Transcript

Spiral Stabiliastion – ref 268

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Steven Bruce
Good evening, glad you could join us. It feels like ages since I've sat in this seat even though it's probably only a couple of weeks now. But I have to thank Claire and Brooke who've been covering for me on two of the lunchtime shows. While I've been busy with jury service. I was hoping that that jury service would have been over by now. But sadly, due to the unavoidable court delays, it looks like we'll be finally getting through it tomorrow. And I know it's a worthwhile thing and all that but I'm into my third week of this and the novelty has definitely worn off and I only got back a couple of hours ago from today's session. Anyway, so what have we got for you this evening? Some good practical stuff. I hope things that you can use in clinic straightaway backed up by some decent science and some robust research. I say that I actually have no idea but I've got two experts in the studio with me, who will enlighten us all over the course of the next 90 minutes about the concept of spiral stabilisation. They are the husband and wife team of Karen and Anthony Padgett. Karen Anthony. Good evening. Now I've given them your names, but of course Anthony, you've got something like 35 years experience as a physiotherapist, haven't you? specialist training in orthopaedic medicine? You've worked with high level athletes. And now you are certainly the studio's expert in spiral stabilisation, probably one of the national experts I thought so we'll we'll get the background on that from you shortly. Karen, welcome to you as well. You started out as Pilates instructor. I think having a bit you've now got what 15 years experience as a sports and rehab therapist and the two of you work as a synergistic team I believe in fixing people through spiral stabilisation. Excellent. So you're the experts.

Anthony Padgett
Well, I'm flattered to be called an expert.

Steven Bruce
We had a discussion about what the definition is.

Anthony Padgett
X is an unknown quantity and a spurt is a trip under pressure. So I'm not an expert that I'm very passionate about what I do and how we do it. So

Steven Bruce
feels like a bit like drip under pressure when you're in this environment. So was your passion before this? I don't know when you discovered spinal stabilisation but was it was it sports medicine and

Anthony Padgett

I certainly worked at sports level sports medicine for a while. But if I'm honest, I got a little bit bored of it. It seemed like I was just getting those people trying to get another 2% better or so I quite liked the idea. That's a general physiotherapy practice with elderly and the young as well. So I kind of moved away from that a bit. We came across spiral stabilisation as a at a event that

back pain, back pain. Sure. Okay, that was cool. And I gotta

Anthony Padgett
say I was at the point where I was probably 3025 28 years into practice thinking, what else? What else is there? And I was looking for CBD. And in this corner was this research. Dr. SHM. Isaac is a medical doctor from from Czech Republic. And he caught sort of caught my eye and I don't know why. But he's esoteric, chatting away to him. And we got chatting for a long time. And I started doing a couple of courses. And then currently I spent about a week in in the Czech Republic in Prague. Just going working at his at his rehab centre.

Steven Bruce
What sorts of a medical doctor was he?

Anthony Padgett
I think as a general medical doctor, he's both his daughters, also medical doctors. And they now exclusively teach and train with a spouse mobilisation, but it kind of it sparked my interest because I want patients to be independent of us not dependent on us. And if I can get get them to a point where they're hopefully moving a bit better than maybe they now need to be trained. And I can't be everything to everybody and I don't want to be My, my skill set is not in sports training. And certainly there are more and more people wanting to do things like strength and conditioning coaches and I, I realised that that's not my thing. So I want to get them to a point where they're moving better and hopefully less pain and then can come in can come in or any VAs sports therapists to teach them more functional exercises which they can then extrapolate and use at home. Right. And this This worked as far as I was concerned.

Steven Bruce
Yeah, I think a lot of us are striving for that. One way or another, aren't we? It's that idea of we want to get patients out but we also we've, a lot of us have recognised we can't be masters of every No. No quite and, and I've, I've always felt rather embarrassed by my lack of rehab expertise in the clinic and like you because you're a manipulative beggar I was going to physio physiotherapist, I don't mind doing the the joint mobilisation and manipulation and stuff like that. But when it comes to the exercise that come with it, come afterwards, I can be very generic, but I'm not nearly as specific as people like you, Karen, or you had and if you know him, there's an osteopath called Matt Walden, who's very good at this sort of stuff as well, you know, so

Anthony Padgett
I came from the training where it was a 10 repetition maximum. And that was how we started to train people went, Well, that means nothing to me. So yeah, so when finding out from Dr. SHM, Isaac, the sort of some background behind this, there's some pretty good neurophysiology behind this, you know, this, it's, it's lengthening the sub short muscles, it's strengthening the weak muscles, and by using Reciprocal inhibition, then you will know that

the agonist will will switch off when you work in the agonist. So there is some science behind it. There's no

Steven Bruce
sound, in many ways, it sounds and I have done very little research. And, in fact, I'm often told never to do too much research by my wife, Chris. He says, If I do, I just forget to ask questions. But from what I've seen it, there's, there's a sense of familiarity about this in terms of, say, fascial, trains, and so and so on, because of the spiral patterns and the crossover patterns and things like that. And maybe we'll see some of that later on. It'll be interesting to see what's different about it?

Anthony Padgett
Yes. It's all it's all conceptual, really. I mean, it's we like to think this, these naturally occurring spinal links, but then muscular links, but we don't actually know that they are. But the thing that I liked about him is he could sort of he did sort of EMG studies, and could see that the vertical chain that we use when the static gets switched off when it's not using a spiral stain spiral chain. And his whole thinking is that if you use a spiral chain in activity, then you don't need a lot of weight behind that chain to get it working correctly. So it's not about pushing hard weights, it really is using long elastic cords, which on the face of it, you think, really. But you can make people work very, very hard with these, which hopefully will show a bit later on. Yeah.

Steven Bruce
How long did it I suppose a better question is how long would it take someone to train to use spiral stabilisation if they wanted to be a master of the art

Anthony Padgett
and master the art interesting? A black dig

that you ever get to be a master. Because I think as you start to work with different people with different conditions, you're learning with them anyway. But from my perspective, somebody who teaches on reformers, Pilates reformers, and the way I teach spiral stabilisation, this elastic cords work that will show you sits very very well with with the kind of correction and the postural correction and the improvement of someone's everyday function. So I mean, it's, it's it works with people who are post surgery and just need to be able to walk without pain through to, as Anthony said earlier, the, you know, professional athlete who wants to gain one or two or 3% more from their sport. And yeah, it's a constantly evolving thing. Whether or not you're somebody who has a fitness or personal training background, I think the basic level is it's a much more basic understanding of how to get the body moving again. And it's something that we can start for people who are still in wheelchair, perhaps, but regress to standing, and then to bring in other props and stepping up and down on things. And

Steven Bruce
so then in a practical in practical terms, if somebody's watching this evening, we're getting way ahead of ourselves. If someone wants you to see me wants to know how to do this, obviously will demonstrate some stuff this evening, which they can take away knew straightaway, but if they want to have a reasonable arsenal of techniques, I'm assuming that there are courses How long are those courses,

Anthony Padgett
those courses? In two days as the introduction course, and I've got some slides from the introduction course, but the actual going back to your original question about the being the master it from a manual therapy therapist point of view, the actual techniques are not difficult. And anybody with a couple years training and start to realise what they realised that what they don't know, which is fine. And I think going on from that when you first train, you're sometimes unconsciously incompetent. You get better at things, hopefully. But hopefully, within 30 years, you'll become unconsciously competent. Now we need those people who've who've gone past that initial upset or two years, they've come out of college, whichever manual discipline they've come from. They're scientifically sound, they're medically safe. They've done all those things. So once they've got that sorted out, I think they can pick up the manual techniques very, very simply, the training, the basic 12 exercises that a taught, you can pick up in a couple of days, but it's always doing worse doing refreshers, I think, yeah.

Steven Bruce
Now, you mentioned slides a moment ago. So I can just have a quick word with the audience. We have got a number of slides to show this evening. They are from a huge deck of slides, which we potentially could have shown. We don't have permission to share those slides with you as handouts after the show. But we will give you some sort of resources that you can go to to get the information you need. And the reason we can't do that it's a copyright issue and permissions issue, which there's nothing we can do about that. I did also say we were going to talk about all the evidence and research and so on behind this. How long is that going to take us?

Anthony Padgett
There's not a lot of RCTs behind this, to be honest. But I think we said earlier on this. That's true across the manual therapy world.

