Spinal Stability - Spondylolisthesis - Ref156SA

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SPEAKERS

Simeon Niel-Asher, Steven Bruce

S Steven Bruce 00:09
I have got probably one of the world's leading experts on trigger points to come in and join me this afternoon, that's Simeon Niel-Asher for the, I don't know how many times that we've had him on the show. Simeon, great to have you with us. Great to have such a world expert joining us in the Academy.

S Simeon Niel-Asher 00:24
Well you keep saying that.

S Steven Bruce 00:28
It is true, it is true. You and Dr. Bob Gerwin, you know, you are leading lights in the triggerpoint world. But also we've had you on the show before to talk about spondylolisthesis.This time, perhaps we're putting more of a trigger point slant on it, but I know that your expertise extends well beyond just trigger points. So you want to lead us off?

S Simeon Niel-Asher 00:47

Yeah, well, first of all, saying thank you again for organising this. Thank you, Claire and both of you for suggesting, because we had a little bit of tête à tête I think you say, a head to head on Facebook with some very interesting questions and some points about, you know, is there a role for trigger points in spondylolisthesis. And I, naively, said that I have an effective treatment, which I've been, I guess pioneering for a number of years, based really on my frozen shoulder treatment, the same ideas behind it about holding patterns and about releasing an algorithm specific sequences. And this was challenged by some people. So here we are, so let me put it out there. I'll put my neck on the block. And let's see what happens. Yeah. All right. Thank you Academy for all your hard work in this. So let's start. Well, I think, let's just go back to the basics, which is, what is a spondylolisthesis. And then what I really want to think about is what is the body telling us about it, what's the body trying to achieve. And sort of this go back sort of take it back to basics about you know, how the body responds to this because clearly, with spondylolisthesis there are four grades as we know, which we'll go through together is a fracture, slippage, dislocation of the, usually the lower lumbar vertebrae, usually L4,5. And it is a weakening or lysis of the pars interarticularis, which causes a slippage and the vertebrae, one slips on top of the other in different degrees, moving posteriorly and compressing the nerve bundle and often causing pain down both legs. So that's a really thing, bilateral buttock and leg pain. And the patient comes in with very specific holding pattern, don't they, they come in with, you know, tight bottom, and in this kind of sequence, which we're going to look at together. So there are really two types of spondylolisthesis, there's degenerative, which is the vast majority and traumatic. Of course, we also have retrolysthesis and I would like to suggest that this treatment is also quite good. Oh, sorry, my cat might be...

S Steven Bruce 03:17

We've had lots of animals on the show before, we quite like animals.

S Simeon Niel-Asher 03:20

Willow, I've been away actually, I was just in the UK for a few days, avoiding quarantine. So let's talk about the different types of spondolysthesis. I don't know if you've got this slide. Okay, before we do, let's go back to that question that was posed if you got that there.

S Steven Bruce 03:35

Yeah. So this is a first slide. This is the 16 year old male that we were going to look at. And

we have a slide on it. that somebody is putting up Tigger on the screen now.

S Simeon Niel-Asher 03:46
Tigger points. Yeah, well, it's quite sweet.

S Steven Bruce 03:50
So what we're looking at is a 16 year old male is 6 foot 8 inches, apparently, which is pretty good for a 16 year old, tall and lean and tending towards hyper mobile. He has been imaged in the shown to have a grade one spondylolisthesis with bilateral pars fracture, but he's asymptomatic, but he wants to play basketball and soccer.

S Simeon Niel-Asher 04:09
Yeah, so the question is, well, the debate was, do trigger points have a role to play with that. So let's just look at the types of spondylolisthesis first, I don't know if we've got that slide there. So if you go into the grades, I can go on to the types. Yeah. So there are six types of spondylolisthesis. A congenital spondylolisthesis, they tend to come out in younger people. So we might be dealing with someone of that nature. The ischemic type, which is the traumatic fall on the bottom and the one that we learned about at college a lot, which may or may not be the situation here. Type three is a degenerative, by far the most common spondylolisthesis, various groups like the Inuit people have them much more commonly, people with a very deep lordosis tend to increase with age, much more common.

S Steven Bruce 05:08
I should say here, Simeon that you're talking about types of spondylolisthesis, we had the slide up, which is showing the grades and just going to make a clear distinction between those two, just so people aren't confused.

