

<u>411 – Demystifying the Hip</u>

With Steven Bruce and Jon Hutt

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Steven

Now then this evening's broadcast, this is my favourite type of show. I have a real expert in the studio. We have a practical demonstration for you and what's more, we are working on a real patient, someone that we only met for the first time about an hour ago. So you get to see how another professional, in this case, an orthopaedic consultant, goes about their assessment of a new patient, including working out what the MR Imagery tells us. Jon Hutt is my guest and he's back for a second appearance because he went down so well last time when we were discussing developments in hip surgery. Jon, welcome back. Well, I say welcome back last time we did this online. But it's great to have you in the studio. We can do so much more.

(00:04:10):

Some people might not have seen the last show, so just remind us what your general practice is.

Jon (00:04:15):

So yeah, I'm a consultant orthopaedic surgeon. I'm a hip specialist, so I really don't treat any other joints. I'm based in London and UCLH and the London Hip unit privately, and I'll treat any patients usually from skeletal maturity about 12, 13 through to 90, a hundred year old people with any sort of hip pathology.

Steven (00:04:34):

And I think last time we looked at developments in hip surgery, new types of implants and the way that your procedures have improved. Interesting you saying before we came on air actually, that one of the problems with modern hip surgery is hearing protection, which is That's an interesting, hadn't thought of that one.

Jon (00:04:48):

Yeah, it's a bit bizarre, isn't it? But I think people are focusing more on surgeon wellbeing these days. We're often being taught how to stand and what our risks are for our own personal health. I can tell you my shoulders are really suffering

Steven (00:05:01):

Well, I can recommend six or 700 osteopaths who might help. Maybe I can come on as a patient. Yeah, maybe. But what are we going to do this evening? We're going to look at a real patient. Now, I know you have had the chance to look briefly at the MRI report and a

quick discussion with him, but you're going to take us through the whole of the process that you would normally go through with someone who's been referred to you perhaps by an osteopath. And today's patient has actually been seen by one of the osteopaths in my clinic, so it is kind of exactly that situation really, isn't it?

Jon (00:05:32):

Yeah, we're going to try and do a bit of live diagnosis, I think.

Steven (00:05:35):

Yeah, that would be fun. And we're going to do that, and then we're going to look at the MRI afterwards and you'll take us through what the hell we're seeing there. Because most of the people watching, and I imagine that there's a good five or 600 of them, are quite familiar with the lumbar spines or cervical spine especially, but hips, I always find her a bit more awkward to assess

Jon (00:05:53):

That. Yes, I'll try and keep to my standard routine and I try to keep it vey focused very focused. So it's going to be quite focused history, quite focused examination, and then we'll see how that goes down.

Steven (00:06:05):

Okay. How do you want to do this? Should we go and talk to the patient straight away?

Jon (00:06:08):

Yeah, why don't we start with

Steven (00:06:09):

That and then we'll start with that and then we can take the conversation from there. Yeah, sounds good. Let's go to the practical area, right Jon, this is Asa. Asa you are, how old are you now?

Asa (00:06:23):

l'm 47.

Steven (00:06:24):

Yeah. And you've been coming to my clinic for something like 10, 12 years.

Asa (00:06:27):

I've been 12, 13 years, yeah. Yeah.

Steven (00:06:29):

Not to sees me all that time, but hopefully we've kept you going so far.

Asa (00:06:32):

Yeah.

Steven (00:06:33):

Jon, we've just referred him to you. He's got hip pain.

Jon (00:06:35):

Okay. So I'm just going to ask you some the questions we briefly scanned over. So why don't you just tell us a bit about yourself, what you do for a living and what you do for fitness, sport activities and things like that.

Asa (00:06:45):

So on a carpentry joiner and have been for 25 years and fitness wise, cycling is my main thing, but I do run in as well, but not as seriously as I take the cycling. But yeah, it's just the past six months. Beginning to

Jon (00:07:07):

Back to your activities, start your cycling is quite serious. What sort of mileage and stuff do you get up to on a weekly basis? On an average week?

Asa (00:07:14):

So it can be up to 200 miles a week In the summer months. I normally train five nights a week, but now I'm training for a marathon. I'm doing it every other day with one rest day, which is normally a Monday. So I'm alternating it, so I'm not doing too much of each one. Okay.

Jon (00:07:42):

And you're training for the London Marathon, April, you told me? Yeah, yeah, yeah. Okay. Alright. So just run me through what the symptoms have been for you and how they've been affecting you. So

Asa (00:07:55):

I first started noticing it down here, which I thought was an IT band issue and I noticed it through getting into bed, pulling my leg over that was causing me pain. But then when I started running, it sort of transferred to my groin. So I've been getting a lot pain in my groin, which is I've been finding it hard to walk, start with, I've been sort of hobbling the lung, but as soon as I have some treatment, like a sports massage or whatever, if somebody sort of twists my leg, the pain that I get up here is just excruciating. So

Jon (00:08:41):

Out of those two pains, the one when it gets bad is really bad is which one?

Asa (00:08:45):

That's like a 10.

Jon (00:08:47):

Is that the groin pain or the outside pain?

Asa (00:08:49):

The outside pain. But the groin pain is, I can't help but hobble through it, but it eases off. So if I was to start running, I'd be hobbling for about half a mile, then it'd ease off and I wouldn't feel it at all through the run. And then it'd be later on in the evening, the next day the pain in the groin is,

Jon (00:09:10):

So it is kind of if the more you do on it, although that activity might be relatively comfortable at the time, that will make the pain worse, ultimately evident for the next a thousand days.

Asa (00:09:22):

But sometimes it can surprise you. So I can do go for a seven mile run and it'll be absolutely fine

Jon (00:09:29):

Even afterwards. Then

Asa (00:09:30):

Even afterwards.

Jon (00:09:31):

Okay, so a little bit unpredictable.

Asa (00:09:33):

Yeah, it's a bit unpredictable. And then say the next day if I go out and do say three miles, I can be in a whole world of Pain

Jon (00:09:41):

. Okay. So what I'm just going to get you to do actually, which is quite helpful, I find if you just stand up for me and if you can just indicate the sort of main zones of your pain again for me.

Asa (00:09:51):

So groin, I mean right in there it is and then down the side here. But the thing is I never get any knee pain.

Jon (00:10:03):

Okay. And how far down the leg does this go?

Asa (00:10:07):

About to, About There

Jon (00:10:08):

. So nothing down past the knee? No, nothing past the knee? No numbness, no tingling, no pins and needle, nothing like that. Okay. Did you get any clicking or catching? No, not that. Nothing like that I'm aware of.

Asa (00:10:17):

No, mainly Pain.

Jon (00:10:18):

Yeah,

Asa (00:10:19):

Just pain. Yeah, like an ache.

Jon (00:10:20):

Alright, grab a seat again. The reason I ask those questions is hip pain is notoriously difficult to localise.

(00:10:27):

It is very diffuse, it's very easy to mix up joint pain and what I call muscular envelope pains. It's also close together. Classical hip pain, particularly in non arthritic hip pathology in younger patients is quite traditionally sort of in that sort of people do this, they do that. It's that kind of groin pain that makes me think joint pain. So that's what I'm thinking a little bit for you. And also quite medial as well. You've got to be thinking about adductor pathology, I think particularly in young sporting people as well. And then you've got this outer pain, which always feels very much like IT band and gluteal tendinopathies and things like that. And of course they're often mixed up because you have one that drives it and the secondary responses and things like that. So you said it's been going on for roughly six months. So in addition to the activity related flares symptoms that you get, do you get any sort of postural symptoms, any positions which are particularly uncomfortable that you avoid?

Asa (00:11:24):

Yeah, so laying down, if I lay down on this side, it's okay in bed because I can move myself into whatever position, but if I'm laying on the sofa, for instance, if I lay on this side, it just starts aching and then it does transfer down the leg. I feel it in different places. But the aching is mainly all up here up to the hip

Jon (00:11:51):

And the sort of groin type symptoms. If you are not doing so much, if you're not exercising, you're just doing your day-to-day life, do you tend to get much of that?

Asa (00:11:59):

Not really, no.

Jon (00:11:59):

Not really. So that's more of a kind of, you have to push a bit harder with that?

Asa (00:12:03):

Yeah,

Jon (00:12:03):

Yeah. Okay, fine. And do you have any other medical problems or any regular medication that you take?

Asa (00:12:10):

I've got Crohn's disease, but I've been in remission for over 10 years now, so I'm not actually taking any medication for that. That's all under control.

Jon (00:12:22):

They don't have anything for that. But you were told me you were taking clopidogrel?

Asa (00:12:27):

clopidogrel Yeah, so I'm taking that. I had a mini stroke a couple of years ago, so I seem to be on that Yeah, now as a permanent Thing just in case

Jon (00:12:37):

Speaker 4 (00:12:38):

I guess.