Steven Bruce
I did say it's slightly tongue in cheek when I was doing my intro because I don't care if stuff doesn't have evidence behind it provided we can talk about the theory and it sounds credible. And when you know that we're getting good clinical results. Yes, that's what we want to Yes.

Anthony Padgett
I don't want to say it but it's so spiral stabilisation, he kind of looks at disc dynamics, and how to hopefully settle down herniated discs. He looks at scoliosis, he looks at failed surgery, and he looks at function. And the idea. The idea is if you can get these spiral stabilisation exercises working in such a way you get a decent traction element to your to your activity, then hopefully, it'll settle things down. And with that in mind, I can maybe show you that first slide is

Steven Bruce
not possible. Yeah, please, whenever you're ready.

Anthony Padgett
So the concept here is that so on the spiral dynamic chains. So when you are moving and walking, and once again, I can't I've been told I can't stand up here because you're just going to pitch my tummy, which is not the most attractive thing I can tell you. So when you're when you're walking, moving running the spiral setter muscles work. So for instance, if you see on

the third instrument, yes, so we're looking at the all the large pieces on the on the right. And as that starts to contract, the concept is that you've got this link across the midline to the next layer down, which then follows round to the front. So in the front, so in the middle one there, you can see that sort of thing, external obliques, and you've got the internal obliques on the other side. And as you continue around the spiral, you start working on glutes. And if you've got the spiral going one way, then you've also got the spiral going the other way. So now you've got this double helix working. So when you are activating both those helixes sorry, that helix, then the idea is with a double helix, you're going to get her a lengthening and shortening, sorry, lengthening and narrowing if you like of the whole spine. Whereas in the vertical stakes on the static state, you've got the vertical muscles working. And once again, I think there's all conceptual rather than proved. He then goes on to show. So this is an example. This guy has been using this for 25 years. And when we

Steven Bruce
say this guy, Dr. Schmuck, check it out.

Anthony Padgett
And he's now he's now lectures across the world. And if you do go on to his website, which will give some information for about later on. You see, he's got in in various languages, and he's not in now in Korea. And he's got the comment which university tears but he's got a an anatomy lab as well. So a lot of his dissections and we'll see some later on have come from that. So it's a very involved exercise regime, you can get lots of people working in the same class. But these these concepts here so somebody like Carol will be teaching the class but hopefully some of these people have been having manual therapy to get them to a point where they can start exercising So these are some of the dissections that have been done. The reason showed this and this is once again, all contention, it's all up to up to up for argument, which is I'm perfectly happy for, I may not be able to answer them, maybe we should bring him over. But the concept is he he worked out. There's also if you look at the annual fibres in the in the desks, you do also have these spiral layers. So each lamella is a different spiral. So his concept is that if you work on the external spiral, maybe just maybe, and he's saying maybe you'll get some change in the in the, in the destructor, as well. I think this is quite an interesting one we did a study on on was the guy in the middle? Usain Bolt, and he's saying that Hussain bolt was basically built for running. Okay. Jeremy was it thought the thought pedo, the Australian swimmer, he was built for swimming, he's got big feet, he's got long legs, he's got big shoulders, he got big hands. Now. Same bolt when he runs his mid stride here and he's actually got a vertical spine. So here, what we what we think we're looking at is large pieces working. So point where external obliques are working on on the same side, internal bakes on the other side, glutes on the other side, and carries on all the way down to the solid foot. And if he's got enough length in his hip flexors, then he's going to get a great extension. So his stride length is bigger. And if you look, if you break down his him getting out of the blocks, he's about the last person after blocks. And he's about three or four strides in before he's up to his full full height. And when he runs the distance between his ear and his and his shoulder, he lengthens its whereas lots of sprinters are up here rather than lengthened. So the concept again is that if he's lengthen through his his, his neck, his lower traps are working more efficiently. And now he's got a much more powerful stride. So it's been

Steven Bruce
very so in terms of this, have there been any trials of any sort which are shown improvements in sprinting capability or other sporting capability following stable stabilisation like

Anthony Padgett
in Czech Republic they they teach this a lot in football teams, and they basically looked at stride length and hip flexor length as well. And he was certainly when we saw him last in whatever year it was, he was going to try to set up he's so busy, what he wants his PhD students and MSC students to set up these programmes. So they're coming out. I hadn't spoken to him for a couple of years, I was in contact with his PA. That's how I got ahold of all these. These slides. It's all you must. You must use them. Please help yourself. He's wasn't Russian, but that's my best. That's my best checkups. And

Steven Bruce
so yeah, okay, so look at stride length and hip flexor. Yeah, flexion. In these people, those are surrogate outcomes. Did they get any outcome measures which showed health benefits will reduce injury or anything

Anthony Padgett
that that I don't know. But we have got, I've got some slides that will show the improvement of a Cobb angle on the scoliosis, which so that's that's significant. So the baseline is that Reciprocal inhibition once again, hopefully, when I do some manual therapy that is a little show. But if you can get Reciprocal inhibition that you're going to get ability to lengthen the tight muscles as well. So what he's showing here, this is something I kind of spoke to him about. So have you got any EMG studies to prove what you're looking for? And what I was hoping to see that when he activates his lower traps, then that fires first and then your external obliques, second, the internal bakes third? And he said no, but we'll study it. So this is what he did here. So on the left, you've got the spiral, whether your vertical chains working, and whilst they're working, the spiral change or not. Okay, okay. But when you're putting the person to the active position, now you're having the spiral chains working, and the vertical chains not

Steven Bruce
and this position is active, because he's, he's extended his shoulder, therefore, there's force on that left hand. Exactly. Right.

Anthony Padgett
So using the shoulder for the neutral position. Yes, exactly. So and by working lower traps, you're going to be able to open the pecs and Reciprocal inhibition, you're gonna switch pegs off. So that was quite impressive. What I was hoping to see was sequential firing of the muscle, but that wasn't the case. But that was yeah, that was quite impressive, I

Steven Bruce
think. Do you think sequential firing is important because that's just what you expect.

Anthony Padgett
That's what I would like to see. But I don't think it's important to know. So here so the sort of alluded to earlier on, he's looking at um, Hopefully offloading discs and improving disc herniation. So when spa stapling stomp stabilisation muscles are not working, the idea is there's going to be some compression. And when you start working, you're going to get a little bit traction. That's the concept behind it. Right. And what he's done here is to show that if you get the smile stuck spinal muscles working, you get lengthen through the spine. Right so that's, that's at rest. And now she's activating

Steven Bruce
the example of this going on here. And we've got Karen, you've got lovely and my postural advisor online says that you haven't

Anthony Padgett
have your postural advisors Thanks, Mum. It's because I'm turning these seats these seats, I can look over that screen but

Steven Bruce
they're getting back to this is something which has always I've always struggled with is people saying, well, if you do this, you can lengthen your spine. I'm thinking No, you bloody can't, you can tighten muscles, which are going to pull things together. But you there is nothing above your head, which is going to separate your spine. So am I rising thing here? The theory is that if you've got spiral squeezing together on like a tube of toothpaste, it's gonna go out of move. That's, that's, that's the idea. Yes. Well, that's the first time anyone's ever explained any of that concept.

Anthony Padgett
So when I was tempted to believe it, okay, no, that's fine. I guess it too. And so I say to patients that, you know, if they, if they have 60% of the time, a decent posture, it doesn't really matter about the 40%. What I don't want is 6% Poor posture. Whoever said that well, thanks, man. I don't want 6% Poor posture and 40% worse. Okay, but to walk around in a sort of artificially, almost balletic, which, as we all know, ballet dancers have as many problems with hyper lordosis as any poor Hit, hit work. So the Yeah, so I want 6% Good. And for tennis, okay, because we got to get dressed, we got to change light bulbs, we've got to live life. But I think that's actually a pretty, pretty good picture. But just by getting a decent contraction, you're gonna get a bit of lengthening and once again superimposing and it's all monsoon and conceptual, and it works. So let's carry on doing the excellent

Steven Bruce
you haven't just said to this patient, Heike, shoulders up to the benefit of the picture.

Okay, when I teach this, I describe the no spine, the first picture, the very shortened waistline, and the loss of skin shall we say, as this but the spiral chain at rest. I liken the effect on the spine. If you think of a spring, I teach on reformer, so I've got lots of springs to show the spiral chain that rest is like that spring at rest. And when we activate the spiral chain of muscles in the way I'll demonstrate later, it's has the effect of putting the spine under tension, which opens and decompresses the space between the vertebra, effectively lengthening the spine, but it also has that sort of narrowing in the middle effect.