S Simeon Niel-Asher 05:18
Well said. So we're talking about the types and then we're going to look at the grades together. Traumatic spondylolisthesis, pathological, which is obviously from cancers and metastasis, things like that. And post surgical. So these people have had stabilisations, or had laminectomies. And they go into a spondylo. So they're the kind of basic types and now we're going to look at the grades. So the grades are relevant, they're relevant, certainly, I believe, for trigger points, because when you're getting to a grade four, which is

more than a 75% slippage, there's, it's kind of gone beyond the physiological realm. I mean, you know, one of the big things that I love about osteopathy, I know you guys do is the the ability of the body to heal itself. And once it goes beyond a certain standard deviation from normal, it's quite hard to bring it back to allostasis or homeostasis, however you want to say, so great four, more than 75, grade 3, 50-75, grade two 25 to 50 and grade one, which is a 25% slippage. So actually, with grade one, they can be asymptomatic. And here we've got a young man who's asymptomatic. Now, interestingly, the longer they've had it, they've adapted, he's going to have adapted to it. So here we have our first clue. The guy is asymptomatic. What is our next slide? So let's go to the next one. So.

S Steven Bruce 06:49
We're looking at what the symptoms actually tell us, I think, which is slide five, Justin.

S Simeon Niel-Asher 06:53
Yeah. So here we have a young guy and he's asymptomatic. Now we know he's got a spondylo. We can hypothesise because we haven't been told. But it probably is that he's had some kind of traumatic onset. Maybe an isthmus type of spondylo. But he hasn't got any symptoms.

S Steven Bruce 07:12
When you say that, I mean, surely it need not be trauma, it just could be strenuous physical activity, couldn't it? Which, you know, where the muscles possibly cause the fracture themselves?

S Simeon Niel-Asher 07:22
That's absolutely correct. They can have a kind of weak pars interarticularis spondylolisthesis and that can be due to, I mean, look, again, you know, I'm not gonna go into the case, because I don't know that he's tall, right. So when we imagine he shot up, that maybe there was some kind of extra bit of cartilage in that pars area that didn't ossify properly, it's possible. There's a lot of different things. But suffice to say, generally speaking, when they are symptomatic, they tend to cause buttock pain and bilateral leg pain, sciatica, pain on their sort of depending on the nerve root, usually L4,5, S1, radiculopathy or nerve root irritation.

S Steven Bruce 08:01

So that slide we just looked at gives us what, six different patterns of pain. And I think we're working from L1 across to S1 along that diagram there, aren't we? And I presume that you could get mixtures of those or all of those all at once, if it were bad enough?

S Simeon Niel-Asher 08:17

Well, it's interesting. So we can have frank neurological compression, over irritation, and radiculopathy. However, we also have something else, which is muscular pain. And that often is, I believe, trigger point based a lot of the symptoms that are coming. And if we look at some of those trigger points, I think if we come to the next slide, actually, how can trigger points come, help, what we see is that we get an acute kind of onset pattern. Actually, that's the one after but let's just talk about, in the glutes, certainly the piriformis, certainly the glute minimus and medius and the maximus, because the person sort of coming in with a very much sort of a lot of gluteal spasm, and in fact into the hamstring and all of those areas can refer trigger point pain down into the lower extremities. So the point I was trying to make in terms of sort of nerve root irritation and looking at those nerve root patterns is that isn't usually in my experience where people feel the pain. They usually feel it in the buttocks and down the back of both legs, in the hamstring area, sciatica effectively, pseudo sciatica. So how can trigger points help? Well, we've discussed at length, some of my ideas about how, when trigger points are manifest, they manifest in a kind of holding pattern. Remember, we've discussed the idea of the body goes into an ancient shutdown pattern and it uses trigger points really as part of the wisdom of the body. I very much see that in a spondylolisthesis. So we have to remember that there are certain muscle groups that are trying to stabilise the lumbar spine. There's effectively the multifidi, the mutlifidus, which remember is the intertransversalis, the spinalis and the lateralis. So we've got these little small muscles that go up the multifidi from one to two segments, to three segments. And they really are the stabilising muscles. Now, they are postural muscles, they can get trigger points in them. Trigger points tend to refer locally to where you see those. But you have to imagine that they are working, they're really working hard to stabilise that fracture that slippage. So they are going to be switched on all the time around that area. And we also know that there's a kind of interplay between the ligamentous and the muscular in the lumbar spine that we get this interplay, generally in a normal spine where we get ligaments activating and then the muscles activate and the ligaments, we've talked about ligamentous creep and things like that. So these are all ideas that we've already well established osteopathically.

