifying our activity. So she Yeah, it was

Steven Bruce
to try and get to that, because some learning about the modification of activities will be a useful thing to do.

Victoria Smith
Yeah. So you asked me if I get it wrong. And I had an interesting patient recently, who was 30. And she was no 28 presented exactly like this pain flexion internal rotation, positive fodder. I sent away with lots of X she was I think she was a community care and the community lots of driving. Certainly with loads of activity modification came back, I feel so much better pain is absolutely pretty much minimal. We will do some strength work on deficits we found. And she'd had an x ray booked because the x ray taken ages to happen. So she had the extra anyway. And she had severe away in her hip. So didn't didn't put, you know, the pieces of the puzzle weren't aligned to for that to be a differential diagnosis. Anyway, but but she was Yeah, exactly that. So I think that's the sort of takeaway from it is actually things just settle with activity modification. She was basically impinging her hip because she developed, you know, less joint space. So it was the same presentation, and with her age, and she actually had what's called AVM, so avascular necrosis. But she had no risk factors for that either.

Steven Bruce
Popping up more and more in our discussions. aveanna really interesting. Maybe it's just I'm noticing him on the shoulder. Yeah, so yeah, looking

Victoria Smith
at Yeah, obviously risk factors, but she hadn't. So I was thinking, look back to my history. Did I miss that? I miss no.

Steven Bruce
Right now, what do you need to do anything more with Caroline?

Victoria Smith
Not unless anything else you want to go through? No,

Steven Bruce
I think I'd love to get to that case history. If we can get time. We've got 25 minutes left, so we can possibly get through the case history brand. Got some more questions. And I'd like to talk a bit about things that people do wrong with their patients, too. Because, yes, because we get so many patients coming to us from physiotherapist to giving them the wrong.

Victoria Smith
So I think in terms of what you can do wrong with this hip condition is try to force movement, right. So trying to regain flexion or regain internal rotation is likely to stir that person up. So you want to work with a range of movement you've got so it's not a case of more movement that that that hit will become less symptomatic.

Steven Bruce
I'll tell you what, and some of the people watching may well have tried this themselves. There's a very famous osteopath who actually learned this technique from a physiotherapist. But he had a patient who had hip pain had very reduced internal rotation. And the physio laid him on his asymptomatic laid him laid him on his asymptomatic side, and and basically belted the head of the femur, the greater trochanter. And I think, once gently, next time, a little bit harder on the next time was a full blooded wallop. And this guy was sheduled for hip replacement, and actually then didn't have the replacement because he regained that

movement. Right. And I think it probably gained him another three or four years before he went for the surgery or something like that.

Victoria Smith
Yeah. Yeah, so I'll be the one mobilises mobilisation techniques you could absolutely use with this, you know, and sort of looking at. So somebody who, for example, stands in this kind of hip hand position, think about the migration of the femoral heads superior laterally, actually, they might do quite nicely with a distraction technique, or somebody who's kind of developing more of a medial kind of guide,

Steven Bruce
because neither of those things we talked about is moving into an extreme position, it's just giving it a belt to try and put it back to where it should be. So give

Victoria Smith
it some relief as well. So, you know, gentle mobilizations can be can be great for pain relief, it gets to sign over your fluid going, and it could just you know, give some nutrition to the joint generally. So,

Steven Bruce
terminology already, you talked about my nips, and I talked about belting it,

Victoria Smith
like massive mobilisation.

Steven Bruce
Is your job. You use the term when it's early on? We were talking about someone Yeah, exactly.