Jon (00:12:38):

And prior to this sort of six months or so problems, have you had problems with your hip at any other points in your life and you've been relatively active, obviously did quite an active job and so on and so forth?,

Asa (00:12:50):

Yeah It's never given me any Grief.

Jon (00:12:52):

Okay. And treatment wise, what have you had so far? I know you've had a scan, we'll go through that once I've examined you and stuff, but have you had any direct treatment for This?

Asa (00:13:01):

Yeah, a couple. I've had some laser treatment, the K laser treatment, I've had a couple of sports massages, but each time I've had the sports massage they've said that this has got to be something else because of the pain I'm getting when my legs being moved. It doesn't seem something that's a standard Sports.

Jon (00:13:29):

And the sort of arc of your symptoms, if you like, over this six months, has it been a plateau? Has it been steadily worsening? Is it more frequent or is it just

Asa (00:13:36):

It's been steadily worsening like the past couple of weeks. It's actually moved now on to my left side. So when I'm hobbling now it's not like I can put my weight onto one side. It is becoming a real problem.

Jon (00:13:54):

Okay, great. I think in summary then we've got a six month history of potentially hip joint sounding symptoms with probably a little bit of muscular pain going on around them. It's obviously maybe not really had much treatment to it so far, which is helpful to know. It gives us the options that we can lay out when we get to the point trying to figure out what's going on. So yeah.

Steven (00:14:14):

Does that six month coincide with your marathon training or is it different?

Asa (00:14:17):

No No, no. So the groin pain that came on when I started running, but the actual side of my leg and the hip pain moving my leg over, that's been since the summertime, before I was starting running.

Steven (00:14:41):

Jon, there's a couple of questions coming from the audience here. Lawrence has said, does the type of footwear make a difference now I don't know whether it does or not, but is it the sort of question that you'd find would be relevant?

Jon (00:14:50):

I don't ask that sort of thing if I'm honest. And I don't think that's necessarily a bad question to ask people when you're looking for modifiable factors really for recurrent pain, particularly

during exercise. But I actually, I guess I don't think that widely about these things often I'm very focused in on what I think is a can. I am looking really for a structural problem or not a structural problem. So I try and keep my focus very much on the hip joint.

Steven (00:15:15):

And Vicky's asked whether you've had any falls off your bike?

Asa (00:15:19):

I have, I have. When was that? Christmas 2022.

Steven (00:15:27):

So Quite a while back before this all started?

Asa (00:15:29):

Yeah,

Steven (00:15:29):

Way before. I think you said before we came on air, one of the things you were desperately worried about was a stress fracture, wasn't It?

Asa (00:15:34):

Indeed. Yeah, but the side that I landed on was my left side and I had x-rays at the time because the pain was that bad. I thought I broke my pelvis but I hadn't, it was all just muscle injury. So that just settled down. I mean I had a couple of broken ribs from it, but apart from that it all just settled down after a few weeks.

Jon (00:16:02):

I guess the final question, which I didn't really touch on, which again I think it's really important for planning treatment is we've talked about the deterioration in the level of symptoms. What's your perception of how much these symptoms are bothering you and affecting both your day-to-day working life and also I suppose your sporting expectations?

Asa (00:16:21):

Well I haven't ran or cycled since not the Sunday gone, the one previous to that just because the pain's been too much and at work I am sort of hobbling around. I'm quite fortunate at the moment because I'm only fitting kitchens so I'm not having to manoeuvre around it at a site or whatever. I'm in a short, small area, so I am managing, but it is painful.

Jon (00:16:50):

Okay.

Asa (00:16:50):

Alright,

Jon (00:16:51):

So if there aren't any other points on that,

Steven (00:16:54):

Hang on, one's just come in. Ian wants to know if you had any relief with the laser treatment. I presume that they were looking at some sort of tendinopathy there with

Asa (00:17:05):

Yeah, they were. Yeah, no is the answer to that.

Steven (00:17:11):

And Simon says, would you include an inguinal hernia in your differentials and maybe we want to talk about those later rather than at this stage. And MR.

Jon (00:17:19):

I mean not with those symptoms so much actually, but obviously that's one of those slightly more on the side to remember when you come with groin pain for sure. Yeah.

Steven (00:17:31):

And the final one here is David says, is your bike professionally set up or

Asa (00:17:34):

It is, yeah,

Asa (00:17:36):

Yeah, I've had a couple of professional bike fits and I have it checked every couple of years but it's always set up the same. It's fine.

Jon (00:17:47):

Okay, so what we're going to do now is I'll run through my examination, obviously take any questions as we go along and I'll try and explain what we're doing. So we don't get completely undressed for hip examination. You can't really see the hip, it's very deep. So it's quite useful to get them in shorts because I'm quite interested in the sort of functional positioning, which I think is quite important for a lot of hip pain. So what I'm going to get you to do is jump off the couch for me and then just I want you to walk up as far as we, I think you can safely walk over that direction and then what I'm going to get you to do is just walk towards me and I get you to walk around, turn around. Now it's obviously slightly artificial, you tell people to walk and the people really concentrate very hard on walking and obviously I try and do it normally in quite a slightly longer way. So you can stop right there. That's great. And what I'm looking at mainly is obviously your gait. I'm looking to see obviously the obvious things like are you limping, are you walking strange, are you walking particularly

stiff? And I wouldn't say you're doing any of that but it's hard to tell on a short step. But I'm having a look at your knee progression angle, your foot progression angle. I'm looking for the rotational alignment of your limb and how you walk.

Steven (00:18:52):

When you say foot progression angle, what do you mean by that?

Jon (00:18:57):

So I'm looking at where the kneecaps point went during the stance phase gait and I'm looking where the foot lands as well. So I'm looking to see if you, I mean it's not a very common male problem to in toe from torsional problems, but it does happen. Or more frequently you'll see people walking externally either because of a rotational problem in the femur or tibia and it's just one of those things I have in the back of my mind, which maybe we'll go through a bit later, is the importance of thinking more widely about the cause of hip pain through the geometry of the whole low limb. It's a very basic way of looking at start with and do a bit more when you're on the couch. I'd normally run through the Beighton tests at this point. I'm sure most people are familiar with those, which is hypermobility tests.

(00:19:35):

The hypermobility tests. We can do that quickly if it's helpful if it's to be hypermobile. So you're not high on my list for this, but we'll find out. So I can do none of these. So if you just bend your wrist and see how far you can get your thumb towards your forearm. So a bit closer than I thought, but not as far away as mine and try the other side. So maybe almost there but not quite. And then I'm going to check if your little fingers hyperextend and I would say they don't, so each of these scores a point as many people probably know. So we've got zero so far,

(00:20:08):

But you're very close actually. So arms out wide looking for elbow hyperextension and again I'd say you are actually a little bit close on all of that and if you just stand a little feet a little bit closer together and push them back, push your knees back straight. There we go. There probably is perhaps a little hyperextension in both knees. And then I'm going to ask how close you can get to getting your hands flat on the floor. So not too bad but not overly so. Okay, we can stand up now. So actually I would score you two but you're borderline on some of those tests more so than I think a lot of men would be and that's just something to bear in mind. I don't think it's a necessarily huge contributor, but it's obviously very in the way your hips move and potentially cause pain. Alright, so what I then get people to do is come and sit on the edge of the couch back here and really just what I want to do here is a series of sort of muscular tests and the main one I do when people are sitting down is I test hip flexor pain.

(00:21:03):

So we do that by putting your hands in your lap so you're not cheating with your hands on the couch. So put your hands just on the thighs, just come back a bit. We'll start with the less painful side. Now keep your knee bent and just push hard up against my hand and relax. I'm looking for both strength and also for pain as well and push up here and relax. So is that a

painful thing to do? No, no, no pain at all. Come and lie down on your back. Alright, and you just sort of stay relaxed, just tell me if I'm causing you any pain obviously, and we'll try and avoid doing that. And I'm checking first just a very rough estimate of leg length inequalities. Again, it's not such an issue in young hip pain, but it's something just to be aware of. Just a very gross checking his pelvises level.

Steven (00:21:50):

And what would you

Jon (00:21:51):

Lining up is what you mean?

Steven (00:21:52):

What would you assess As being a significant leg length difference?

Jon (00:21:54):

Well I mean clinically I think it's very difficult to detect anything that's less than about a centimetre to be honest because of the pelvic positioning. So it's really more of a gross alignment as well.

Steven (00:22:06):

We've already had a question to ask if there's any pelvic torsion

Jon (00:22:10):

We will come to some of that I hope so I'll check that and also just I'll get 'em to relax and look at their resting foot position as well because certainly if you see somebody whose foot is in a completely different alignment from the other one that suggests either a fixed deformity or a potential for a rotational problem,

Steven (00:22:26):

There's a little bit more external rotation on the right, isn't there?