Steven Bruce
And you were saying earlier on that you you use spiral stabilisation in conjunction with the spinal decompression offered by the IDD machine as well. We've done a show on IDD, which you may well have seen. And presumably that works quite well if you're trying to further encourage that distraction of the disc. If I knew that, I'm

Anthony Padgett
going back to something you said earlier on that the idea of your artificially lengthening you are going to spend a bit of time contracting back down again. So I get that but I think if you are activating and you're running in a more lengthened position, and I think that's what's

that's when you're getting some traction through it. But there was a he and I did have a big discussion about oh, look, come on. It's just attraction unit. Why is it helping with the IDD for instance. And I've been doing it for five or six years and it works. We've got some lovely, lovely responses to through the through IDD, but that's not a lot of surgeons on our side yet. They're starting to become but that's a different issue altogether.

Steven Bruce
So their suspicion is always that we only tell them about the good cases, the bad ones and there are people who don't respond usually if we miss assess them in the first place, because as has been pointed out, he put the wrong patients through any form of therapy them to get better.

Anthony Padgett
So, this is something I had an issue with Dr. SHM Isaac about saying that. So you can see the on tuten 2012 This gentleman had a pretty sizable 434 disc and then you only later that disc is now settled. But actually the disc below is no different, relatively speaking. So thinking well how many of us out there in therapy world have seen this these spontaneously reduce anyway

Steven Bruce
Yeah, so it was I think it was symptomatic of just MRI

Anthony Padgett
now it's symptomatic so it's quite compelling viewing but I've also had patients who have had a reduction of discs that size because it's actually pretty wet wet disc if you look at the pictures so we kind of agree to disagree on that one but he's got plenty of papers plenty of examples sorry showing discord improvements but I think the stuff that I'm really was really impressed by was the the Cobb angle changing so here on in 2017, this lady head I have got a previous episode I'm actually measuring the cop angle then in the same year only so a year later was less than a year later, isn't it some six months so there's a significant change and that that's a that's maybe an adolescent spine so I think that's

Steven Bruce
quite impressive. Just in case anyone is in any doubt remind us what the call angle is and why Cobb

Anthony Padgett
angle is you measure from where the the starting of the curve is and where the bottom of the curve is in some lines, which I haven't got here but But irrespective the actual club angle by superimposing one on the other you can see there's there's been a straighten up on the spine.

Steven Bruce
Basically, it's a measure of the degree of scoliosis, literally the degrees of scoliosis.

Anthony Padgett
And we've got a lady Ruth, who is was came to us via word of mouth. She would be in her late 60s Probably. And yes, it was up at the Royal National Orthopaedic called pronounced scoliosis worked with Karen for a year maybe we'd unbeknownst to her, she was having a review by the Royal art law National Orthopaedic and the surgeon went your scoliosis improved? What have you been doing? And explained it was through cybers spa

stabilisation so that that's pretty conclusive in my mind. How much further we're going to get, but we are going to be having a year on year review because the an independent person is going to be measuring. So I was quite impressed by that. And I don't know what you think about this, but a mature adult spine, are we going to get structural changes? Really? Just by exercise? I think you do. I don't know.

Steven Bruce
It's, it's tempting to say that's what we're all seeking. I suppose it depends when those changes were first established or established. Thank you. Because of course, if they if they are structural in the sense that over the adolescent years, we've got bony changes by the time they harden, they're not going to do much I'd imagine you wouldn't also know but if you've got an adult who has developed a scoliosis for whatever reason assumably we can reduce that when we know we can reduce that we whack it I didn't say that. I didn't say

Anthony Padgett
just whacking so this is a probably early 20s late late teens maybe. And I think what he's done here, just superimpose there are so the concept here wrong Wait, do apologise. So what I'm looking at here is is his sort of scapular slightly away from his spine he's got a slight twist going on sort of a and if I go to the next level so we're now starting to work the the lower trapezius and you can see his whole spine tucks in I must get the forward and backward thing work properly

Steven Bruce
so that's what we're looking at here is that is the first one is the first one is February 2018.

Anthony Padgett
And the second one is

Steven Bruce
those April Yep. Okay.

Anthony Padgett
And it's via via the elastic cord work and home and compliance something else we talked about? Because Because some a lot of stuff he does which is with the with the juniors and unless the whole family is on board about re educating the child to do the work it's not going to be easy.

Steven Bruce
When you get Why are you treating this guy?

Anthony Padgett
We weren't reaching this is off his slide. Why was he being because of the scoliosis he was brought in because the scoliosis Was he having problems because I don't know the background but his

Steven Bruce
head angle doesn't change a great deal and and I think does it if it gets worse I think you're right. Actually that's a majority of terms to say something gets worse it changes not in the direction we might have expected but

Anthony Padgett
and this is the same chat. I will do the measurement later on but so on on his his left side. So we're dropping a plumb line from his ear, his left side his hip flexors tight and on his right side. And by doing the the stretch techniques that we're showing on Shailesh from getting some improvement, what we're looking for is to get with the athlete, he would want about a 10 centimetres improvement on the on that plumb line to improve the stride length.

Steven Bruce
It's interesting that so much of what we we look at in terms of athletes and so on is improving the flexibility of hamstrings. And he were turning around the other way we're looking at the other side of the leg and looking at stretching. We've had anybody who's paid much attention to hip extension on the show before it's always been will stop hamstring injuries, improving the length of hamstrings, okay?

Anthony Padgett
I might my to go to areas with protracted necks, etc. Protect your shoulders is tech depth, length, and subject, some Clavius and pec minor. And when it comes down to here, the hip flexors, how many people when they're flexing forward are hinging from the hip. And because they've got tight hip flexors on the hip flexor doesn't attach on to the L five s one interdigitated to force through to one. So if they're tight, then it's actually shearing through L five. So if we can then improve the lumbar, the hip flexion. And suddenly they start flexing, as opposed to hinging from the hip, they can now start to flex the lumbar spine. And, and there are some patients who you are getting into bend forwards, you know, there's a poor movement pattern of flexion. And you get a really decent hip flexor stretch, as long as all the other tests are fine and no normal. And you can significantly change their flexion just by stretching pretty quickly. And at first the first few minutes. So I'm very, very interested in hip flexors.

Steven Bruce
Just Karen, do you have a particularly Do you pursue the textbook ideal posture in your patience? Because I've always thought, well, everyone's different and trying to make everybody fit that little diagram that we all saw in our, in our anatomical textbooks in training is a fool's errand.

Absolutely. I think you just look to improve, you look to get someone's range of movement better than they had, and you look to improve their everyday function. And there are some simple basic things. And to a large extent, it's also what you look like, isn't it when you're dealing with the general public beyond getting them out of pain. So anything that starts to improve that posture, I'm going to determine if this posture is what I'm looking for, it then becomes self motivating if by doing these exercises working in this way, adopting this method of stretching as their everyday homework, they can see that they can actually improve further skill. function being in to a certain extent beyond pain relief, often the secondary thing, it sort of becomes a self motivating form of exercise. And by default, they'll I think people look to get

Anthony Padgett
encouraged them to be more

encouraged to do more. But the ideal posture probably doesn't exist.

Steven Bruce
There's kind of two aspects to this. And that if you're if you're prescribing stuff for people to do away from the clinic, wherever they choose to do, and you've got to get that give me the word compliance. You've got to comply, but to do it, but also they've got to be motivated and motivated to keep on doing it. Because it's very easy to say, Oh, I've done some postural exercises. But now I'm going to go back to my forehead at the desk.

Anthony Padgett
And I'm going to go and see my physio, chiropractor osteopath. I'm going to go to see my went about

Steven Bruce
as though one appointment or whatever is going to achieve everything that you want. And if

Anthony Padgett
we're seeing them for an hour, what are they doing for 23 hours of that day, they said, thank you very much. And again, as you say, straight back to here again. If you're so sore, again, you're not

Steven Bruce
doing so what are the typical patients that you use this on coming to you for?