Victoria Smith
So you can do Yeah, desk, definitely, you know, those definitely plays for, you know, some form of manual therapy, managing this hip condition. But as you said, it's the extremes of positioning that you want to be avoiding, and looking at exercise choice. So if you're given an exercise choice already try and work that hip into an extreme, you're likely to flare it up or not get it to settle. So I would be you know, if I was in a proper consultation with Caroline, I'd be looking at first of all, I'd be looking at that gripping that where we can't you know, she can't relax the leg looking at pelvic floor as well in connection to that. Because because there is an association with the with hip muscles and pelvic floor. So if you're gripping the pelvic floor, you're also going to be increasing the Tolan through those muscles, which can then translate into the hip. So it's looking at it's looking at the whole picture really looking at breathing patterning as well. So you know, some in a very irritable hip, you might just want to send them away practising. Okay, breathing and relaxing, which we spoke about earlier, didn't weigh and find in a position that they can do that in comfortably. So I'm looking at, you know, strength deficits. So are there any areas

Steven Bruce
Did you think that you see FAI s in thinking women here particularly more after childbirth when pelvic floors tend to suffer

Victoria Smith

a little bit? symptomatic that yes, so there may be had the might have had it before become symptomatic? Often we see it when someone's pregnant, or after? That's often a really Yeah, so really good point, actually. Because that's really important to ask, and yes, you're right, often we'll see it either after childbirth, or do they develop symptoms during childbirth had been forced into position, you know, hold your legs up, or you know, stirrups? And that kind of thinking about things we women have to go through? But yes, that can often bring bring symptoms on. So yeah, definitely. You can you can see that

Steven Bruce
we release, Caroline. Thank you, Caroline. It's very easy to come in. And thank you

Victoria Smith
for letting me you know, really push your hips

Steven Bruce
because that that's a very good way of getting a proper treatment table. This has been well schooled. Thanks. Let's get back over here.

Victoria Smith
Have a quick slap as well, as you know, talk a lot.

Steven Bruce
Just when we were talking about exercises and so on, are there in all your experience of seeing people who have been to other practitioners other specific exercises that people typically prescribe for hips, which you would say you shouldn't be doing?

Victoria Smith
Yeah, I've actually got a slide. I think, oh, it's the number.

Steven Bruce
No, give us the number on the gallery can bring it up as the hip exercises slide.

Victoria Smith
Oh, yeah. That was the crossover sign. Actually. That might be Yeah. It's on the hand that's on the handout. Yeah. Get distracted now. So it's number 11.

Steven Bruce
We don't get there very easily. Oh, here we go. That's, that's the positions you were demonstrating earlier on.

Victoria Smith
Okay. So these are Oh, yeah, that's it. So these are some YouTubers with the FAI effects that you often seeing. But this one don't, it's not just a straight leg raise, which is fine. It has a hamstring stretch. It's actually the way she's pulling it into internal rotation. Potentially, that's not the worst one. But you can see, so we're going into flexion. And into into or basically just impinging the hip. The same with this one. We'll see what he's doing. Yeah, he's forcing it into flexion. And

Steven Bruce
this, he's got the right right foot over the left hand.

Victoria Smith
So he's trying to pull I'm presuming he's trying to pull that. Left hip, and, and then we've got again, internal rotation flexion. And we've got extra external rotation and this hip, and internal and this one, so just not ideal. If you have someone with an irritable hip that's, you know, struggling with flexion and internal rotation, sending them away with this. This was on the FAI fix. I think it was called. It's like this is basically

Steven Bruce
people trying to push past the pain, isn't it? It's that then try and fix a bony bony abnormality by pushing through it.

Victoria Smith
Absolutely. Yeah. Yeah. So you're likely to end up with pain if you do that. So yeah, just again, it's just using common sense looking at the person listening to what makes them worse, and putting that together. And then, obviously, I would be working more on sort of stability than stretching.

Steven Bruce
Right. Okay. So let's see if we've got 15 minutes. Can we run through your case history at the end? Just yeah, number 12. So we've got slide number 12. And we can look at what you did to help this lady. She'll give us an idea of the sort of rehab protocols that might be

Victoria Smith
appropriate. So first of all, it's it's nothing rocket science.