Jon (00:22:28):

Perhaps a little bit. Yes, exactly. And what I'm going to do now is just I'll get you to relax and then I'm just having a look by taking the foot in and then relaxing it back. I'm just looking at that capsular recoil, which again with hypermobile patients, you will see less of that capsular recoil. So as it bounces out quite naturally you get the bounce back from the capsule at the front of the hip. If you have a very hypermobile hip or if you have somebody who's had previous surgery in the hip and they have a capsular deficiency, what will happen is that it will lie like that and it won't come back again. Again, it's less of a problem in the unoperated hip to be honest, but it's a useful test. Then I'm going to do a few more muscular tests. I'm just get you to rest your knee on mine at this point I'll do a cursory knee movement just to Check.

Steven (00:23:10):

Do you only need that recoil test on one side?

Jon (00:23:14):

I'm just really concentrating on the one side. So it's not so much a comparative test. Yes, so when I've got the knee there, I'm just going to do a very, very cursory kind of just check your knee doesn't hurt too much when I'm moving it. Does that feel okay?

Asa (00:23:26):

Yeah, yeah, nothing there at

Jon (00:23:27):

All. And then I'm going to do a slightly different test where you're about to 20 degrees flex. I'm just going to ask you to straighten your knee and push up against my hand here. Now that test for me slightly isolates the rectus femoris part of your hip flexion as opposed to the psoas test. You can do it seated or supine where I'll get you to push up against my hand here. Now none of these tests are a hundred percent specific. Do either of those hurt? Fine. They are a little bit better at differentiating one over the other just as a kind of muscular envelope problem. And then up in this position I'll get you to push out this way. Painful. No, nope, pull in this way. So that's mainly abduction and abduction there. And I'll also do this test for the gluteal insertions. The abductors predominantly if you push your heel out against my hand there, is that painful at all?

Asa (00:24:19):

No, that's fine.

Jon (00:24:20):

Okay. So actually, and of course all of this depends on how much pain you have when we meet, right? Yeah, of course. Could be having a good day could be having a bad day. That's why it's useful when you come away and we do this again at another point, but at the moment what I'm getting from this is you don't have a lot of muscular irritability around the hip. It all feels relatively strong and it doesn't seem to be generating an awful lot of pain. So now we'll do the hip movements and I think it's important of course we keep an eye, make sure I'm not causing you pain if you put your hands down by your side and people have a tendency when you examine them to lean up and want to talk to you, but what you've got to make them do is life flat on their back and just relax, which is very difficult to do when. So what I'll firstly do, and again we're not talking about really arthritic hips, which the arthritic hip exam is basically just check the hips, painful. This is for the non arthritic hips, we'll move it up and I'll keep it outside end range.

Steven (00:25:12):

Can you be sure this is not an arthritic hip?

Jon (00:25:14):

Well not at this stage, but I'd be surprised with his age, his activity level. It's not unheard of course, but obviously I've seen the scans, that's why I'm saying that now. And I'll keep you outside of end range of motion. Just check for general irritability in the joint. So I'm just making sure I'm not taking it too far. I know that that will start to cause pain and actually it will cause pain in almost everybody. And that's the other important thing to recognise, particularly men, it's very easy to put the hip in an extreme position that causes pain. So we will get to that point and try and I guess combine that with what your symptoms are like and try and figure out which of these bins are relevant. So hip's not that irritable and I'm just going to get you to relax again, just try and relax the muscles and then I'm going to push your straight line flexion. Just tell me to stop if it's sore. Any pain there?

Asa (00:26:07):

No, I can feel it there

Jon (00:26:08):

But It's not too bad.

Asa (00:26:09):

Yeah.

Jon (00:26:11):

Okay. And then we're going to do a series of movements. So first we're going to have a look at the general rotation. So I estimate the external rotation inflexion there we're looking at about 45 degrees or so, not painful particularly. And then normally this is a more comfortable manoeuvre in the hips. I'll do this first and say is that pain

Asa (00:26:27):

That's

Jon (00:26:28):

Really comfortable? That's really comfortable. So interestingly that manoeuvre doesn't tend to cause too much hip pain unless you're very unstable out the front, but it can flare up. That can really trigger your gluteal pain, which it doesn't seem to do for you actually. And then I'll have a look at internal rotation and we've almost got, I mean you can see it might be hard to appreciate, but as soon as I internal rotate that I can see his pelvis is also tilting. So he's got very little internal rotation there. Is that painful if I push it

Steven (00:26:54):

Internal rotation or external rotation?

Jon (00:26:56):

And that's internal rotation as I call it.

Steven (00:26:59):

Okay,

Jon (00:27:03):

Starting to do, which one of your pains is that causing?

Asa (00:27:08):

Yeah, basically just there. I can feel that.

Jon (00:27:12):

Okay. And then the more extreme version of that, what we call the impingement test is I'm going to push it over into abduction flexion and rotation, which is this one. Is that painful?

Asa (00:27:23):

It is, yeah, starting, yeah.

Jon (00:27:25):

And is that more the groin pain or the outside pain? The outside pain. Okay. That's interesting. Alright, so that manoeuvre is the one that will generate symptoms in most people. I'm sure it would hurt me. And so it's important that we establish what we're generating with that test and whether it's your normal pain as well. So for that I'm generating more outer pain.

Asa (00:27:47):

Yeah, just there

Jon (00:27:48):

More there. Okay. So let's see. So more in this zone here, but when you get your groin pain, it's not in this area, it is more, it's

Asa (00:27:57):

Right in there.

Jon (00:27:58):

None of those tests that I'm doing on you there seem to provoke your groin pain?

Asa (00:28:02):

No, not at all.

Jon (00:28:03):

No. Would they normally?

Asa (00:28:04):

No.

Jon (00:28:05):

No. Okay, fine. So what I'm going to do now is move you on to your side. So if you can roll and face the screen. Okay, so now we're just going to have a little feel around the tendon. So I'm just feeding up where the trican is and where the tendon insertions are. Tendinopathy generally is anterior, so you generally feel it in the front where the insertions are. So I'm just going to press down on here. Any pain around there is at all? No, it's fine. No, nothing really tender there at all is it? No. And then up into the muscles up here again, not really. Not really at all. And lift this knee up against my hand, push hard and relax. Is that painful at all again? No. Okay. Now straighten the leg out and then lift up again. That just slightly takes the TFL out again, is that painful?

Asa (00:28:55):

No, but afterwards it is. Once I relaxed it, I could then feel it

Jon (00:29:01):

Interestingly in the groin that's all working topsy-turvy today. Okay, fine. Now there's a number of other tests that I would sometimes do in this position depending on what we find, which I'll just demonstrate if that's all right. So I don't think they're relevant to you. If you're getting posterior type hip pain, then I will usually do the initial femoral impingement test at this point where we take the leg, move it back this way and we put it in external rotation and extension, trying to basically squish the issue of femoral space and see if that generates pain. I don't think that's where you're getting pain, so I wouldn't probably bother with that with you in particular. And then what I'm going to ask you to do is roll onto your front just for the final bits, and this is really just take this out the way if you completing the sort of rotational profile element of the exam.

(00:29:50):

So I'm going to bend your knee up here and I'm looking at a few things here. So we're going to repeat your internal rotation. So again that's a bit Sorry about that. As in here. Yeah, yeah. So it's hurting more there, is it? Yeah. Okay. So again, very little internal rotation even in extension and similarly external, maybe a little bit reduced but not two things about that. One is the, sorry. It's fine. If you want to set yourself up again while I just explain that again, there's two things I'm looking at there. One is the arc of motion. So I'm looking to see how much rotational he has all the way through that motion, which isn't an awful lot and that's not unusual in men to be honest. He's got almost no internal rotation, either inflexion or extension. He's got about 40, 45 of external, which can mean a number of things, but the arc of motion is not huge either so that it comes into a bit later if we talk about treatments in various other situations. But those two elements are important, but it doesn't suggest that he's going to have an anomalous rotational profile particularly.

Steven (00:30:54):

And again, you didn't compare sides on this, would you?

Jon (00:30:57):

No, again, I don't always do that unless I'm finding something very abnormal because it's not necessarily a comparative thing, it's an absolute thing. So it is going to be demonstrating either excessive external or internal rotation. If we are potentially thinking about changing that, we might look at the comparison as well, but actually it's really more relevant to the actual painful side. So interestingly from that, I get the impression that the hips, it's got a reasonable range of motion. You're obviously lacking that internal rotation, so that suggests that there could just be a number of hip pathologies that can cause that. But interestingly, I'm not generating a lot of hip pain when I examine you.

Jon (00:31:42):

None of those, even the more extreme tests for me are generating what I would consider to be joint related symptoms. So reeling back after you sort of described your symptoms to me, I'm thinking, well there could be some joint symptoms there. I still think that may be the case, but the examination is not really pushing me hard towards that as a causative factor actually. And really what I'm doing, what I'm stressing your hip or putting in extreme positions, really I've seem to be generating more of that muscular pain, which seems to be quite anterior, sort of TFL, which is right at the front. It's one of the muscles that we'll talk about possibly anterior gluteal pain as well. But again, it wasn't the most exciting examination if I'm honest. We didn't get an awful lot of positive.