S Steven Bruce 11:12

Simeon, what do you mean by the ligaments activating?

S Simeon Niel-Asher 11:16

Well, there's evidence literature that says that actually, the muscles don't work on their own, that one of the reasons why pain can get worse towards the end of the day in low back pain is that you get a kind of ligamentous creep, which is that the, we get an activation of the posterior longitudinal ligamentum flavum and they start turning and working and then you get this, I think it's like something every 15 minutes, you get this interplay between the muscles and the ligaments, muscles and ligaments. So they play with each other. And they take over depending on the loads that you're putting on the body, of course. But in terms of the electromyology, that's what people have studied. So and the ligamentous creep is that as the day goes on, there's less fluid in the ligaments because they're activated and they start to ache a bit more towards the end of the day. So if we're imagining that we've got a slippage in this area, what we're getting is an anomaly in the holding pattern around that area. So instead of getting this nice fluid ligament muscle multifidus going on, we're starting to engage other muscles, much like we see in a frozen shoulder, an aberrant pattern, holding pattern. So what are those other muscles? Well, as I said before, the piriformis, the glutei, the hamstrings as well, to a certain extent, and the erector spinae. Now the erector spinae generally don't get involved with posture, they generally are electrically silent posturely. We call them the erector spinae, as you note, they do not hold the spine erect, the multifidi do that, the erector spinae are extensor muscles. So from flexion, to extension and powerful, and we're going to look at the three groups, the whatever longissimus, the spinalis. So we've got these wings of, I like to think my angel wings, if you like of erector spinae. And they start also to be engaged in a spondylolisthesis. So as I said before, we've got aberrant movement in that area, the body starts engaging in this ancient shut down pattern. So let's look at that pattern together. But before we do, so I just want to mention that Caroline Stone came up with some absolutely excellent ideas as well about just not mechanical, that there's kind of proprioceptive function and there's cerebro-spinal tract, and cerebellar functions as well. I don't want to rule any of that out. I think it's well said, and certainly possible. I'm looking at the mechanical. And really what I'm trying to share is my experience of dealing with this and having results. So one of the things that I pretty well established in my frozen shoulder treatment is that stimulating trigger points in a certain algorithm have proprioceptive functions that it changes the proprioception of the muscles. Now, the erector spinae have got huge amount of proprioceptive fibres in them, as have the multifidi. And again, one of the things about stability and switching off the stability. And again, one of the debates around this, where the trigger points can have an effect, is by working trigger points in a specific algorithm, and in one direction only. Again, it's something we looked in the shoulder, remember, we go from the elbow to the deltoid to stimulate but in fact, we're going exactly the opposite, this time we're coming caudally,

rather than cranially we're coming downwards, is that we can stimulate, the trigger point has a proprioceptive function around that spondylo and it actually increases the strength and stability around it and that is the core of this debate. So there are reflex stability pathways, things like the Konstam reflex, we looked at that again in the shoulder when you're pushing against the door, and then you let their arm float up on its own. These are passed down reflexes, again, around in the lumbar spine as well. So we're getting reflex change, we're getting a holding pattern, a spondylo holding pattern. And I think the trigger point is very much part of this, the trigger points are very much part of the story of going in there and helping.

S Steven Bruce 15:28
Certain people would poopoo what you're saying I'm afraid.

S Simeon Niel-Asher 15:31
They already, I saw them poopooing it on... So let's look at the holding patterns. Let's come to the next slide. So look. Here we have the holding pattern.

S Steven Bruce 15:42
There on slide seven now.

S Simeon Niel-Asher 15:44
So this is the holding pattern, really, this is what the body wants to do, much in the way we looked at the holding pattern of a shoulder, which is sort of the default, kind of lifting the shoulder and holding it into this slim position. This is what's happening. Now let's analyse it together. And of course, there are degrees of this, depending on the degree of slippage. But we can see what's happened here is a flattening of the lumbar curve, this kind of anterior sort of leaning forward, spasm of the hamstrings, flexion of the knees, and incredible tension and spasm around the glutei, so this is kind of puckering around the low back, especially in the degenerative ones as people get older, you can really see that. Now, what that tells us is that certain muscles are working really, really hard, right? They're working really hard and working in a way they're not supposed to. Now, when muscles work hard, and work in ways they're not supposed to, they can produce trigger points. So very much part of what I'm trying to say is that the trigger point story is very much involved in these holding patterns. So let's have a look down. Let's come to the next slide. Where are we? So the Phalen-Dickson sign is the name that we give the holding pattern of a spondylolisthesis. And this is buttock, sort of bum out, sort of a hyper

extended lumbar spine, flexion of the knees and all of the muscles that are involved in that and around that.