Steven Bruce
And this, this is in the handouts as well. So yeah. So

Victoria Smith
this was a lady who was a primary school teacher, and she had two children. She loved running. She's a fit lady. Yeah, good, healthy BMI. She had been referred in to see me after three sessions of Vizio classic Here's an exercise sheet go away do it. So the exercises she would she was given really good aggravator she's given clams resisted. sidesteps resisted sideline hip abduction and lunges. So some some on there that weren't bad. They were just too much for her. So they were just overloading her a little bit too much. So, you know, potentially the right idea with what they were trying to do, but just maybe not at the right stage for her

Steven Bruce
nothing clams. and resisted sidesteps. I wouldn't necessarily feel we're going to be a problem because unless you unless you're taking the leggings to severe abduction, you can do that without you can get you can do a resistant sidestep without extending that abducted. Yeah,

Victoria Smith
I think sometimes it's just what we working with it. So, you know, of clams and visitor sidesteps and sometimes overwork TfL the lateral kind of muscles rather than the deeper ones. So if we want the deepest system to work, it might just be that you need to strip the exercise back a little bit and then maybe introduce that later down the line. There's, you

know, there is as physios we jump, you know, a lot of us don't like clubs, but there's a there are some physios who will say why not you shouldn't you shouldn't demonise an exercise, which I'm kind of starting to come to terms with.

Steven Bruce
Somebody's gonna ask me what clams are in a minute. I think they just, yeah.

Victoria Smith
Yeah, it's quite a popular exercise choice. So yeah, that that that's where she sort of came from, if we could put the next slide up. So she had 13 year history, this is a classic, The I see this sort of presentation all the time, see sign bit of anterior pain, and occasionally some buttock pain, around a three to nine out of 10. She was in a flat metal cycle, so she'd flare up, it would calm down, she then do something else that would flare, she had been seen screws, the name there, but it was it was done for local training. So she was seen by a consultant who specialises in hips, but he didn't specialise hugely in your hips, told you had dysplasia of flattening of the femoral head at that point, she was told to stop running and didn't didn't. I'm a big advocate of trying to keep someone doing something they really loved doing personally, even if that's a modified version, she didn't have any mechanical signs now, given where locking her hands were.

Steven Bruce
So with that, are you thinking this is not a label at that point,

Victoria Smith
potentially, although you can have a label tag and have no mechanical signs, but really, you're not looking at an unstable label tap, so it's not getting caught in the joint, then it's, it's stable where it is. So she was aggravated by standing, walking, running, which she'd had to actually stop because she was in too much pain with it. Low chairs, bit of a problem with a job. She had another called Startup pain, that if you're familiar with that term, so startup pain is quite common with this technology, which is where you stand up sit to stand, and it's painful, kind of almost giving way for those first couple of steps. And then it eases off a little bit breastroke Hills getting in and out of the bath lying on the right side. And when she had to do anything that increased that load to the right side. So

Steven Bruce
for example, the right sided problem yeah,

Victoria Smith
all right sided. So turning, you know, supermarket shopping, when you kind of look loading through that right side would increase her symptoms.

Steven Bruce
Okay, so we're gonna look at the next one.

Victoria Smith
She had night pain. So she did not tonight pain when she was in a flare. But when she was in a settle, no pain, she had a history of scoliosis. That was correct, isn't it a teen surgically? Otherwise, she was fit and well,