Steven (00:32:26):

I think that possibly this is in some ways a more interesting examination because it's bloody irritating when patients come in and you can't find what's wrong with them if there's no glaringly obvious Positive test.

Jon (00:32:37):

Yeah, well that's very true and I think that

Steven (00:32:40):

Not for you, Asa, of course you want something glaring obviously we can fix, I know.

Jon (00:32:44):

Yeah, and I think, but in some ways it's good as well because if we're getting strong positive findings on all our tests, it generally does suggest that there's some things we're going to find. But actually if we're not finding huge amounts in a situation where your hips not flared up, then we might not essentially be looking at quite such a troublesome picture.

Asa (00:33:02):

And I have rested it since where it's been a week and a half now. So

Jon (00:33:10):

Conversely of course if the patients who come in and they're and need a load of pain when you see them, it's very difficult to get much out of it either because if you're in so much pain that I can't examine you, I don't learn an awful lot from that either, apart from the fact that you're in a lot of pain.

Steven (00:33:21):

But we do get information from the fact that with rest the pain is less for sure. Because if it were a hip pathology then presumably you'd be getting some quite positive results.

Jon (00:33:31):

Yes, I think so. And I think certainly with arthritic hip pathology you can almost always generate some symptoms if it's genuine. With the non arthritic stuff, I think it does depend a little bit how flared up it is, but I think even those extreme range of motion tests, you would expect to find some positive feedback if you are getting real intraarticular issues. And I think less so with the muscular envelope pains.

Steven (00:33:54):

So in your own consultations, by the time you see your patient, you will have already had the MRI conducted. Would you still always do the examination first and then go and look at the scan rather?

Jon (00:34:06):

I would always do that because we'll discuss in a minute sort of my imaging sort of strategies, but I almost never get MRIs as a first line measure. I think what we would start with is plain radiographs, which give you a real wealth of information about your hip structure, which is really what it's about for me. It's about understanding what your hip structure is. And of course, as I was mentioning to you previously, the MRIs will usually throw up all sorts of stuff because they're very detailed scan and they often cover a wide area. And so there may be stuff on there that particularly people who have got their own scans and they've read their reports, they will focus on an element, look it up and read about it and all the rest of it as you might expect, but it may be completely irrelevant to the situation. And we'll talk about, I think most important lesson about this is about labral tears, which I think we should spend a bit of time discussing, but people will come in with a report or sometimes a referral with a labral injury or a labral tear and it'll turn out they've just got back pain or something completely irrelevant and that completely means that the MRIs is not going to be very helpful in figuring it out.

Steven (00:35:12):

Well to some extent, if it turns out you don't need surgery for anything, that's a good thing for your marathon hopes in April, isn't It?

Asa (00:35:20):

Exactly.

Steven (00:35:20):

Because you're running the London marathon, who are you running it for?

Asa (00:35:23):

Headway East Northants

Steven (00:35:25):

What does headway do?

Asa (00:35:26):

They look after people where they rehabilitate people that have had head injuries. So they take part in cooking, there'll be gardening, music, anything like that to stimulate and

Steven (00:35:43):

That sounds like a worthwhile charity.

Asa (00:35:44):

Yeah,

Steven (00:35:46):

To thank you for coming in, we'll contribute to your fundraising for that and I'll also put it out to our viewers as well and maybe a bit something from them as well. If you don't mind hanging around just in case we want to get you back in here to do anything else, we probably won't, but you might find the rest of the discussion interesting as well. Yeah, sure. Alright, thank you. We go back over and look at the scan. Thanks very much. So what do you take away from what you've seen so far

Jon (00:36:24):

Well, there's a few things really. I mean he's obviously got significant pain. I mean I think that's important. It's significant progressive pain that's functionally disabling for the sort of things he might be expecting quite rightly so to be doing it at his age and the history very much points to a sort of mixture of potential joint pain and some soft tissue envelope pain potentially in the adductors or the sort of abductor compartments as well. The examination didn't really focus me any closer than that actually. And when he's indicating at the moment some of the sources of pain at those end range of motion, we're really looking around the TFL musculature, maybe some of the anterior glut insertions, whereas I sort of became less convinced by the hip joint as the examination moves forward if you like. But so it's a balance of the impression that you get. So I'm not, then when we go through the scan, I'm not then thinking everything I find on the scan is necessarily actually that relevant.

Steven (00:37:34):

Right, but you've said earlier on that MRI would not necessarily be your first approach with that patient.

Jon (00:37:41):

No, the problems with MRI, it's obviously it's very useful because it's incredibly detailed and we will come to what we can see on it in a bit, but it doesn't really give you as much structural information. There's a couple of reasons it shouldn't be the first line sort of scan for a hip and firstly it's because we could, I mean it's fair to say we could be dealing with arthritis there. It's not particularly dramatic arthritis, I wouldn't imagine. And if you pick that up on an x-ray, you've got your diagnosis, you don't need to do any more investigation really. But there's a lot of other hip pathology that shows up on an X-ray if you know how to read the radiographs properly and your hip might look normal. And I think there is a problem in the community reporting of x-rays that often the focus is on, is it arthritic or is it not arthritic, but the subtleties of acetabular shape coverage, femoral shape and things like that get missed I think. And they're things that I'm really interested in evaluating.

Steven (00:38:44):

They will show up on an MRI shortly.

Jon (00:38:46):

Well they don't actually, because the MRI doesn't give you a really good appreciation of the bone in space.

(00:38:52):

You've got a sort of slice, you can probably pick up more gross morphology and a bit more on the femoral side, but I think it will miss things like subtle acetabular dysplasia. It'll miss the functional acetabular retroversion that you might get as well because it's not really designed to give you the pelvis in a functional position to look at as a 3D object. So actually I will learn an awful lot more from an x-ray and in fact a CT if I want to do more detailed imaging, whereas I tend to use the MRI scan for a couple of very focused reasons. Now I generally get them on everyone because without an MRI scan, you aren't going to pick up stress fractures, you aren't going to get as much information about the joints, but you are also not going to pick up rare things like cancer for example. I've had a couple of patients I've picked up metastatic cancer on an MRI scan and you just aren't going to pick that up necessarily on the other imaging or soft tissue problems and things like that. And certainly if you're thinking of a muscular issue, the MRI will certainly give you more information about structural problems in the muscle insertions and things like that.

Steven (00:40:02):

Now, I don't know who referred ASA for MRI, but presumably what you're saying is that their first approach should have been to say let's get an x-ray

Jon (00:40:09):

Yeah, I mean I don't want to sound disingenuous because it's perfectly reasonable to refer people for MRI scans. They're pretty harmless, they're radiation free, but they won't give me the answer in a lot of cases. I don't know whether people ordering x-rays in the community will also get the answers that they want. That's the other problem I suppose, is if you're looking away from the gross morphological changes, but I would certainly start with an x-ray

and I encourage all my orthopaedic colleagues and people who review x-rays practitioners in the community to actually get comfortable with X-ray imaging because it will tell you an awful lot.

Steven (00:40:44):

Were you saying that radiologists generally might not be looking for the sort of thing that you would want to know in their reports?

Jon (00:40:52):

Our experience is that is the case,

Steven (00:40:54):

Yeah.

Jon (00:40:54):

So it isn't the case that simply ordering the x-ray will tell you the answer without it being seen by somebody knows what they're looking for, really wants to look at the hip in a lot more detail.

Jon (00:41:05):

It's Variable for sure, and I think that's part of the problem of picking up some of these issues.

Steven (00:41:11):

Before we go on, I'm going to shout across the studio to ASA because Sam says Asa, are you a cyclist on Instagram because Sam reckons that he or she recognises you.

Asa (00:41:21):

I am indeed.

Steven (00:41:23):

So he is on Instagram, right. So good. Well Sam's definitely going to contribute to your fundraising for

headway.

Steven (00:41:30):

Well, that's my decision, not Sam's! Vicky said her question to ASA was does he get off the floor using the same leg every time? Would that be something which you think could be relevant? Because of course most people probably do and most people don't have the same symptoms that Asa has.

Jon (00:41:49):

I wouldn't be quite sure what they were driving at with that question. Repetitive strain possibly. I don't know. I mean I think that I generally focus, and again, this goes down to what we were talking about before about you've got limited time, you tend to focus on certain things. So I would tend to focus on people's day-to-day life, their work life and their activities more than specific movements I think.

Steven (00:42:13):

Right, okay. And before we get into the detail of the MR imagery here, then Sharon said, would ultrasound be helpful in this case?

Jon (00:42:25):

I don't think it's a bad modality of imaging. An ultrasound can give you an awful lot of the information, particularly around the musculature that an MRI can give you. I'm not sure it's additive in a lot of cases, unless you think there's a dynamic problem. That's its big advantage is ultrasound can be very dynamic. And so if you've got concerns about snapping around the iliopsoas or around the IT band an ultrasound is a really good modality for looking at that. And I think it's also another really good one for tendinopathic changes. And also the advantage of an ultrasound of course is that the practitioner can also talk to the patient at the same time. And so you can be scanning his gluteal insertion and say, is this where your pain is? And if not, move on to the next one. And then that helps you sort of eliminate the false positives in a way that an MRI scan can't.