Anthony Padgett
A typical patient journey if you like. While back pain definitely is a typical age group. No, I treat. We haven't treated many 80 year olds with this technique. But we certainly treat a lot of 60s and 70 year olds. That it's it's maybe repeated bouts of back pain over a period of 10 years. They've been to various therapists. They've heard about something. Could they try it? Yes. They like having a masseuse? Yes, they get relief from manual techniques. But why are they not getting better than to the next level? Quite often you got to look they've got to look back. I mean, we've all done it when we're assessing patients, what are the things you are not doing that aren't helping? And what are the things that you are doing that aren't helping? You can't be sitting there in front of a computer for that length of time. If you are at home in COVID sitting on your on your bed with your laptop, it's hardly surprising and again, a bit sore. And when you go for a pee, it might be your loon just in the same room or next door, and it did sign in in the next room. But you're not going down through four layers of stairs to go to your office loo, so you're just not moving. So certainly in lockdown, we saw more and more people with postural dysfunction and, and pain without a doubt. Yeah. Does that answer your question?

Steven Bruce
No, no, it certainly does. I mean, there was quite a lot wrapped up in that.

Karen Padgett
I do use the technique with my older patients to live, some approaching 90. They largely sit. If I can get them to lie on a reformer, it's great. We sit or stand,

Anthony Padgett

can I just interrupt there for a second, that's kind of the exercise age patients are not necessarily seeing those patients for manual therapy or any description, we've got Parkinsonian patient who responds very well to his kind of exercise,

Steven Bruce
but responds in what way

improves her function, improves her balance improves her posture, and our well being mental well being, I think, is the biggest improvement I've seen, she feels in better control, and better able and more confident to go out and drive herself somewhere, again, to go for a walk with her friends and not feel I'm going to trip over at every step. So she has an incredibly strong call very proud of that. And is, yeah, we work on her posture, which also helps you negate some of the shakiness where she goes through particularly uncomfortable. And

Anthony Padgett
I think that's, that's what I'm, I'm, I'm fascinated by this technique as well, because I'm thinking very clinically, and can I help me get better and actually, Karen, I work together. And she did more the reformer work because she's now bringing this into it as well. So you're getting patients who are just coming to Karen for getting into getting fitter. And by introducing this and Heather's Heather's an example this,

Steven Bruce
Karen said here in one of our pre show telephone calls, she said you're useless exercise, manipulators and stuff.

Anthony Padgett
Yeah, no, I can I can talk. No, but you just did. So I'm stuck. Really? It's my it's my ball. It's my bad. Yes. And it took me a little while to actually man up about it say, look, it's okay. I just don't teach exercise very well. So let's we said,

Steven Bruce
You're useless. I'm exaggerating. comic effect.

Anthony Padgett
You'll be sleeping outside of that tent is still there. Yeah, absolutely. play to your strengths.

Steven Bruce
So another, you just brought another topic to mind. Because today, I saw an article in The Guardian relating to some research in the British Journal of Sports Medicine, about one legged standing and the correlation between the people's inability to balance and I'm thinking that the outcome was later ill health. Yes. But it also it talked about Parkinsonian patients. So has has what you do got a role to play in falls prevention, for example?

Anthony Padgett
Yes, very definitely one simple answer.

Again, we can demonstrate in a moment, but the recruitment of the spiral muscle chain according to doctors, me Sex inflammation, and from what I've seen anecdotally, very definitely the Parkinsonian lady's A case in point, as is the scoliosis lady, she has metalwork in her spine, as well as other issues. And when she initially, before we got involved in a more detailed programme, incorporating the elastic cords, her balance was shocking, her her words, not mine. And so definitely there is a role to play.

Anthony Padgett
I think I'm right in saying that in the geriatric world for physiotherapy assessment, if you can get them to stand up without using their hands five times, and they can get toe to toe to heel walking forwards and backwards. And they can, they can maintain their balance for certain period of time. The prediction of them falling over, up to five years later is reduced. So anything that improves their balance, I've got I've got an interesting picture of I might show yeah,

Steven Bruce
please just bring the slides up again,

Anthony Padgett
if you could, please just do encourage just said about the metalwork so this, this poor person was having. So I mean, that's a very scary picture.

Steven Bruce
Right? So the the right hand side, yes, because things

Anthony Padgett
are working. So this is nine days off the first operation, four months after the first operation. So the scoliosis is basically despite the metalwork it's come back, and that was with another operation. And then this is the same person looking forward. So shoot fuse l five as well. On right up to t 771. And surprise, surprise, you take away all that range of movement, you're going to load the transitional areas. So even with ease, so the other cry the other group of patients he works with is failed surgery if you'd like

Steven Bruce
to remove the background, so this, obviously, there was a severe scoliosis. Yeah. Which presumably was bringing with it some other symptoms that the patient was complaining, just because metic region, yes, yes. But now it's producing completely new and fresh ones. So

Anthony Padgett
it started off in one of the 2020 13 or so sort of a T 67 movie, metalwork and then extended up and extended up and extended up terrifying. So but even with these people are now it's a different thing altogether. But even with people at that level of dysfunction, if you'd like iatrogenic dysfunction, getting strengthening and lengthening was can be enough to make them more comfortable, are they going to be pain free, that will be lovely, but are they more functional and living their best their best life whatever that they want they choose to be. And the final bit the it goes on to is training. So we're destabilising the base that these are these are very thick foam that goes on from your balance thing earlier on. So by getting the person to stand up on one leg, you get a much much better recruitment as a spiral stabilisation as well. And by putting resistance in and we talked about the so called set position. And, and he trains you know, top level skiers football as

Steven Bruce
I know you're going to demonstrate this later on. But if someone is at home following a basic regime of spinal stabilisation, how much time have they got to devote to it? It's

Anthony Padgett
1520 minutes a day. And then if they can create so my little tips, tips to patients when they're walking down the road that I want them to be looking over a garden fence without being obvious. You're not going oh, you're getting your lengthening. Right. Okay. So you get you do get that physical lengthening of your crown of your head. So I want you to be walking in a therapeutic manner, not just a functional manner. I'm going down to the post office now. I'm walking to deliver a letter and what that lengthening, and you'll find that when you get that therapeutic walking, you do get access to these spiral muscles.

Steven Bruce
Somebody Anonymous is somebody Anonymous has sent in a question. My suspicions about who this says is related. They're relating it to me, could this sort of work? Do anything for arthritic knees in this particular case or other arthritic joints? I guess?

Anthony Padgett
Depending on the reason for it, I mean, if you're if your pelvis isn't in such a position or your hip flexors are in such a position that you're loading or your knees in particular way, yes. But if you've got a valgus or various knee with, with wearing toe and your medial lateral compartments, then probably not. Can we get you stronger? Yes. Has it been shown that any arthritic joint with better muscles around it improved? Yes. Is this another way of doing it? Yes. Is it specific? No. But can we get you stronger? Yes.

Steven Bruce
Yes. Well, you obviously assessed my knee Well, earlier on because a few years ago, I could You could fit a peak between my knees and the passageway, you know, but now you can only fit halfway because they fix the other knee. Falls knee and one straight leg and one bit one end. So that's the answer that question about whether it would help me but obviously, Victoria are some time back whether you said this was just a two day course I'm not sure if they're saying how can you do all this in two days? No.

Anthony Padgett
Good, good point. Well, well made. So the two day course is just the introduction of of the concept behind it. And then there is no you have a pure scoliosis course which is two or three days and then there's a a decent reputation rehabilitation for these top level athletes. So there's another two or three days there or something in the order of eight, lots of two day courses of which do you to run these four or five days so that we won we did in in the Czech Republic was was a four day course. And we've done probably five of them, five of them and but he also does a four day course of MRI studies and it brings doctors involved in there as well. So if you want to end up teaching it formally then it's a five or six courses.

Steven Bruce
Do you teach this yourself?

Anthony Padgett
I teach this to patients but I don't know that there is a spike there is a spiral stabilisation lady, educator. She's more of a sports trainer educator. She's not she's not a clinician site because she's very, very good but teaches this.

Steven Bruce
So very quickly before we go over into some practical stuff. You talked about teaching, this being taught to doctors and so on. What's the buy in you? Have you got from doctors near you? Whether GPS or orthopods? Or none? None at all?

Anthony Padgett
None at all. It's just purely word of mouth. But

Steven Bruce
you've mentioned people being impressed at Royal National Orthopaedic Hospital by the results. Yes,

Anthony Padgett
we've had, we haven't had direct contact with him now. But he was he was interested via his, his patient who came back with improved, improved from structural changes. I think this is a slow burn, because even though it's been around for 25 years or so, in, in, in Czech Republic is taken on board fully in Germany is now across in Korea. It's torn across many, many countries. And I don't know why it's taken time to get to England. I'm not the kind of person I'm not the forthright person gonna go out there. I'm not your kind of thing of the word. Evangelist. Yeah, almost not quite that. Gone. But I'm not that person who's going to stand up in front of people to say, right, this is what you need to do. Given the opportunity here, I thought it needs to be discussed, because I think it's the kind of thing this is it would cross many disciplines, because it gives people that facility to look after themselves in a better way.