Steven Bruce

that has any relevant

Victoria Smith
there's not really any research that suggests the link. But sometimes with a scoliosis, you could maybe overload one side. So maybe you could be putting more load through that side, which potentially could make you have symptoms on that side. And her mom had a hip replacement age 60. So really, always quite good to get that family history. Are there any issues in the family of hip problems? She was taken out perfect and paracetamol. She had a pretty low BMI of 20. And she hadn't had any any imaging at that point. So what they found was she didn't have an antibiotic gate. So she was quite nicely, although she did have some increased internal rotation when she was in the stance phase on that right side. So she was dropping into internal rotation. She stood in a hip hanger, so as I showed earlier, classic like that with lots of rotation in that in that right hip. So she was she stood like that all the time at work. Obviously, she was a teacher, noted a scoliosis and she had a lot of overactivity and a TfL and her upper glute max, so both muscles feed into the ITB. So they're superficial muscles. So often we see that they get larger when the deep system maybe isn't the stabilising system isn't doing their job quite so well. So she had a lateral shift with single leg stance. So when she stood on on that side she did, she did that. And again, that increased internal rotation of the right hip. The left hip was I don't know why I put improved control. I probably went to see better. So muscle testing was you had to strengthen abductors, adductors, extensors and flexors so Um, quite a lot. And she should have. So I yeah, we've we've had manual testing. Yeah, absolutely. Obviously, preferred choices is, you know, with a dynamometer, but we don't this was an NHS patient so didn't have that NHS obviously. So, when she, when she was on the site, and she did hip abduction, she had a pattern of flexion and internal rotation, which fitted in really with the the sort of TfL and upper glute max being hypertrophic and hip flexion. She did what Suzy does where she had she has a pelvis. So reduced trunk control. So good test for that is a side plank. So most studies show that if you can't side plank for more than 34 seconds, you're more likely to get a better outcome. So she had really 34 So 34 seconds is very specific. Yes. So range of movement, 90 degrees flexion but when we corrected so she did this. So when we corrected the tip technique she had, she had a bit more interpretation 20 Again, I was stabilising so that's what I was doing. When I put corrected I was stabilising and she had a limitation of 50 and abduction of 30. So you can see that she had more external rotation, yet she was standing in internal rotation. Yeah. Okay. Positive 30. And she had a positive clunk with Faber. And with Thomas test, you had some tightening shortening of the of the TFL muscle, left it full range movement, full strength, so very different hips. So the next one, just so what we did in the first session was we discussed what I thought was her, you know, differentials. I said, I think you've probably got FAI, and maybe some label pathology. Now, we don't know. But it seems to be a hit driving the condition, looked at her age, her risk factors and kind of came to the conclusion that it's likely to be FAI. Although obviously I haven't got an x ray. So I couldn't I couldn't put it as FAI s because I didn't have that diagnostic tool to give you that diagnosis. So we just did, we did a lot discussing her work and her everyday postures looking at how she maybe is overloading that hip. And that's something I can't stress enough is is to really look at that and really sort of delve into that. I requested an x ray. So I looked I requested an AP pelvis for hips, which is what we would request and a lateral hip view. So there are two kinds of hips X rays you would request for this issue. And this is the report from the X ray so subtle bilateral Cockspur funder so that means deep socket, slightly more pronounced on the right no femoral heavy modelling. So no cam, the lateral centre central edge angle of both hips are remarkable. Okay, so no definite signs of impingement on playing film. So I requested an MRI and obviously did this thing COVID times. So I think that probably took a long time to come through the next slide. So here's our x ray. So when it's reported as coxhoe profunda

that's because the medial so the AST tabular fossa is more medial to this ilio issue line. Okay, so that that's that's COC Superfund. Patrizio is when the femoral head actually goes past that. Okay, so you can see that, you know, for me, here's the anterior wall of the, as it's happening is the posterior wall. So it should be parallel. So potentially, we've got a little bit of what we call under coverage and tyranny, so maybe a little bit of instability and tyranny there. Which is potentially why she's dropping into internal rotation all the time. So yeah, no, no, no. Can you see the difference between this X ray and the other one who've got that with that lovely reduced that neck? femoral neck offset, whereas you're the ones carried on?

Steven Bruce
Okay. Excellent. Yeah. So, so basically, you've now shown me she hasn't got impingement.