Steven (00:43:14):

Right, and you did answer this question earlier on, but it's come up on my list here, so perhaps they've missed it or maybe the question was added before I'd asked you, but he just wanted you to go through that capsular recoil test again, which is where you've got the patient's supine straight leg and you were just externally rotating, letting it bounce Back again

Jon (00:43:30):

If you can relax the patient, you just internally rotate the leg in an extended position with them lying supine and then you release it, the leg will flop out, and then you are looking for the recoil bounce back in and it's just the sign of capsular integrity and the positive findings where it doesn't roll back in again or it gets stuck out are usually present. I've seen them in either very hypermobile patients and it's a sign of significant tissue laxity in that situation. Or patients who've had prior hip arthroscopy usually, and they've had a lot of capsular excision and they've therefore got capsule deficiency, which can be a significant cause of ongoing symptoms In those cases.

Steven (00:44:08):

Maybe we're getting ahead of ourselves here. What's your approach if there is a hypermobility issue, that leads to that laxity?

Jon (00:44:17):

Hypermobility a huge challenge. I mean, I guess the thing about hypermobility is to try and understand how severe it is and how big a contribution it's playing in the hip problem because it's the one thing we can't do anything about. There is nothing I can do to change people's tissue integrity and so I have to be able to explain that to them. In my opinion, soft tissue procedures for hyper mobility around the hip are not very successful and there are caveats around the sort of operations you might do and the expectations you might have for the patient. So it's very much a part of expectation setting conversations. And as a lot of your viewers probably know, it also has a significant impact on pain pathways. So people with hypermobility tend to perceive pain in a different way and often quite an elevated way, which makes management even more challenging than it would normally be.

Steven (00:45:11):

One last one on the examination over there, Dave's asked whether you could explain rotational pattern problems in a bit more depth.

Jon (00:45:19):

That's a good question because I think that the assessment of a patient's rotational profile from a clinical perspective is a really important part, particularly non arthritic hip pain. I mean a lot of this goes out the window with hip arthritis because it's a relatively straightforward conversation. But the elements that I like to focus on is, what I'm really thinking is, do I think this patient has significant underlying femoral torsional issues or tibial torsional issues, both of which can contribute to either impingement or instability in different ways. And I'll go over that in a second. But from an examination perspective, you start with their gait and you look at how they walk and where they position their knees and their feet in space. And I don't go into huge amounts of detail with gait, but it's a very basic thing is do they point their foot forward when they walk?

(00:46:09):

Do they point their foot out? Do they point their foot in? What are their knees doing when they're walking and standing? That's a kind of functional positional thing. And then during the examination we're examining their rotation, so internal and external rotation of the hip in two separate positions, one at 90 degrees of flexion and the other in extended, which is easier to do with the patient prone. And there's two things you're getting out of that. One is the overall arc of motion. So you're looking to see do they have a large range of motion in their hip that might, if that's a maintained range of motion, for example, in both flexion and extension, you might be thinking there is more likely to be an instability type problem. An impingement issue will usually limit your range of motion. So you often lose internal rotation, inflexion, whatever the cause of your impingement might be.

(00:46:55):

And it'll give you an idea as well about if they do have a torsion issue, what that torsion issue is. Because if you have a wide range of internal rotation, you lack external rotation, at least in the way I did it, I hope everyone else does it in the same way, then that's a sign potentially of a high femoral torsion. And that could be associated with hip instability. So that movement and less of that movement is a sign that you might have some femoral retrotorsion which is associated with impingement. And then in addition, sorry, what I thought I didn't mention is I'm having a look at his thigh foot angle, seeing which way his foot points when I've got his

knee flex when he's on his front and the angle it makes with his thigh. Now if that's very high, it can be suggested that they have high tibial torsion and

(00:47:41):

That is important, although it's a rarer cause of hip issues. If you imagine somebody has pretty normal hips, normal femoral rotation, but they have high tibial torsion, you might notice that when they're walking their foot turns out a bit and most people would probably be comfortable doing that. But when they are then, for example, doing a sport or when they're running, most people can't run like that. So I know people can see my feet, but they will turn their foot forward and if you have tibial torsion, that movement can be quite significant and therefore the functional effect of that can be to lead to your femur pointing backwards. So it gives you functional femoral torsion and that can be a cause of impingement. So very rarely, but occasionally the solution to someone's hip pain is to derotate their tibia. I would not put that high up on your level of diagnoses. It really isn't that common, but it's understanding how the rotation of the limb plays into hip impingement and also hip instability problems is a very important part of the examination.

Steven (00:48:42):

Okay. I did ask you about, I mentioned over there pelvic torsion. When you do your examination, how far up the spine do you go in?

Jon (00:48:50):

I don't generally go very far at all.

(00:48:53):

I might, I didn't today, but I might have a quick look at their spinal mobility just from a stiffness perspective. So I'm interested if they have a very stiff spine and they don't really want to flex, extend and rotate, that's obviously important. I think also in younger women I might also just look at scoliosis and things like that as well, very briefly, but I don't really focus too much on that. I get a lot of functional information about their spine from their x-rays. And I think I'll pick up a lot of the motion from the way we take the x-rays. So one thing I do, again, predominantly in younger patients, and it's more of an interesting factor in women than men most of the time, is I'll take an AP radiograph for the pelvis and I'll do that when they're lying down. I'll do it when they're standing up and I'll have a look at how much the sagittal rotation of the pelvis. So that's forward and backwards essentially how much that changes because that can have a very important functional effect on your hip. I think in the other planes. So I don't normally think have too much of a problem, at least from a structural perspective in that zone. I mean

Steven (00:50:06):

Obviously I noticed you were checking ASIS levels on Asa's pelvis,

Jon (00:50:15):

That was more just for my limb length just to make sure I'm not missing the fact that he's sitting there with his pelvis wonky. But that doesn't necessarily play into my thinking about the hip pain unless of course we notice that they do end up having a significant obliquity. I would say that's quite rare actually in those planes to find a significant Problem.

Steven (00:50:33):

I think a lot of osteopaths and chiropractors find them all the time. I would say this sounds wrong, but if you try very hard to find things you often can.

Jon (00:50:44):

No, I completely agree with that and it's just not something that I've ever really focused on my examination with a view to it being a contributing factor I guess.

Steven (00:50:53):

Yeah. Should we have a look at these pictures and perhaps try and understand what we're looking at here?

Jon (00:50:58):

I think I've picked these two because I think these are the important things. The wide field views of the whole pelvis where you see both hips are generally very non-diagnostic. So one of the things is, is that if you do get hip MRIs or you order them in your practice or you ask patients to order 'em, it's super important that they get an actual hip MRI, which Asa has had, not a pelvis MRI because the pelvis MRI is almost completely useless for diagnosing hip pathology. So you need these small field views of the hips and those, what I tend to focus on and I find axial coronal imaging much easier to look at than sagittal imaging, but that's just what I've got Used to.

Steven (00:51:36):

And these were taken presumably with Asa supine, so does that matter?

Jon (00:51:42):

Not really, again, because I don't think the MRI is a functional exam, it's more of a detailed exam and actually there are a variety of other MRI scans which people positional ones you do, but the images tend to be really very degraded. So you need to be getting good MRI imaging in a proper MSK centre. Some of the time when people come from other areas, we end up able to repeat

Steven (00:52:08):

It. Interestingly, I mean, I don't know if we ought to mention who did this scan, but you did say that some companies are less reliable than others.

Jon (00:52:18):

They are, and I actually think it depends where you are in the country as well, what they have access to in terms of scanners and radiographers profiling, the MR scans, and that's a little bit outside my specialty, but

Steven (00:52:30):

Is it due to this high volume if you bring the cost down to get loads of people through the door, does that mean that they,

Jon (00:52:34):

I mean, I guess there are some scanners who will try and skip steps to make money. And it isn't to say they all do that at all. And it isn't the case that all of the kind of independent MRI providers outside of hospital do bad scans. They don't. We have our weekly MDT meetings with our radiologists and their favourite thing is to turn on the scan as the source of the problems and rail at the profiling and all the things. I don't really understand if I'm honest, but it is important for getting proper imaging. Yeah. Okay.

(00:53:08):

Let's look through the axial ones first. What I'm going to do is, so basically I'm going to try this so I can get this to work. There we go. Right. So that's basically the hip joint here. Now I'm going to preface all of this by saying that I'm not an expert around the muscular insertions of the hip. I generally leave that up to the radiologists because they look at hundreds and hundreds of these every week and it's very hard sometimes, particularly in the adductor compartments and the gluteal compartments to really understand what's happening. So I will often rely on my radiologist's opinion, whether that's the radiologist they get through the scan or I'll go and show my own MSK guys and ask them what they think if I'm not sure.