Steven Bruce
Yeah, I'm hoping that people are going to be very intrigued by this, because it's where some people might be thinking, because it's just the same exercises, we already do give it a different name. But if we see there is some some differences in this, I'm hoping people will be intrigued enough to say, well, could this be useful in my own practice? And you know, is it is it better than the exercises I've been recommending for the last 1015 years or whatever they might have been doing?

Anthony Padgett
The same old, same old.

My perspective as somebody who teaches exercise, the simplicity of the system, the exercise with the elastic cords? Is is what sells it right? For me it's a such an easy homework prescription.

Steven Bruce
Right? What would you have been doing? What would your alternative have been before this,

it might have been exercises on the floor Pilates based on, you know, calling, Jim, Jim based maybe what's to my mind, the benefit of using the elastic cords, or just even pretending you have them is that it's a constant movement thing, right. So rather than performing an

exercise, one of my pet descriptions is we can do this standing on guard at Buckingham Palace. But then we have to let go of it to walk or talk or put the kettle on. This is a lot more functional as a method and suddenly very easily adapted and adopted at home so that it can become an everyday wave moving. And so you know, the more you practice it like anything, the better you get at it,

Steven Bruce
show people what you're talking about. If you don't like, Okay, let's do a demo area. And let's see what we can do.

Anthony Padgett
I'll put this little clicky thing down. That was what was called a clicky things but

Steven Bruce
it is up to you.

Anthony Padgett
Standing up notice. Right, I'm not going to go through any spinal assessment. I'm hoping and expecting people off the kind of calibre of your audience. Look at spinal segments already. So there's a couple of key things. I'm particularly interested in hip flexors. So currently when I get to pop up there for me. So I'm going to artificially get Karen to give me some really tight hip flexors. Okay. So the things I'm looking for here is if I drop a plumb line from the back of her head, and, and I want it, I want it to be actually in contact with the bottom. So what I'm going to do is is making contact with the bottom and you'll see from hopefully from that camera, there's not vertical. Yep. Okay. So now I'm going to get her to get vertical. And this one, I'm looking at this load order lotic space between her back and the on the pole. So I'll get you to gently do a pelvic tilt for me, Karen good. Were you on a it's like a loaded question because I know what you're, I know what you're going to say. But hopefully you'll see from the camera that the stretch is at the front of the hip. So you're lengthening through here as opposed to all too often people try and do their hip flexors by Aki lordosis. For me, they think they're doing hip flex and all they're doing is sharing through L five s one. And look at the space here.

Steven Bruce
You see that I can't do the exercise anymore because my knees when sportsmen are doing that of course, you can see this horrible bend.

Anthony Padgett
Great job. Now you're not looking for the subtle guy or girl at the back who actually in standing do the same thing. So when so can't sit with a bent knee but I can do it in standing. So pelvic tilt. So pelvic tilt here. You're getting contraction your abdominals, which by Reciprocal inhibition you get reduction in your rectus By day, you got a very strong contraction, you're in the glute. And as a result you're getting released in your hip flexors. Right. Okay? release for me. So we then talk about these top level athletes, you look forward for me, I'm going to do a plumb line, I'm not going to look, a plumb line from your ear. Let's get your hand across for me. This one here. That's it. Get out of the way. Honestly. I knew we shouldn't. You didn't make the bed this morning. Okay. So if I drop a plumb line from that year, you'll see I think on the front here that the it's only just in front of a knee. Right? Now, in an athlete, I want to be able to do right cheats for me Do you do lumbar lordosis. Now if I do a plumb line in front of it here, once again, I'm not looking. That's what 1015 centimetres in

front of the knee. But she's achieved it by cheating. Right? If she thinks she's that good, in neutral, now do a pelvic tilt. Without she can't

Steven Bruce
do it. So you're not trying to you're not presumably trying to remove the lordosis altogether, you're just trying to get that to what you can see me neutral.

Anthony Padgett
Yes. Well, actually, to do a decent hip flexor, I want it flat. Right. So talking through what he wants. So you're doing this activity of lower traps, I want your spine to be straight when you're activated, down standing if you happen to be even relaxed. So if in standard you, you happen to be lordotic, or sway back or flat back then that's you. But whether or not when you're being activated, the idea is for him to be straight. So particularly interested in it flexes, if he pops off onto your back.

Steven Bruce
While you're doing that term, Collier sent in a an observation where he's saying this sounds very similar to the spiral patterns activated in Tai Chi practice. You're absolutely and

Anthony Padgett
also in PNF patenting as well, exactly the same, right. And so, purely because the cameras there we can see when people are doing this walking. So I'm saying you're not you know, we're getting we're going down to the pub, I want to look over that fence. So I physically will lengthen. And if anybody out there is listening, hopefully a few people are just stand up now with take one leg behind you. And all I want you to do is do a pelvic tilt. And think about lengthening look over that fence and just feel what's happening with your posterior leg and your glutes, what's happening in your your trunk your your abdominals on the front there. And if you can now think about taking your right shoulder blade down or back, you saw your front legs, shoulder blade down and back, then you're activating your lower traps. And now what you're doing is trying to lengthen between here. So when people are running, they're not doing this. They aren't doing that. Lengthening. So the other kind of thing I'm looking at, hopefully this will show I'm going to artificially give Karen a very tight pectoral muscle. So bring it into

Steven Bruce
to just watch that microphone. Just in case you

Anthony Padgett
artificially taking this as your standard rugby player, front row forward, artificially taking shoulder pay for giving a tight pecs and just see where her shoulder can go with just relax. That's where she's going. So you're not getting much rotation. If I keep this hand still, and just take that back? No, let me do it. Let me do it. Take that back to where I would say is neutral. And then we can let this go, we'll suddenly get all this rotation. Okay,

Steven Bruce
now going in your front room forward,

Anthony Padgett
even to the front before they may not get that far. But I'm in my in my my world. If I want to be able to probably with a slightly smaller colour, I'd like to be able to get that lower than the year, obviously, with no previous dislocations. And if they if they're that tight, and they can't

drop, and that's me just letting letting gravity take over because I can't get there, she started to cheat. So if I take it back, and then we can get the range. I mean, Karen's got very bad partials. So

Steven Bruce
you can do that. That was like helping this person, your your front room forward here.

Anthony Padgett
So showing them that by opening up the chest, so I keep pressing that by showing that it can be achieved, then we give them stuff to work on. Right. And that would also be there. So we've now now worked out that she got some pretty tight hip flexors and there's so many ways of stretching it. So a manual therapy point of view. I'll show you the things that I do. But actually once we taught the patient how to do it themselves by Reciprocal inhibition working the glutes you will get released you will get some stretch, five to 10 second bursts. All depends on which MSC PhD student whether the stretches are 15 seconds, 30 seconds or two and a half I don't know. But we do want to get a degree of stretch.

Steven Bruce
So but of course the other the other side of that is that there's strong evidence that in clinic how We've done those stretches, you will see a difference, but within two hours it will have disappeared. Absolutely.

Anthony Padgett
So, I mean, why does it take three, three to six months for college into plastically? Adapt? That's with lots and lots. Yes. encouragement. Absolutely. And if that's you, they're coming in with a shared 305 s one, there's no no major discs, they're in pain, they're facets have been loaded, and they do a few stretches on them to offload it enough. So it starts to heal, they're not going to do the stretches, because they're out of pain. You know, they're out of pain. And they're going to come back in so many months time. So if you can impress upon them that the you know, responsibilities, there's we're not there to cure you if you're not prepared to do things yourself. And I think that's what it comes to breeding independence of us not dependent on dependence. Can I get you to lie on that side piece? Yes. Yes, sir. Could you bend that knee, please? Right. Um, hopefully, this camera will pick this up. So if you can hold on to that hand for me. So let's superimpose a really tight hip flexor. So she can extend her lumbar spine. So in this position, by using Reciprocal inhibition, I'm going to be doing a stretch and I'm replicating Karen's kneeling position. So if I hold on to here, when I want you to, as you breathe in, as you breathe out, do a pelvic posterior pelvic tilt. And I can introduce more stretching. So if you don't you mind me sharing your tummy. Okay, so what I'm looking for, is, as Karen does, relax, breathe in, as you breathe out, engage with the pelvis. So you got to see really strong, and I can also feel the glutes working. So we're getting a decent stretch through here, we got to really be careful not to drop it, take it too high, otherwise, you'll end up if it's too high, then it's your ITT is maybe caught the call, if you're into neutral, doing a pelvic tilt fliegen. Good. So I'd be very comfortable doing that on the patient as a as a manual therapy technique

Steven Bruce
I love wherever your breathing are, while she does the exercise.