Victoria Smith
She actually on MRI did have a small cam, very small camp. And she she had under coverage of so you could see that anterior under coverage. So she actually had mild anterior and posterior acid tabular under coverage. So slightly shallow socket, AP wise. But the way the angles were I haven't put the angles on there because they they can be confusing meant that she was in slight retroversion. Okay, so she had more coverage at the front than the back then than is normal. So she was going into internal rotation too much. She had an alpha angle of 49, which is actually under, we wouldn't use that as a positive for cam. But sometimes they can have an alpha angle of, you know, say 49 but still have a bump somewhere along the femoral head so they can have an out but they could still have a bump somewhere. So So she had a bit of a bit of an uncertain unstable hips, you had a bit of shallow shallow socket and a bit of impingement as well. So we did a telephone consult at this point because it was a COVID. And we couldn't see see her. And I sort of discussed this with that, I think we have probably your first option, because we'd found so much in the assessment. So she was very anxious because previous physio aggravated so then I was like, yeah, we'll get you in. We'll mask up, you know, we'll do the whole PPE and we'll get you in. So I looked at doing a bridge supported lunge, single expand all too difficult for her pain straightaway, when she did all of those, we move on to the next slide. So I gave her some exercises to do that she could cope with. So we looked at some pelvic tilt couldn't manage the bridge. So we sort of broke that down a little bit into a posterior tilt, I put a ball between her a knee so she could get a little bit of static adduction. Because attraction can double click lying. Lying cover should be all between the knees, doing a pelvic tilt with some static adduction contraction, she couldn't lift because she she found that too painful, quick lying, alternate legs, like as we found this quite dominant TfL. So wanted to start to try to get some length through there. So using a heel, sliding, and then using a heel to come back up again, we looked at a standing posture. So balloon, that's just a cue. So imagine you have a balloon where your ponytail is if you've got one. And then

Steven Bruce
today, otherwise, you had a lovely one

Victoria Smith
earlier, didn't you? So yeah, using the balloon and to use wall and hand support if she's standing for more than five minutes. Luckily, she's on summer break from school. So we had time to kind of calm her symptoms down. We looked at sitting posture, and we discussed her expectations. So what might happen when she returns to work and how could we work with that I've been taught progressions from from here moved into the bridge and the Double Leg Squat, you can move on from there now. And then I reviewed her again. So she actually had really, really calm down by this time, she'd added in bridging and double leg squat, which

isn't always enough to get people you know symptom free. You often need to do more with that strength work

Steven Bruce
is that double leg squat with external rotation that you demonstrated earlier on?

Victoria Smith
I tend to go with what they they sort of take to me is comfortable. So if for her No, I don't think it was we didn't need to, but I sort of look at the positioning and say do what works for you. By this time, she was back at school teaching and receptions are very very baby chairs. She had no seen sight see sign. She had some mild upper glute max ache at the end of a day. But she was back to jogging and cycling. So she was very happy. I gave her an open appointment and haven't heard from her since so she's she's doing well. Perfect

Steven Bruce
timing. Because we are three minutes away from the renovar show. I have had a question what is crook lying?

Victoria Smith
So it's lying on your back with your knees bent.

Steven Bruce
You're gonna say is that like a shepherd's crook or something? I've had a question from Beverly and it's just died on me. I don't know why this isn't gonna second Beverly was talking about her 15 year old daughter I think a 24 year old daughter has a five year history of bilateral hip pain. been diagnosed with FAI FAI s and mild dysplasia experiences burning pain down her anterior thigh when walking, especially upstairs or uphill. Is this a common symptom? You're going to be very quick on. So yes, yes,

Victoria Smith
absolutely. Anterior pain can be absolutely related. It is one of the signs we say.

Steven Bruce
So that's pretty much all the questions I've got time to deal with at the moment. not actually sure how many people have been watching the ECB. Normally I get the numbers up on my screen before but they're obviously too busy with machine learning and things like that. That's been brilliant. I think there's loads of stuff that we can all take away from that. So things that things that we will see that have been done wrongly by other practitioners, things that will be diagnosed wrongly by perhaps many people because they're not putting the two together FAI SM label tears and things like that. And, you know, running through the case history and what you've discussed over there gives us an idea of how we might go about managing these things before we referred for.

Victoria Smith
I think the key with exercise prescription is not to jumping too hard, too fast. So just make sure that they can cope with what you're prescribing. So, you know, if somebody is struggling with single leg standouts, and in the way of the single leg stand, work backwards. Yeah.

Steven Bruce

Brilliant. Victoria, thank you very much as the as I say, so kind of you to come all the way up here from Pompey to take part in this and it's been great. I've really enjoyed it.