Steven (00:53:47):

And I think the report for this basically found very little.

Jon (00:53:50):

Yeah. So the report I think was basically no significant abnormality even though they have identified a couple of things, but they didn't really think there was much going on.

(00:53:58):

The things I tend to look at here, so we're right in the middle of the hip here, lemme just check. I've got my arrow on the correct bit. There we go. So again, coming from this is the top of the hip and then we come through the centre of the hip and down to the bottom. If you look at the, there's a thick black line at the front there. That's the hip capsule. Okay. That we're seeing there. And we're seeing the psoas tendon at the front, which is that little black triangle. Then you've got, as you come up, that little black, triangle in the centre of the screen there where the arrow is, that's the labrum. Okay. Which is relatively truncated here. And then you've got the thin grey line surrounding there.

(00:54:41):

There we are, this thin grey line, that's the articular cartilage. So when I look through the axial part of the scan, I'm seeing that the cartilage looks a little on the thin side maybe, but it doesn't look like there's bits missing. So, I'm not thinking here that there's a huge amount of degenerative disease going on, but there might be a mild bit of degeneration happening. And then as I come through, I'm also looking predominantly the anterior bone to see if there's any sort of cystic change in this area here where you start to see the first sort of problems when you get wear from, particularly from impingement but also from instability problems. And I'm not seeing a huge amount there. So although I did decry the MRIs a little bit for the shape of bone, it's actually quite good for looking at the femur and you can see that he's got this sort of the ball on a stick element there. So as you come up the neck, there's quite a nice curve into the ball there. There's not a flattening, there's not a big bump of extra bone, which would be a cam lesion, and that's pretty prevalent all the way up. Although again, as you get slightly higher, I'm not seeing a huge amount of cam lesion there. So there's sort of increase in offset here, which can cause impingement. So I mean that's what I generally get from the MR scan. I mean you've obviously got all the surrounding musculature, but as I said, nothing's lighting up over here. And if we come to the other side, this is my favourite set of scans. I seem to understand these ones better. So there's the back of the hips can see with the line tracking on the other side of the screen. Yeah, we probably should say on the right hand image, the top is anterior.

And so here what you've got is the patient standing facing you, that's the lateral side, that's the medial side there. So that's the pubic symphisis there in the middle. So if we come through that again, we're seeing that thin grey covering of the femoral head and the acetabulum, it's thin but it's not broken and I can't see any big defects in it as I come through. Again in the subchondral bone, which is this area just under here, we're not seeing a lot of cystic change. You get this very diffuse change in appearance depending on the bone marrow. So that's not really usually a relevant problem. So again, I'm not seeing a huge amount there. And again, the shape of the femur as we come through to the middle, again, you come up the neck and there isn't a huge bump of bone, the offset looks okay, and then I'm focusing really more on this bit here. So this is the labrum again here?

Steven (00:57:26):

Yes.

Jon (00:57:26):

So if we come back to the front, I study that in a little bit of detail. Again, that thick black line there, that's the hip capsule there, which again doesn't normally feature in primary pathology. There's the labrum. There we go. So there's a little tear I think in the labrum just here, just underneath. But also what you're seeing here is there's a rigid bone just above it. So as you get posterior in the hip, you do see this more, but we're not actually that posterior, as you can see from the line on the opposite screen. We're sort of just in the middle of the hip at this stage. So it feels to me like he's got a little bit of rim overhang there and then the labrum sort of underlying it, which may have a slight tear in it. Now that in itself shouldn't worry people, because, I can't remember how old you now Asa? 48, yeah. So if you scan all of Asa's friends and cycling mates, I would say two thirds of 'em will have a label tear and

most of them will be asymptomatic. So it's not an unusual finding, but it is something to flag up sometimes in someone who's got hip pain.

Steven (00:58:32):

But would he give rise the sort of pain he's described?

Jon (00:58:34):

Not really, no. I think that the labrum is almost always an effect, not a cause. And I think that's a really important thing to recognise. So finding a labral tear doesn't have to be completely unimportant, but it isn't the main reason for doing a scan. And I think that message actually does get a bit lost and not only amongst the people watching this, but also amongst orthopaedic surgeons. So I very frequently will get referrals which say probable hip pain, labral tear, they'll come expecting labral treatment, but that's not what you should be doing. You need to be focusing on what might be causing pathology in the hip that may lead also to a labral tear. And that again is these broad categories of impingement and instability. And that's what I spend most of my time trying to figure out. Firstly, is it the hip and we'll come to that variation in a sec, but secondary, if it is the hip, what is the mechanism? What is the patho mechanism of that labral tear? That's what I'm really interested in rather than the simple finding of the labral tear, if that makes Sense

Jon (00:59:41):

So I would say that would be my summary of the situation. now on a very simple level in the lateral hip, again, as we come through and we see the insertions of the gluteal muscles here, they're not really lighting up a huge amount here either. And they're certainly not seeing any tears or detachments, which I think I probably could spot, but it doesn't feel like he's got a lot of active tendinopathy in that hip examination. This was only about a couple of weeks ago wasn't it? Or maybe in a week and a bit. Yeah, so I mean that's sort of my summary of what I'm seeing for Asa. So if I was going to properly offer an opinion on his hip, I'd almost refuse to do that without an x-ray because I can't really appreciate the anatomy from this scan in a way that I can, that could partly be the way I've been taught to think about things. But I think if I saw an x-ray, what we might see is a little bit of what we call acetabular over coverage. So we might see the acetabulum just creeping over the head of the femur a bit, and that can potentially lead to some impingement that could potentially be a cause of hip pain.

Steven (01:00:45):

Why would that have come on so recently Even Though he's been exercising for years and years?

Jon (01:00:49):

I mean that's a really good question and I think there's an element to which also, as I said, I don't think the hip is completely normal. I don't think it's terribly bad, but it's not completely normal. So you could have this very mild thinning and very early wear and that combination could be what's causing the pain. But sometimes I think if we focus just on the impingement, because obviously you're quite right, most people's anatomy is what it was when they were 15, 16 really in men and even younger in women. So why it suddenly causes pain is never completely clear to me. It could be a little bit sometimes due to a change in activity, it could

be a change in motion, it could be a change in the muscular envelope in the hip and some abnormal motion within the joint. It's one of the reasons why therapy for impingement works is because you can realign the hip joint and the muscle control, but I think sometimes there's not a clear answer for that.

Steven (01:01:42):

Right. I know you said that MRI would not be your first option, but Robin's asked whether you'd want to see a STIR sequence in here as well.

Jon (01:01:51):

My radiologist might. I have to say again, it is a little bit about what I'm interested in from a hip perspective. And so again, the structure of the hip on the MRI is pretty visible, but it doesn't give you that functional positioning even so

Steven (01:02:11):

In my own experience, which is relatively limited in terms of referring for MRIs is that if you don't ask a STIR, you don't get it. And with lumbar spines generally, or spines generally because the company you're referring to will simply do what they're asked to do. Yes, they've got the information on why you're doing it...

Jon (01:02:28):

Well, I mean it probably explains why, I guess sometimes you get reports or you get images that feel a bit subpar. I mean, I suppose that I'm lucky that I work with radiologists who know what it is we're looking for, protocol their scans and do whatever it is they want to do so they can tell me the answers to it. And I've actually not ever delved that far into it. I trust them to protocol the scans and I will only ask for scans into places. So they'll either happen at UCH or they'll happen in the princess grace where everybody knows what I'm asking for what to do. That's a fair point though. It's more complicated when you're ordering them outside.

Steven (01:03:08):

Before you go on, if I can run through a few more questions, which you come in, I colleagues asked what the state of his lumbar spine is. We don't actually know that from the examination you did earlier on.

Jon (01:03:16):

No, I'm afraid I didn't do much. The detailed examination the spine, and we clearly don't have any imaging of It either.

Steven (01:03:21):

No. And I'm sure it's been done in clinic, but I dunno the answer to that, David, a different David I think has said what about tests like the Thomas test and FABER test

Jon (01:03:31):

Outdated as you see, I didn't do the Thomas test particularly. I don't think I really used that very much. I think the fixed flexion deformities in the hip with arthritic pathology usually fairly obvious whether they're helpful to my treatment decisions or not. I dunno, the specific tests that I do I appreciate are not as specific as I'd like them to be. So the FABER test is Good

Steven (01:03:59):

isn't that true of so many orthopaedic tests?

Jon (01:04:01):

Well, I think so. I think It is.

Steven (01:04:02):

Specificity is limited, isn't it?

Jon (01:04:03):

And so I think that what I try and do is I don't try and do multiple tests for the same problem. I don't try and do too many tests, but I try and do the same thing every time so that I feel like I'm appreciating the changes that I see more clearly. Now the FABER test is quite a good example. So the FABIR test or the impingement test is probably more reliable for a hip problem. So that's the flex abduction internal rotation. So really pushing the hip to its impingement limits. If that generates hip groin pain type symptoms, it's pretty reliably going to be coming from the hip, even if I can probably make that happen in most men anyway, the FABER test is a little bit less specific and you can get symptoms with sacro iliac pain. You can get it with posterior impingement in the hip, you can get it with Gluteal tendinopathy. So it's partly performing the test and partly evaluating the response and where they're getting the pain. That can kind of inform you as to what's going on. I don't have any better options at the moment.