Anthony Padgett
I just practice what I preach. So that's, that's the kind of thing I say, Look, now you've done the kneeling, the effectively kneeling, but meeting with you. That's what you need to be

doing at home. So in the kneeling position, do the pelvic tilt get that length sensation, get your lower traps working at the same time and making gauge that the whole process is working. So now we're going to get landmarks on your side facing me. Watch out for that. My squish it. So the kind of things that I I want to try and do is get a little bit of length into the spine. So what I'm trying to do is isolate maybe whatever l four or five, possibly, what I'm wanting to do is get a decent length thing. So what I want to do is if I do and I'm putting here, I'm not going to extensional flexion, right, I'm just putting into here. And you can get a pretty good stretch, you can superimpose a side flexion if you aren't careful. So trying to dead Central, and take your time. And all I'm doing is maybe getting a bit of stretch enough for her to then exercise this is not the treatment, then off you go, you're done. I'll just warming you up a lengthening, stretching you to then exercise go and see Karen in 10 minutes and get yourself working hard. So in the

Steven Bruce
Okay, so you're not there to do this when your patients at home getting ready to do their 15 minutes. So how important is this part of

Anthony Padgett
the if they're in pain, I'm hoping that stuff they're doing at home is because they're out of pain. But if they're still in pain, that's probably where we fit into this. So for instance, if you if you he has a residential, you can really go there for a whole week in the in the clinic in Prague, and you have massage in the morning, you have manual therapy, and after that you break for lunch back to massage back to manual therapy. You're in the gym twice, three times a day. You go to bed early, and it's almost it's kind of a I don't know how to describe it, but it's full on. And you've got a whole week of that. Okay, and

a healthy prison camp

Anthony Padgett
is delightful. He's He's very infectious. And so that's the kind of things I'll be looking for. I will be stretching the hip flexors, getting them to do the stretching me doing some lengthening and then we go straight on to the exercises, which you have to do that.

Steven Bruce
Yeah, obviously I'd just read something that's come in. It's not a question. It's from Hambo, who says congratulations on an excellent illustration demo of the lordosis with hip flexors. And he says this is exactly how I try to train my patients with regard to the psoas release. Yes, or inhibition? Yes. So the interesting one because I've only heard of this happening once. But the standard psoas release that we were taught is a nice big dig into the abdomen with the fingers. Yeah.

Anthony Padgett
That's that's a beating, isn't it?

Steven Bruce
I've known one really nasty adverse reaction to that. What would be your write on? Exactly what we're doing?

Anthony Padgett

Slightly slightly different. Can I get you to watch? If I go take care to the edge of the bed?

Steven Bruce
Yeah, we can wiggle cameras around. Okay. Yes, please.

Anthony Padgett
Yeah, you're gonna sit. And it's a modified Thomas, isn't it? So, if you take your bottom right to the edge of the bed, hold on to one knee, and then slowly drop back. Excuse me, you wouldn't do this to a patient, but it's my good lady rice I can. So in this position of what was it the cat cameras probably not picking it up. But if the it tears tight, then Is she going to be dropping out laterally. If the hip flexors tight, she might be not be able to drop into neutral. And if the if quad is tight, then her legs going to be an extension. Alright, so in that position, I'm looking at those three things. And actually, she's not tight at all.

So just sketch that

Anthony Padgett
out, oh, look, your ICT happens to be very tight. So if I bring that in, and she then goes into more flexion, then maybe it's the deep short hip flexors rather than the quads. So I would be releasing her. So acid iliacus by doing a Reciprocal inhibition again, okay. Okay. So I'm going to get to get you to breathe in, you're going to engage your abdominal, clench your butt, and then all I'm doing is trying to very gently stretch back out. But do not let that spiral, extend breathing. And as you breathe out, engage. So that that is doing in three,

Steven Bruce
yeah, it's a little bit, this is going to be almost impossible for the audience to see. Because you've got you're on the wrong side of the car. So we get the idea of that one. But you want to do some stuff on the on the floor.

Anthony Padgett
This bed out the way.

Steven Bruce
Right, so we've got the elastic bands out now.

Yes, they are some elastic cords that might go around the wrists.

Anthony Padgett
Right? So we've talked about the so called set position. Once we have to look at your load trap, really, can I get to turn round?

Steven Bruce
Which you move over to here just a bit perhaps. If we can get early to work and camera one can get her to do

Anthony Padgett

if we can get that camera? In fact, that's fine. Just let that right arm drop down. So what I want you to be able to do is you got a vest on you okay, do you mind taking the top one off. Cans very kindly agreed to take that top.

Steven Bruce
Transfer the perils of high tech.

Anthony Padgett
This is something you can be trying at home, everybody by learning to isolate your lower traps and then investigate what happens to your opposite abdominals. So if you just hold on with your left hand, just drop your right hand button. So what we're looking at very nicely, Karen is artificially sticking a scapular out. So what I want to try to do is access lower traps. So to start with, I would position the patient themselves to get so right gently down the back. Because if you're trying to gently squeeze at a tennis ball between your shoulder those good. And once I've learned to actually isolating see with Karen, she's isolating nicely, then she's got to be able to I say to patients, they're trying to tread drinks in front of them, that tray is getting bigger. So she's going to rotate the hand out and rotate. So now what we're doing is accessing, rotate back in trying to take the shoulder down and back. Start again. Down the back. That's nice and hold. Relax. So by just doing a slightly back. So by accessing lower traps, we should find that she's

Steven Bruce
well just about to ask, you know, when you're doing with this with this with a real patient, clearly the tension is greater the further from the anchor point you stand. You judge how Yeah, hard to make the exercise.

Anthony Padgett
Absolutely. So you really sat at the other end of the band, which you cannot see we basically wrapped it around a pole. And you'll hopefully you can confirm this but there's a little black elastic. Yes, that's a quarter of the pressure. Okay,

Steven Bruce
okay, what's the quarter of the this? Let's get the camera on.

Anthony Padgett
This might be interesting, please.

Steven Bruce
Yeah. so people can see the. So

Anthony Padgett
what we can do is, if this was attached to the pole, and she's pulling against this resistance, when that goes tight with water pressure, that's only so you're just pulling against that. Yeah. Okay. And then if you if you go into this level, it's kind of a one on pressure, you can then wrap this, if that's anchored, it's double. If that's anchored, it's quadruple, okay. And it's really very, very much stronger. And actually with with the top level athletes, what we will be doing is, they'll be doing two in one hand, right, doing the stabilising position. That's tough. Yeah. So, unfortunately, I put Karen under great pressure, because it's a much shorter, quite right. But it's the only way we had to

Steven Bruce
completely ruin the illusion of our students. But it's been useful in demonstrating

Anthony Padgett
that I can do a nice butterfly that helps

Steven Bruce
you did your little bit exercise, then we want to begin, we're going to progress.

Anthony Padgett
So once they've, they've learned how to engage their lower traps, and we're trying to say to the right, we're not likely to do on both sides, you can take one foot forward just for the time being to take pressure off. So tuck your elbows into your sides. And what I want you to do is that that tray of drinks in front of you getting bigger and bigger and bigger. And what I don't want to see his opening a chest too high, we really aren't getting the lower traps to be working harder on the house and come back in again. Good. So this is where Karen would normally do the teaching, but I wasn't prepared to wear a vest for her to teach me how to do it. But so the so called set position once they've learned how to isolate the traps as you can you can you carry on,

Steven Bruce
we've got a very flamboyant sort of movement going on here. It's

very important. Yes, stretching over tight muscles to restore a more neutral joint position so you can strengthen the weaker ones. So we had the posterior plumb line earlier for the so called posture we're aiming for. If we brought the plumb line, plumb line round to the front, what I'm vise just stand on both feet. The plumb line, if you think of it, attaching to my sternum at the top of my pubic bone at the bottom, this upper body thing, I can call it creating a sort of question mark shape. Yes. So here I'm creating a stretch across the upper back down the length of the spine through my lumbar spine, got my glutes active and I'm stretching the hip flexors all

Anthony Padgett
may not look like the hip flexor stretch. But if you look, if you isolate just Karen's midriff done her pelvis her the, the plumb line through her leg is still behind her at the angle of a hip. So she is stretching your hip flexor, right? Okay, she's not in flexion, she is in neutral extent and a little bit of tension.