S Steven Bruce 17:14
How specific is that Simeon, do you know?

S Simeon Niel-Asher 17:18
Yeah, it's very specific. It's actually pathognomonic. The Phalen-Dickson sign is pathognomonic to spondylolisthesis to some degree. And again, we're talking here about a sort of a type one, a grade one of slippage. So we're going to have less so. But in a grade four, that's what you see walk in the room for sure. Yeah. So you're with me, so I'm trying to build up a kind of logic here. There'll be some degree of, depending on the extent of that holding pattern. Now. Again, we're looking at the muscles, again, the gluteus maximus, bits of the minimus, medius, the piriformis for sure. And we know that when the piriformis starts getting tight, it starts causing, it can cause pseudo sciatica, or sort of sciatic pain, irritation. And this is why you're getting it bilaterally. It isn't necessarily a nerve root irritation, because an NRI would be much of those sort of dermatome patterns that we're looking at. So it doesn't really fit into that, it tends to fit more muscularly. Let's just carry on in the next slide.

S Steven Bruce 18:23
Last night we had the one legged hyperextension or spondylolisthesis. Now, that to me looks like a really dodgy thing to do with someone who you think might have a spondylo.

S Simeon Niel-Asher 18:34
Yeah. I don't disagree, by the way. I wouldn't want to, yeah, generally speaking, they come in with a diagnosis. Not always, of course, sometimes we send them off for the X-rays which brings us nicely to the next slide. So what sort of X-rays are we looking at, are the obliques. So if you suspect a spondylolisthesis you're going to ask the doctor gently to say, listen, I think this patient's got. Now the symptoms, of course are clicking in the low back, generally we don't get clicking, unless in usual lumbar spine issues. So if they're starting to feel clicking or clunking down there, you're pretty sure that there might be something going on in terms of stability. And we're going to ask for an AP, a lateral and an oblique X-ray and it's really the oblique, that's the one we want. I actually prefer X-rays to MRIs for this. That's just my particular, I read a lot of MRIs both for X-rays or actually CTs, but the X-ray is good because we're going to see the oblique fracture of the Scottie dog neck, you

know, that's the, we're going to see an our X-ray. In terms of CT, an MRI, let's come to the next slide. They are helpful because you can grade the amount of spondylolisthesis and the amount of discoaphy there as well. So again, you know, good slides here, we can see the slippage, we can see the disruption to the disk, this rupture of the annular fibres. And one can imagine what's happening now, again, I keep going back to that question, but the guy is asymptomatic, right? So if he's asymptomatic, he's not getting, even if he's got like a 25% slippage, there's clearly, his body had adapted to it and compensated for and how, you know, how's that happened? It's clearly through the mechanics, through the structures, the erector spinae, the multifidus and the other adaptive muscles that we've discussed together so far.

S Steven Bruce 20:39

I think that pathological sieve is quite a useful one, Simeon, don't you?

S Simeon Niel-Asher 20:44

You leave that up then and I'm just going to talk about what the symptoms are okay? Because, again, just to go over them again, we've got either congenital degenerative or pathological, so congenital or traumatic, you know, those are the kind of types of spondylolisthesis, so some of the symptoms might be, and again, have a look at this pathological sieve and as I'm talking about the symptoms, you can sort of start playing with it yourself. Difficulty standing straight. Back and or buttock pain, pain that runs from the low back down one or both legs, weakness or numbness in both legs, difficulty walking, leg, back and or buttock pain that gets worse on bending over and twisting. Rarely, we get a caudaequina kind of symptoms. Morning pain and stiffness, pain getting up from a chair, pain that gets worse as the day goes on. Poor tolerance for activities requiring excessive spinal loading, including running and jumping. But a large percentage of patients with spondylolisthesis are asymptomatic. A large amount of percentage of patients are asymptomatic. So right, so what are the symptoms telling us? So first of all pain, so pain is a signal that something's wrong. Pain is part of our protect and defend mechanism, we discussed this many times and a spondylolisthesis, back pain is the most common symptom and this is mainly due to an overload of the erector spinae muscles, not the multifidus but the erector spinae because they are starting to do a job they weren't designed to do. They weren't designed to stabilise the lumbar spine. They're designed to extend the lumbar spine, and you're asking them to work all the time. So they're asked to do two jobs at the same time, the normal job is of maintaining postures, the multifidus and also the erector spinae plus they're asked to stabilise around that fracture site. So they get tired, they get fatigued and especially as the day goes on. So this posture, this sort of Phalen-Dickson posture leads to glute maximus, medius and