Steven (01:05:09):

I've got a few questions about specific patients here. Lawrence says, I had a patient once, he did a fair amount of running when I tested his hips, they go backwards and forwards, I presume flexion and extension, but in any other direction it was virtually zero. His question is can people have certain ligamentous tension that can express itself like that?

Jon (01:05:28):

I mean the natural range of motion in people's hips is hugely variable.

(01:05:32):

So for example, I had zero internal rotation in my hips and very little external rotation - I have done my entire life. So when I was at school, I could never sit cross-legged on the floor. I'd have to sort of hug my legs to stay upright. So I am inherently very, very stiff and I'm sure that that is not primary pathology in my hips, although I've never checked. And so that makes me on the side of the spectrum as opposed to the hypermobility side of the spectrum. That said, having zero rotation inflexion is very unusual and probably suggests a little bit of

hip pathology if you have usually degenerative hip pathology. Now of course it's perfectly possible to have degenerative hip pathology and very little hip pain, but it will still have the stiffness effect that you might notice on an examination.

Steven (01:06:17):

Right. Okay. Sorry, I'm trying to run through those s and loads of questions here and I don't want to distract you from taking us further through your assessment here. Robin says, how much do you look at the aetiology related to the patient's activities of daily living, occupational postures and things like that?

Jon (01:06:35):

Yeah, so again, probably part of the problem of trying to take histories on camera as you're trying to remember if you've asked what you normally ask. But yeah, I think that's really important. And I would generally say to patients, is your pain and activity pain or is it a postural pain? And see what they say because of course you are relying on your patients to interpret their symptoms correctly. And some people are very good at that and some people are not very good at that. You just have to see what you get. But I think both of those are important partly for understanding what the mechanism can be partly for understanding what their expectations are of what they should be able to do.

(01:07:12):

So as an example, classic impingement pain will be deep squatting motions and often they'll describe that in the gym or difficulty sitting, they'll describe as you'll see, that I will preferentially sit a bit like this. And I think that's probably because I've got a bit of hip impingement, so I can't really tuck myself up because I get pain. So I'll sit and people will relax like that. And so they'll tell you if they sit in a deep chair, they get a lot of pain and things like that. Whereas again, pain like He was describing, that kind of night supine pain when you're lying down, that's very rarely hip pain. That's much more tendinopathic pain. And I think that my experience of lateral hip pain and Gluteal tendinosis is that is very common. People, they get pain at night and they get pain when they're lying down. I'm sort of pushing arthritic pain out here, but as well, because we're not really talking about arthritic pain. So so evaluating what people do and if they can tell you the movements that hurt and again, rotational movements of the hip playing sport for example, or even just turning in the kitchen or doing the hoovering, that's another sign of non arthritic hip pain. So it's kind of fine in straight line motion. I'll sometimes tell you that they can walk or run in a straight line, but when they go to rotate, that's when they really start to catch things.

Steven (01:08:27):

Right. Okay. You've said you'd want an x-ray with Asa, so I'm sure we can set that up in our clinic, but is that the next stage he needs to get an x-ray and then get a further opinion?

Jon (01:08:39):

Yeah, I think what I would do is I'd like to see an x-ray because I'd like to understand his hip morphology, but I think fundamentally we've got a history that feels a little bit of muscle pain, possibly a little bit of hip pain, maybe that hip pain wasn't hip pain, it was adductor pain, I'm not sure is the truth. So what I would be doing for, I'd probably be thinking along the lines of

doing some treatment and some diagnostics as in proper diagnostics and forms of things like injections. I mean I think that, I'm not sure how much of actual input therapy is probably not that much at the moment because we've discussed the problem with pain killers. He's not really able to take a huge amount of anti-inflammatories, which is a bit of an annoyance really because very useful in this situation.

(01:09:23):

So you can hit people with anti-inflammatories, do some physio or whatever therapy you want to do. And really the aim of that is to rebalance the muscles to offload the painful muscles and all the things that a lot of your colleagues will do when they work with patients. Then I think we're trying to decide really whether it's a muscular problem or hip problem, both problem. And sometimes if the imaging isn't clear and the findings aren't clear and particularly the examination isn't clear, then I would do some diagnostic injections and I tend to target what, I tend to target the hip first because really that's what I'm most interested in because that defines where our treatment pathways go. And so what I would then do is, so I'd probably reexamine him again in another situation if we can find some more clues and if we're still in the same place, consider maybe doing a diagnostic hip injection for him. So we put some, you'd usually get my radiologist do it under ultrasound, put a local and steroid into the joint, get rest it for a day, and then do some stuff that would hurt the hip and then get a sort of read on what's going on. And it wouldn't be simply diagnostic because of, obviously it works.

I think the level of problems we're seeing in the hip suggests that we're not thinking about being overly interventional here. We're thinking about maximising the kind of strength side of things and the balance side of things and just trying to get him back into training and so on and so forth. And particularly with the marathon coming up, if I suggested to him we need to do major surgery, he's probably not going to be very up for that anyway. And based onAthe responses to that, we could then potentially target other areas around the hip. So if we then focus for example, on the lateral hip pain, which I think is one of life's great unsolved problems, both in non-surgical and surgical situations, I don't really know an operation that works on the lateral hip pain, which is both good and bad for me in essence. But I find that with the lateral hip pain, what I'm talking about with patients often is that the solution is the therapy and the strength and the balance, but sometimes it can last a really long time.

(01:11:30):

And what you have to do in that interim then is try and take their pain away somehow. And so I have a sort escalation of treatments and the ones I generally use and people use all sorts of things. I'm up for anything when it comes to lateral hip pain, but generally I'm quite into shockwave therapy. I think that's quite good. If it comes to injections, I tend not to use steroid around the tendons, but PRP can be very good as well. I think it's one of the areas where that is quite helpful. And then any other adjuncts of pain relieving things that people want to try.

Steven (01:12:00):

So there's a lot of things that we could have Asa trying in the meantime, he's not going to want to rest too much given that he's got until April to get himself up to Marathon Standard. I mean, he's not aiming to break a world record as we heard earlier on before we came on air, but nonetheless, we've got to do all this stuff and still keep him training, haven't we?

Jon (01:12:18):

Yeah, no, exactly. And I think that the other thing that I often find myself telling patients that in the vast majority of situations, and I suppose the only one that jumps to mind when this isn't true, is a stress fracture. The pain that people are experiencing is not damaging pain. So the fact that you are experiencing that pain does not mean you are hurting your hip, you're not making it worse. Now that isn't to diminish the symptoms and the effect they have on him, but you can encourage people to find ways to train and exercise that doesn't flare up the hip too much. Obviously if you're doing something and it's really flaring it up every time you do it, then you've got to stop doing that and do something else for a while. But I wouldn't think you need to offload it for any other reason than that. And it's probably a good idea to find that balance because doing too much on it, provoking your pain, that's not good, doing nothing, that's not good either because you're not doing your muscular envelope any help by not using it. So you find that middle pathway.

Steven (01:13:10):

A few more questions, if I may. Sue's asked what you said the second likely cause of a labral tear was, you said one was impingement. What was the second one?

Jon (01:13:18):

So instability. So I mean this is kind of an hour's discussion in itself really, but impingement for people who come across it, E femm tablet impingement is the kind of classic term for it. And it's usually associated with either femoral cam lesions or what we call acetabular over coverage pincer lesions. But it's also caused by rotational problems in the hip socket. So sockets that point backwards, acetabular retroversion, femurs that point backwards, rotation lower down the limb, all of these can give you impingement, and that's a collision pain in the hip. And I separate that from instability. Instability is where you have poor coverage of the joint and hypermobility is often a factor in this as well, but you will get acetabular dysplasia or underdeveloped hip sockets or you'll have rotational problems in the other direction. So high femoral torsion, and both of those will lead to the femur coming out of the front. Both of these will lead to cartilage injury and labral pathology, but the mechanism is very different and the treatment is very different as well.

Steven (01:14:19):

Claire says, I have a patient whose lateral hip pain replicated on external rotation with the hip in flexion, she suspected gluteal tendinopathy. There was, however, a very bony end feel to the restricted external rotation. Could that indicate an impingement or would that more likely cause groin pain rather than lateral pain?

Jon (01:14:44):

Yeah, I think I agree. I think actually as I was saying when I was examining him, that movement of external rotation and even a little bit of abduction is quite a good test actually for lateral hip pain because it often catches the gluteal tendons if they're tendinopathic and makes them speak. Obviously there's always an end point to external rotation and some people have a lot and some people don't.