And then we activate the glutes, extend the hips, raise back the spine, and we add the resistance into this is called the active position. And the intention of lengthening the crown of the head to the ceiling, while simultaneously push the floor away is how I would describe it. And hopefully you can see, there's an awful lot of work going on. So you'll see that this essential, very basic range of movement is what we repeat throughout.

Anthony Padgett
irrespective of where the elastic band is going to be coming from because it could be from behind to one side. So for

example, take a quarter turn to the right. We'll take that roll down. Again, the question mark,

Steven Bruce
so you've got a rotation, rotation,

we bring the arm up and over, tap the elbow in and restore that.

Anthony Padgett
So stay there for a second if you don't mind. So lower traps are being activated. abdominals have been activated glutes have been activated. The head the top back of the head has been lengthened to the ceiling. She mustn't be flexing. She's trying to get that length and so that sensation this active position, it's tough. So if your mid run mid dance mid movement, you're got that lengthening sensation and that opens the ability to maybe have a longer stride length

Steven Bruce
Claire's asked whether you need the specific bungee cords or whether any older theraband Yes,

Anthony Padgett
I think theraband does work. The the benefit of this is that you when you're doing much larger movements later on. So there's a sort of course if you if you go through a full routine of the circle wellness routine, it's about a 10 minute workout and you're changing. north south east and west you're doing a stand and you do in kneeling. So you need that mobility. I think nothing the the theraband wouldn't work for that. But the early stuff Yes. Was it attached to behind you So all the time, Karen is activating abdominals, glutes are getting that lengthening sensation throughout.

Steven Bruce
And what effect on which muscles are we going to see, after this routine that we're seeing here?

Anthony Padgett
I would expect large chaps to be a much more woken up and activated, like certainly expect your abdominals to be much more activated. Right, right.

Steven Bruce
And this will contribute to the lengthening of the hips.

Anthony Padgett
Yes, absolutely, yes. Because it's functional. And irrespective of whether it's the distal release, whether it's the scoliosis correction, obviously, if so, if she's left side of scoliosis, there'll be greater emphasis on a certain type of rotation, rather than always influencing the tighter muscles. And whether it's post surgical problems, the routines are very, very similar. So is the manual therapy? Yes. So irrespective of what so now this is getting much harder. So Karen starting to work on the one leg can be quite tired. This is This is tough as you need for vicarious improvement. So, right now, what we're gonna do is get counted, kneel down,

he's done. I don't say darling to every patient. Well, no. So now, could you do the other monkey can do the other leg?

Steven Bruce
From a camera's point of view? It's helpful if we're at the same Yes, yeah, absolutely.

Anthony Padgett
So if you remember what Karen was doing on the on the bed, who's doing that pelvic tilt to improve the the hip flexors. So on the right leg now, so doing a pelvic tilt for me. So we know she's going to be stretching the hip flexors to hamstring stretch. But she's still stretching the hip flexors, bizarrely. And then present yourself as in the set position. So in that position, those glutes are working hard, those those abdominals are working hard. And she's getting a lengthening through and she's now really stretching your hip flexor while still working the glutes. Right? And back down again. But this is advanced stuff. Okay. Not many people can do get to this level. Yeah. Okay. And then, then we would, we would incorporate so could you net could you transition onto the other leg but doing smoothly, because you're on camera, and edits. So you can just do two in that position and then transition to the other leg. And this is where coordination comes into it. So she's going one strong. So the cues here would be contract, contract length and come on length and length. And that's absolutely ahead. And by Reciprocal inhibition, you're getting Peck switching off here. To show you one more, I won't make it hold at this time. Again, the other side, good contract. Right. And then as you come back, transition to the other leg, please. This is tough, and then switch on. Good. And go. All done. Oh, work against quite such. Please forgive.

Steven Bruce
Sorry. No wonder this sort of pressure was six cameras on you and two people watching.

Anthony Padgett
Okay, I think you should I think you deserve a rest I think this is tough. So off camera, these these elastic bands are sorry, this chord is very, very tight. In the early stages, so people are are in too much pain to do anything like that will do it and sitting. And they still got to learn that you could do it from wheelchairs? Absolutely. Yes. But the the first thing they've got to learn is how does the load trap work first, right and recognise it as a chat work in sitting, you do get some activation here as well. And then we start layering that?

Steven Bruce
I'm not sure quite sure I follow this question which has come in because Keith has asked what what's the advantage of the bands over a dumbbell?

Anthony Padgett
Yes, the dumbbell is going to change its loading, if you like through range, whereas this is going to increase the range? Yes, yes. Yeah. And I think this this gives you free movement. So right so for instance, if I had a dumbbell in my hand I was doing external rotation my anti gravity muscles are stopping the ban the

Steven Bruce
the weight from falling but there's no resistance on your external rotation at all.

Anthony Padgett

But there's lots of there's for you, I mean, the very fact you are externally rotate rotation rotating means you will load it, but if the weight is your hand, what is that waiting, wanting to do fall to the ground? So good question.

The elastics is traditionally the little routine starts facing where it's attached. You do a certain assortment of exercises a quarter turn to the right so your work against this way round. Let's say we did the facing the attachment exercises like now stretching against resistance and going into

Anthony Padgett
the preset position every time

assistance. So we're bringing in resistance and assistance throughout constantly constantly changing and keeping it moving. I'm out of breath I'm doing.

Steven Bruce
Well tell me what are we going to sit down? Yes. You've done on Demo

Anthony Padgett
Day? Yes, absolutely. I think flowing

Steven Bruce
while we're here. What would you offer to people as a takeaway? What from this? Could they do in clinic now with patients, which might be helpful?

Anthony Padgett
Yes. Okay, get a rubber band, and get attached to a door, stand in front and do this yourself. Don't do anything on a patient till I've experienced myself so you can actually explain exactly what you're feeling I feel a bit in I can one my leg feels a bit funny. So test yourself. rubberband, round elastic around the doorknob. And get into the habit of holding it very lightly. Don't grab it, hold very lightly. So you don't you get less flowing the brain bit. Got them all out. But holding tightly might actually block the movement. So it's very light. You're trying to externally rotate and get that tray of drinks working. So go away thinking of that. So we'd love to ban any hand coming down to stretch first and trying to think looking over that fence. And externally rotate. Don't hunch

Steven Bruce
I knew. Lengthen lumbar neutral going on?

Anthony Padgett
Yes, all that trying to get a bit of pelvic rotation going on. But first of all get localise your lower traps, localise your traps, then introduce your glutes as your abdominals and trying to do both together. If it's too much, just do one. Isolate first. And then once that becomes I think if you do it 1000 times it becomes second nature. I think that's in martial arts, it's once it's done, it's set as a new muscle pattern, correct muscle. So that's what I will do last week, banned, tro drinks, and then start introducing different leg movements. Right. So you're getting other diagonals, spirals working? Okay, so a bit wordy, but I think I answered your question.

Steven Bruce
Do you want to put your top back on and we're gonna sit down over and over there, and you can have a little bit of a rest? Thank you carry

Anthony Padgett
some water. So I put you through. It worked. So I think we both get lost in it. Enjoy it and passionate about it.

Steven Bruce
No, it does. Watching Karen doing doesn't make me think, crikey, there's this is a complicated movement. It's not as simple views or theraband and do some internal external rotation stuff, there's much more going on which I can understand that now seeing the pictures of the spirals and so on, you were trying to engage a whole lot more than just external internal rotators.

Anthony Padgett
And there's certainly a picture which I do have, but I'm not allowed to show it. But there's a guy who does the it's the Natural Bodybuilding, he doesn't use any weights at all. He's purely done this, he looks magnificent, and strong and very balanced. And because you're it's a chain, if you get all parts that chain working in this chain is really strong. For the last Japan could actually supersede weights. But there's something to be argued about.

Steven Bruce
But as an interesting one. I mean, bodybuilding isn't necessarily the same as strength building, I can't believe that it doesn't come without a considerable amount of increased strength. I can see how this, I would imagine from sort of conventional teaching about building muscle strength, it would take a long time to build strength through this. Yes,

Anthony Padgett
I think it would, right. But are you building on a much better and much more than natural length muscle? I mean, listen, if people want to do weights, listen, fantastic. And that's what gets them through their day in their life, and they want to do it. And then I think we all would support that.