hamstring muscles becoming engaged to protect and stabilise the lumbar spine and their myofascial attachments. Overtime this leads to chronically tight clenched buttocks, often with spasm in the buttocks. And this clenching can really be seen clearly during examination, gluteal muscle spasm and tension can turn into piriformis muscle, which again can press on the sciatic nerve causing pseudo sciatica. Okay, just a few little facts. While we're here, I was gonna have a little look, there's some interesting facts.

S Steven Bruce 23:47
One thing that occurs to me, I mean, we probably haven't got time to go through all the individual slides of trigger points. But could we bring one up just an illustration of, do you want to do glutes and hamstrings? Should we look at that one?

S Simeon Niel-Asher 23:58
Yeah, we can look at those first.

S Steven Bruce 23:59
Could we get slide 17, Justin, that one would give us the gluteals. Okay, so on this one, we've got two bright red patches in the buttocks and then a sort of a red shaded area running down the leg.

S Simeon Niel-Asher 24:16
Yeah, so in fact, we probably just, why don't we just start with the slide 14, we just go through them quickly because I'll just show you that because taken of course from Trigger Points 3D, the ultimate trigger point resource.

S Steven Bruce 24:28
Well, Simeon's glossed over that but Trigger Points 3D is of course, one of the services that Simeon provides, which is a fantastic resource for looking at trigger points, as he says in 3D putting it in context, but we won't go into that now because we haven't got much time left, so, Simeon.

S Simeon Niel-Asher 24:44
So let's start with the erector spinae. So we can see this is the longissimus thoracis pattern here and we can see how it radiates into the low back and into the buttock. And this very

much is a spondylolisthesis pain. You know, this is really the pain that they're coming out with, erector spinae pain. Let's look at the multifidus now and on the next slide, multifidi is actually showing you that the pain usually is local to the area of dysfunction. So, L5, you're going to get L5 symptoms, T2, you're going to get T2 symptoms, it generally doesn't spread up and down. However, you can get symptoms into the kind of sciatic or pseudo sciatic kind of symptoms. I know people don't like talking about sciatica, do they, we don't, osteopaths generally, but we talk about it a lot in Israel. The piriformis is an interesting, so have a look at the next one. Classic spondylolisthesis pain, pain down the back of the legs, pain in the buttock, classic referred piriformis pain, spondylolisthesis. Again, the glutes and the hamstrings tend to be locally. But again, as I said before, you've got this aberrant, mechanical holding pattern where these muscles are being asked to do things they're not designed to do. They're being asked to hold things when they're designed to move things. And these are classic conditions for generating trigger points. Nearly there.

S Steven Bruce 26:12

Simeon, the right hand side of the slide, which has just disappeared. At the top of the muscle in the buttocks there, can you put it back up again, please, Justin, thank you. There is a white dot. Is that the trigger point?

S Simeon Niel-Asher 26:26

Yes, generally speaking, where the blue dot is is where you'd find, maximally find the trigger point. And the one on the left is the referred pain pattern. Let's just go to slide 19 now, I believe it's 19, the one with the glutes and the hamstrings? Is that your 19 as well? Okay. So look at this. So hamstring trigger points is absolutely classic, spondylolisthesis in my experience. So again, I think it can be well argued that the adaptive process, the holding pattern, the Phalen-Dickson sign, is going to be manifest in tension in certain muscle groups, which the muscles are being asked to work in a way that they're not designed to work in and trigger points are a natural result of that kind of activity. So then, of course, the question is, can we use trigger point treatment to effect a change? And if so, how does it work? And does it work? So I guess let's come on to that now. Because this is the hot potato. So for those of you that haven't seen my stuff on frozen shoulder, this is a little bit odd, some of you will actually be using the frozen shoulder treatment. And again, I published it extensively, you guys have got it, we're running courses, Steven, his amazing team at the academy on my UK sort of course people, which I'm very grateful for. And hopefully we're going to start again this year after this COVID fiasco, horrible, anyway. And some of the things that I demonstrate are how we can use trigger points to have an effect on the nervous system over and above what we're thinking. So let's come to slide number 20. So slide 20 is talking about some of the effects that we can have or produce