(01:15:07):

So it's also not a, strictly speaking, an impingement manoeuvre, you're causing posterior impingement. So there are situations where that will be painful because there's excessive bone at the back of the hip or you're getting impingement at the posterior element of the hip. I think they're quite rare. And so I don't think normally you would actually associate that with groin pain. The other time that can happen is if you have an unstable hip and you have literally not much external rotation but a lot of internal internal, if they've got high femoral torsion, if you push them into that position, you are going to aggravate their pain. But this is again, that wouldn't normally manifest itself as the lateral hip pain. That'll be more anterior Pain.

Steven (01:15:45):

And we mentioned stress fracture a few times earlier on, and it was one of the things Asa was worried about. You pretty much excluded the possibility of a stress fracture from here, haven't you?

Jon (01:15:54):

Yeah, I can't see any evidence that there's a sort of stress injury in the hip at the moment. No.

Steven (01:15:58):

Vicky's asked where would be the most common site for a stress fracture

Jon (01:16:02):

Usually. And again, the other thing I was saying earlier was that Asa is not a classic person for a femoral neck stress fracture. He's a muscular well-built chap and there's nothing in his history that suggests he's a high risk for it. It is true that you see them in people training for the marathon or excessive loading for sure, but they're normally women. They're normally usually quite fit, healthy, but skinny women rather than overweight women. And it is normally a sort of bone metabolism problem as well. It's underlying that. So you would see it normally in this area of the femoral neck, you can see it in lots of different places. And then you'll either see them on what we call the compression side here, or you'll see 'em on the tension side here with these latter ones being slightly more risk for displacement and problems.

Steven (01:16:56):

So not going To be full width, then

Jon (01:16:57):

It depends. So it depends what stage you see them at. Now in an MRI, you often see this huge amount of lighting up because it's more than just the cortical crack. But they can go all the way across, they can just be on halfway or at the beginning. It depends where you catch them in the pathology. Hopefully when you see them, they're never displaced because that is a very difficult situation.

Steven (01:17:16):

Yeah, it was an interesting observation from somebody, and I hope whoever it is will forgive me. I think the name is who Iuliulu, but I could be wrong about that. They want to know what we think. I think this is for osteopaths and chiropractors rather than for you probably Jon, about a technique which we've been taught by one of the world's best known osteopaths where you give the head of the femur a good old sharp tap to sort of free it in the hip, which tends to overcome a lot of these problems. And the only reason I bring this up is because I know that that technique was actually used on Asa a couple of days ago in clinic and it didn't make any difference. I dunno if you've ever come across it, but

Jon (01:18:00):

That is literally the first time I've heard about that.

Steven (01:18:02):

Well, it's interesting you and I can discuss this later, but when Laurie Hartman has described this technique to us in the past, he discovered it from a physiotherapist, but a chap who was scheduled for hip surgery in a few days time, a hip replacement, he did this technique on the patient and they cancelled the surgery. It was all of a sudden the pain went, the mobility came back, and he doesn't pretend to be able to explain how the technique works. It just does. And it's one of those weird things. Yeah, I suspect most of the viewers will know the technique I'm talking About.

Jon (01:18:35):

Yeah, obviously I dunno that and I couldn't explain it even if I did. I don't imagine, I think with a lot of things, I mean I do appreciate the fact that I think that we come at things from a slightly different angle sometimes than depending on the route of training from osteopathy and chiropractors as well. And we don't often think about things in the same way. I mean, I'm always very open to people doing whatever they think is right provided that they're not harming the patient. And people come to me and will tell me all sorts of variety of things that I've never heard of that work very well for them. And I think fundamentally at the end of the day that's all that really matters is I will happily advise patients on things that I think are dangerous. And actually that's more from our side of things of what I would call dubious injections being performed, things like stem cells and lipogens and all this sort of stuff rather than sort of manipulative or pain.

Steven (01:19:25):

You see a lot of that? I mean, we've had spinal consultants say that there's a lot of bogus practice going on.

Jon (01:19:30):

There is a bit of it going on. I, I mean, wouldn't say it's widespread and I think the vast majority of my colleagues are very sensible people, but it definitely happens and I worry more about that than I do about some of these other techniques, which I've never heard of. And as long as patients are doing things which are helping them get rid of their pain and get on with their lives, that's all that really matters.

Steven (01:19:51):

Well, for those people who don't know that technique, then they should be on that course with Laurie Hartman in June that I mentioned earlier on.

Bionic Dan says, what's your recommended recovery time off work following a total hip replacement. His own surgeon advised 10 to 12 weeks, but several of his patients who've had hip arthroplasty told him it's more like six or eight weeks.

Jon (01:20:13):

I Thought bionic might suggest he has an implant actually. So as we discussed before, I do most of my hips where I think it's feasible through an anterior approach. I think that leads to relatively good and predictable recovery. So for me it's about your work commute and what you do that really matters because I've had patients go back to work the following day because they're sitting in their beds in the hospital desperate to get back on their computers. I'm not sure I'd recommend that, but I would say you are two to four weeks on average on crutches. It can be shorter, it can be towards the longer end of that. And that's the limiting factor for a lot of people in terms of if they need to drive, for example. they need to be able to walk off crutches before they can drive unless they've got an automatic and it's their left hip.

(01:20:58):

If you are a very manual person and job requires you to do a lot of activity, it is going to be closer to six to eight weeks before you are getting back into the full swing of it. But you really have to talk to patients about what their job involves. And I generally say, because most people, if you're self-employed, it's kind of really up to you, but most people of course are dealing with employers as well. And you have to give your employer a fair warning about the length of time that you might be off for. And I tend to suggest you are on the side of caution because it's much easier to shorten your time away from work than needs to extend it

(01:21:30):

Equally, the pressure's on a self-employed person, we want to get back to work as quickly as possible. And I think that, and actually one of the risks of doing stuff too soon on hip replacements is that although the techniques are very good, the implants are very good, you don't want to overload your hip replacement early on whilst it's bedding in and fixing to the bone because that's a very important time. So I guess with the really active patients, we often try to reel 'em back a little bit more than encourage 'em to move forward. And so I would say to my patients that first six weeks you are aiming about getting back to day-to-day life. Don't push yourself too hard. six weeks to three months, you can get back in the gym. You can do off non-impact, non rotational and non plyometric stuff. So swimming, cross trainers, bikes, light weights, that sort of stuff. But wait till three months before you get back on the ski slopes, before you go and play tennis, the implants going to last you 25 years plus. So you can take that first three months and just do your rehab and take it easy.

Steven (01:22:30):

Okay. Couple of quick questions then before we finish. Robin wants to know if you have a specific test that would isolate the TFL?

Jon (01:22:36):

No, that's a difficult one actually. The TFL I find to isolate it. The good news about the TFL is it's a relatively superficial and easily identifiable muscle. And so you can normally sort of palpate it and locate it when you're examining it, rather than

Steven (01:22:51):

Most of them hurt when you're poke 'em don't they?

Jon (01:22:53):

That's the problem with muscular pain, particularly lateral pain. If I stab everyone in the side with my finger, it hurts. But no, I don't have a particular test for that.

Steven (01:23:01):

And Lawrence says is always somebody who shoves in long words. These things can late diagnose CDH or protrusion acetabuli produce the symptoms that we've looked at this evening?

Jon (01:23:11):

Yeah, absolutely. So two different ways. So dysplasia is a complex deformity, but essentially leads to instability in the hip from under coverage on both sides of the joint. I see a lot of that presenting even sometimes in late forties as acetabuli protrusio. It gives you a very deep hip that gives you impingement pain.

Jon (01:23:30):

They're two slightly different problems, but yes, they can really present at any time for reasons I'm not entirely sure of.

Steven (01:23:35):

Yeah, which I suppose is just one of those things that we have to live with, isn't it that not everything's predictable in medicine?

Jon (01:23:41):

No. And again, and I can't predict where they go afterwards, I often get asked, should I have it treated now? What's going to happen in the next five years? It's very difficult to answer those questions. And so I generally say to people, we treat your hip based on the symptoms that you have not on what's going to happen in five or 10 years. And if it's not bad enough now come back when it is and we'll see what's going on and we'll treat whatever that is at the time because it's very difficult to sort of know what's going to happen for people.

Steven (01:24:08):

lan's just sent in a quick question, going back to TFL and so on. He's asked, what do you think of Ober's test or modified Ober's test?

Jon (01:24:17):

So that's really more about the tightness of the IT band. So again, it's interesting. I don't see that a lot. I mean, I see a lot of IT band pain. I see a lot of lateral hip pain. I will, I didn't check it in him, as you probably noticed. It's typical, but you can do that. And again, it's just a little indicator that there's tightness and I don't think it's tightness in the IT band. I don't think it's a movable structure, but it will be tightness in the glute musculature and the attachments on either side.

Steven (01:24:43):

Okay. Well, you've covered a hell of a lot for us there. We've had just under 550 people watching. So clearly a popular topic. Really pleased that you came into the studio. I'm grateful for your time. Thank you very much for that.