with trigger points. We know that trigger points have an autonomic response, we know that we can get conjunctivitis in the sternocleidomastoid for example, reddening of the eye, we get conjunctivitis, we get disequilibrium or vertiginous kind of symptoms from the sternomastoid. We get conjunctivitis from sternomastoid trigger points. But the, if you remember, when we're treating frozen shoulder, people have got an intense spasm of subscapularis, they're holding their arm here. And as you remember, Steven, we're going to inhibit through infraspinatus. And what happens is as you, you get this reciprocal inhibition, and we get this kind of post isometric relaxation. So we're activating one trigger point in the infraspinatus to treat this subscapularis because of the Hilton and his law and the inhibition compression, reciprocal inhibition law. So, again, what we think we're doing during treatment isn't necessarily what we're doing. But again, what I'm thinking of is not specific muscle groups, but we're thinking about neurology and how we can change the feedback from these aberrant holding patterns to the brain, to get the brain to start to engage in a different way. So here we have someone with this kind of, walking in with this pattern. And this is a treatment I've been doing for about, I don't know, 18 years, something like that. I do it more and more lately. And quite frankly, you know, there's evidence based medicine, as I'm sure millions of people are going to throw at me, the academics. And then there's medicine based evidence. And I will propose the latter, which is this medicine based evidence, this is evidence. And again, you know, I've been involved in this debate over the frozen shoulder for years, and I've done randomised trials. And I'm just going to put forward what I have found to be incredibly effective, like uniquely effective, and we will be running courses and sharing it with you guys, more than happy to do that. I just want to share it. So let's come to slide 21. So this is the algorithm that I use. It's an algorithm, step one, we're going to work from one direction only, from the upper, sort of mid thoracics down to the lumbar spine. And we're going to be doing deep stroking massage of the erector spinae. In fact, it's probably not both sides, it's going to be unilateral. So I'll come down, it's not quite right, didn't have all the right pictures. But we're going to come down first of all the right side. So we're going to work down from the right. And we're going to come all the way down to the sacral crest, even some of the sacral fibres. And we're going to come and we're going to do that three or four times. Now, really, what's key here is the amount of force and velocity that you're going to use. Because much like the shoulder, we're going to be imagining we're squeezing toothpaste from a tube. We're not here to massage and to release things because obviously, the muscles are trying to stabilise the area, the last thing we want to do is to destabilise it by doing kind of deep massage. So really, what we're doing is slowly. So step one, ipsilateral, working in one direction only, three to four deep strokes slowly, squeezing toothpaste from a tube, instead of trying to relax the muscle, what we're trying to do is stimulate it and get some kind of engagement in the fibres. Step two, okay, so let's go to the next slide. Okay, so what we're going to then do is I'm going to pause at the bottom of that, if I use an elbow either side, we're going to pause down at the level just around about the

ileo, sort of sacroiliac joint. Step two, is what we're going to do then, and step two is really important. Step two, again, with a patient prone, I've shown it here, this is not ideal, but anyway. We're going to come in and we're going to aim, we're going to hold through the piriformis and we're going to aim towards the opposite, L4, L3, wherever the spondylo is.

S Steven Bruce 33:15

So we've got this on slide 24, Justin.

S Simeon Niel-Asher 33:18

Yeah, slide 23 or 24, yeah. Okay, so we're going to hold that position. And we're going to aim the force towards the opposite side of the body where that spondylo is, either L3, 4, usually L4. And what will happen is, as we hold that force, we're driving through the piriformis, we're gently sort of inhibition compression towards the opposite side, often you'll get a little pop as the spondylo sort of corrects itself or drops back in. And we're going to do that, again, the whole procedure, we're going to work three times. So we're going to work right lumbar erector spinae all the way down, and I'm going to come in to the left piriformis, glutes, trigger points, hold it inhibited, aim towards the opposite side of the spondylo. And then we're going to do the other side. And we're going to do that in a sequence three on one, three on the other. And I'm going to do that two times. Okay? Again, this is an algorithm. Much of it depends on the velocity and the force. And I'm just telling you now, you're going to go slowly, you're going to feel those fibres as you come down, you're going to engage them much like squeezing toothpaste from a tube, you're not going in there to relax anything, you're going in there to create a kind of neurological profile. Every time we touch something we stimulate receptors, and we're just engaging and then when we're on the opposite side, usually, I stand on the opposite side, and I usually use my elbow pretty much like we've got there, I hold that. It's a little bit around piriformis, top of hamstring, we're aiming to the spondylo on the opposite side. And then we do that three or four times. And then we do it twice. Okay. And then after that, with the patient prone, we usually finish with something very straightforward. I think we showed it in one of our videos, didn't we, in on one of your lectures that we did, I think we did it together, which is we sort of hold, we start at the buttock, start in the lumbar spine and we're going to work our way this way. So we're going to start higher in the buttock, lower in the lumbar spine. And we're just going to work our hands apart on the opposite sides, just doing some inhibition. And we're going to flip the patient on their back and do a little bit of sacral holding, if you want to do some just there. And that is it. That is it. That is the magic cake. There's nothing more and there's nothing less.

S Steven Bruce 35:45
I've got a lot of questions for you, Simeon.

S Simeon Niel-Asher 35:46
I bet you have. So let me finish by saying this. Slide 26. I tell you, I'm putting my head on the line. So this technique is not about massage. This is about stimulating a neural sequence rather than making sure that you've stretched out every single muscle that's in pain. In the case of spondylolisthesis, it's not a good idea to completely relax all the muscles, because they're doing the important job of holding and protecting the spine. We are aiming to use the trigger points as feedback inputs to change the relationship between the brain and the holding pattern around the spondylolisthesis. And there I rest my case.

S Steven Bruce 36:33
Well, certainly you're not disappointed. Not only will we send you copies of the slides that we've shown, but also there's some other slides in the deck which include red flags and exercises for this but I want to get to the audience questions before we have to shut off. Several people, Simeon, have said that they can't lie their patients prone because of the spondylo. So can we use your algorithm in any other position?

S Simeon Niel-Asher 36:57
Yeah, you can do it sidelying. I often put pillows around people, in every single patient I put a pillow under the ankles anyway. And again, it depends on the degree of spondylolisthesis, but you can do it sidelying, for sure. I mean, it's quite difficult to come to the opposite buttock when you're sidelying, but you can do it if you put your hand underneath and inhibit through and just rock gently. But yeah, you can do a sidelying, but prone is preferable.

S Steven Bruce 37:26
Okay. Gary says have you ever noticed any link between spondylolisthesis or disc bulge and hip bursitis?

S Simeon Niel-Asher 37:38
Well, I mean, there is a link, right? We just saw the MRI, you know, when you've got a

spondylo, you've got a shearing force through the annular fibres of the disc and they bulge. And of course, when you've got the Phalen-Dickson sign, you've got the hips poking backwards, which is going to mechanically irritate the bursa. So for sure, there absolutely is a link, the degree of which is, you know, it varies from patient to patient.

S Steven Bruce 38:04
Okay, thank you, I suppose we ought to return to our 16 year old patient that we started with, and Joanna has asked whether you would limit his activities because of the spondylo. Bearing in mind, of course, he's asymptomatic,

S Simeon Niel-Asher 38:19
I would say, I would have to know more about it. But as a broad brush stroke., if you're going to work with these algorithms to improve the proprioceptive function around the lumbar spine and that holding pattern, you will automatically get a reflex improvement in strength and stability around the area. And then by working with exercise, you will reinforce that. So I would actually actively encourage it, as long as you feel that you're getting a nice stability from the work that we're talking about.

S Steven Bruce 38:58
Right. Okay. There's an interesting thing from Scott here. Scott says that GPs are not allowed to specify 35 degree obliques and if they do, they'll be ignored by the labs, who will take the standard 2. I wonder if rather like when you're asking for MRIs you need to tell them what it is you're looking for, so that they know that that's the angle that's necessary because they should do that, shouldn't they, they should know what's needed.

S Simeon Niel-Asher 39:20
Yeah. Fair point. Fair point. Yeah. You know, I'm a little bit out the loop in the UK.

S Steven Bruce 39:29
Yeah, well, I suspect that most of the UK systems are in turmoil at the moment so God knows what happens. Ian says is multifidus supplied by one spinal nerve segment, if the muscle is switched off, can that be related to chronic low back pain? Yes, okay. Lawrence says muscles aren't being used as stabilisers in a spondylolisthesis, well, only in a minor way, hamstring tightness, etc, all due to traction on nerve root or nerve roots.

S Simeon Niel-Asher 40:02
Is this Lawrence Butler?

S Steven Bruce 40:03
No.

S Simeon Niel-Asher 40:04
Okay.

S Steven Bruce 40:05
I choose most of the time not to give surnames because I don't think people want that.

S Simeon Niel-Asher 40:10
Okay. I'd like to see his evidence for it. I'm not questioning that he's wrong, traction on nerve roots? Yeah, I mean, you're going to get traction on the roots. I mean, I don't know if you've got a grade one spondylo, how much traction are you going to have on the nerve root, or even have it on the theca, on the sheath, on which nerve roots you're going to have it? You know, not sure what to say about that. I can see that if you've got a grade 4 spondylolisthesis, and you've got someone that's in a kind of chronic state with ridiculoapathy. But if you've got an asymptomatic, again, just common sense, you just have to look at that Phalen-Dickson sign, which is the ring pattern, and you can see that the muscles aren't doing what they're born to do, right? I mean.

S Steven Bruce 40:59
Yeah. Somebody who remains anonymous says that he or she suffers with L5 spondylolisthesis and lisis as well as other issues, which people will stop moving my questions around while I'm talking. Because he's now gone, where is it gone, says they often cause a significant nerve root compression, and she finds that or he finds that stretching the hamstrings and lats helps to reduce the symptoms significantly.

S Simeon Niel-Asher 41:25
Yeah, yeah. Well, you know, I feel for you, I would say that, you know, get someone to try this technique on you. It's, I think I probably successfully treated maybe 5, 600 cases now

that I feel ready to sort of start researching and publishing it.

S Steven Bruce 41:49

Just the audience that are questioning, Simeon, so the cat as well. Last question, Alex has asked whether you could achieve the same effect using a percussion massage gun in your sequences.

S Simeon Niel-Asher 42:04

Funnily enough, I've used a percussion massage gun for the first time ever on Sunday on a patient and until I used it, I thought, what a load of crap. But actually wasn't half bad. I palpated the erector spinae before and after on a guy that had some sort of chronic lumbar pain, and it definitely softened it. I don't know, I'm a bit old school, I like to feel the change in the tissues. Specifically when I'm engaging the erector spinae, I'm really feeling for change as I go from, you know, head to buttock I'm really holding and sort of letting go as I'm going down deliberately. And I just think that the degree of that, I did get some proprioceptive sensation through the gun, you can definitely feel you're getting feedback from it. I mean, it's possible. I'm not an expert in it. I just, I don't know, I'm bit of a smug really, I just like to use my elbows and thumbs.

S Steven Bruce 43:12

Yeah, sure. I would imagine that for the inhibition which you teach in regard to dealing with trigger points that you need to have that feedback and you need to feel where it is and how it's responding, don't you, as well as keep it going constantly rather than have the percussive element.

S Simeon Niel-Asher 43:26

It's not good for inhibition. Yeah.

S Steven Bruce 43:28

Yeah. Simeon, we're out of time. And there were several other questions that I haven't had time for. I just want to acknowledge Gilly Woodhouse's forum Osteopathy Works, because that's where this question was first posed by an Australian osteopath Joya, probably still asleep at the moment, but very generous, apparently in sharing knowledge, as is Simeon. So somebody has been great having you on the show again to share all of this.

S Simeon Niel-Asher 43:52
He's a great guy. I'm on a couple of groups with him. And he's a terrific fellow.

S Steven Bruce 43:56
Right, good. Excellent. Well, we ran through an awful lot there. We didn't have time to cover an awful lot of what was in your original slide pack. But if you're happy, we'll push that up as a handout because it was mainly the exercises and things and red flags. And I've no doubt we'll be seeing you on the show again sometime in the not too distant future because you're a frequent offender.

S Simeon Niel-Asher 44:16
Thanks very much for having me. And thanks for allowing me to sort of populate slightly different views.

S Steven Bruce 44:23
Well, that's the purpose of what we do here, isn't it?