Steven Bruce
Well, actually, yeah, I mean, it's if people are going to the gym, that's a damn good sign, isn't it? I suspect there's some research somewhere that said people who go to the gym live longer than people who don't want to and of course, there'll be a very flawed bit of research and observational study, but it's always a good thing that people are getting exercise. My theory says for patients with hyper flexibility with this routine alter,

Anthony Padgett
it would alter because their neutral would be different. I think you'd have to make sure that they weren't. So hyper mobile patients unless it's all nine points. I don't remember the name of the scale, but I think you need to be a bit careful with your hardware, cardiac valves etc. But I think you could you can still work with with hyper mobile patients, but you just need to be a little bit more aware of when they're doing for instance, a hip flexor, stretch a decent one, they're not loading their lumbar spine. If they extend too much because they can that's their default. The answer is yes. But you know, I think you do need to be a little bit more cautious.

Steven Bruce
There's a bit of me saying if they're hyper mobile, why are we doing a stretch on anything?

Anthony Padgett
Yes. So if you're loading your bike as a director Again, I'm going to work life after a long day. But there's still be muscles that need to be strengthened. Yes. If you're if you're if they're stretch, as has got to be within their limit, but you're still strengthening the agonist maybe that's what I suppose I don't know the answer.

Steven Bruce
Yeah, maybe maybe a better question is in hyper mobile quest patients have you used this and has it been

Anthony Padgett
beneficial, I haven't, I haven't seen them enough,

I, I have some hyper mobile patients that I use a combination of reformer based Pilates and some of this viral technique, but I can do that with a reformer. So I'm not having to move them up and down and around the room. Because the bottom line is, we still need to improve gluteal strength, we still need to improve the posture around the shoulders, and the principles of this method of exercise that if we have a degree of contraction in those shoulder depresses degree of contraction in the gluteal muscles, you won't need to think about the core. And in terms of, you know, this magical core stability thing, everybody's always thought about when you send a patient to you to work on their their, you know, back pain or what have you. The recruitment of the spiral muscle chain in that order will fire up the obliques to creating that stability in the middle. And by default, we are strengthening those muscles in the chain. So whether or not they need the hip extension, being hyper mobile, almost isn't isn't the certainly for somebody out there I'd be working with for the exercise side of things isn't the focus. It's it's firing up the glutes in this in this way.

Steven Bruce
I suppose another question arising from that is I mean, what are the contraindications to doing this? Have you made patient? Could one make patients worse?

Anthony Padgett
I think because I get the technique wrong? Yes. I think it's its compliance. Its its understanding of body position. I wouldn't say with any contraindications. Right? If if they got a spondylolisthesis is unstable, they probably aren't seeing you anyway. Because they're still in pain or something. But I think it's more patient understanding how to do it would be a contraindication whether they've got the mental capacity to do it. And if they've taken it on board, and they do it incorrectly at home, then then was it your teaching was incorrect? Or was it their understanding was incorrect?

Steven Bruce
Did you do any of this via video link during COVID? I mean, presumably you can you can you can teach this over video link or supervise it through video link if

Anthony Padgett

we had to do a sort of refresher course with with the lady in based in England. And that was actually very efficient. Very well. Her camera angles such that we could do it but we had had experience I had we didn't we haven't taught anybody with as far as stabilisation you hadn't had experience already. Yeah, you couldn't start from scratch. Okay, because until they can actually get that tactile response, if you like of, where's What do you mean, my shoulder blade in my back pocket? What do you mean all like this? No, you're not, you're not cardio. I want you to be able to be subtle about it and lengthened and tall and balletic.

Steven Bruce
Yeah, and again, and you did very balletic. Thank you. Carrie says presumably these exercises need to be done just right or will not activate the correct muscles and could be problematic. Do you get patients to do this themselves? And Carrie, I'm sorry, Carrie are preempted, perhaps by that question.

Anthony Padgett
I would only get into themselves once they've been taught thoroughly. And they so at one, once we've taught them, we would then watch doing it and there's a mirror for them to to engage. And we will keep them going. You know, once they've once hopefully, if they've come to me with pain, they're out of pain, nursing care, and they're exercising, we will send them away with things as long as they're doing it correctly. And then we will check them up in a month's time to do the next level because there are lots and lots of variations on this. increase resistance to the band, changing position, one legged, etc.

If the patient is willing, I have them come in weekly, because without a shadow of a doubt, teaching them day one seeing them on day 31 The bad habits have crept in and so we're not adhering to the

Steven Bruce
season before. Would it be a 15 minute appointment to run through their 15 minute routine,

I see them for about an hour. Some of that will be explanation some of that will be me physically putting them into position. That initial funny looking stretches you described it, you need to feel it. I call it the question mark shape. When you're in that reach forward position. You can feel the abdominal muscles are working. The gluteal muscles are working there's a lovely stretch through to the lumbar spine. You can feel the stretch in the upper back and shoulders and you get that elongation of the neck just in the sort of preparation to go into what is defined as the active position where I was holding the

Anthony Padgett
trigger but I could be there for an hour and a half. for two hours, if I'm doing manual therapy on them as well, they might need a bit of a break, and then they're gonna get to work out.

Steven Bruce
But I was thinking there was there's been, there was at one point quite a drive to doing tele appointments that we call, Zoom account, zoom, rooms, and so on. And of course, people will say, well, it's so much more efficient if you can do these things with a with a zoom camera on a computer and supervise a patient in their home. But I wonder there's actually there's probably a therapeutic benefit in coming into the clinic isn't that the patient feels that

they've, psychologically they feel that they've been properly treated and handled and superfluous?

Anthony Padgett
Yes. And it kind of goes against slightly what we start, I started off saying that I want I don't want them to be dependent on us. And actually, invariably, because can teach us very well, they want to keep coming back because they're starting to feel better and stronger, but they're not seeing therapy as such. So they're now seeing it as well. I'm not going to the gym, I'm going to save my money going to the gym, I'm going to

Steven Bruce
do you do any of these in those massive classes that you showed a photograph of? It's always one to one? Could you could you have a class and say I've got five patients coming in? And well, I will do this

excellent five, I have five reformers and space to attach five sets of ropes and still have room to elastic cords that is still have room to put everybody to work effectively. But in my wouldn't teach any more than I think I need to go round and correct see, and correct when necessary. You know,

Anthony Padgett
when I get it when people are doing sort of mat Pilates in in groups of 20. But and it must be very frustrating for the people teaching them because they must be saying, well, I can get lots of people in and you know, hopefully they will they're getting paid for that. But are they? Are they because they'd be more efficient by seeing to a loss of 10? Or for loss of five or something that makes 20 Yesterday,

Steven Bruce
you could have balanced the aim of making a living without keeping the cost down for the patient. Yes, well,

Anthony Padgett
yes. But also they've got to it isn't it isn't occasion.

Steven Bruce
But of course in Pilates, there is a slight difference in that people come to a Pilates class and they expect to all be doing the same thing. If you've got five patients and one's got a shoulder problem and one's got a hip problem was Would you still ever classify people would they be doing the same exercise,

I would but because the classes are so tiny I can I can adjust for the individuals in it. And that's the beauty of the elastic cords, I could attach it on to the very slender on the blackboard. This is nickel elastic at the end of it, making it very light resistance comparing it to the way it was attached for me today. incredibly strong. Equally, I can have everybody essentially doing the same exercise, someone could be sitting on a chair or in their wheelchair, someone could be standing someone can be stepping up and down on a cushion or a box or something even higher. The the words for me are the same effect for the patient, the person performing the exercise is the same.

Steven Bruce
Part of the reason I asked the question is and you and I were talking about this earlier engineers that there is a widely held perception which has been possibly earned by a section of the physiotherapy community that physios just hand out exercises to patients. And you know, that's not what physios should be trained to do. It's not what proper physios do. But when people come in, and if they're all getting the same exercise to people then think, well, this is this can't be designed for me. It's not bespoken I want this but

Anthony Padgett
no, you're right. But that's why if you've got a group of five,

Steven Bruce
you can make micro adjustments. Yes, absolutely. You know,

Anthony Padgett
if they've got some kind of impingement syndrome, then I'm not I'm not going to get them to be doing huge lateral rotation while they're inflamed if they got nasty bursitis Stop it, but we can localise a lot of traps, for instance.

Steven Bruce
Well, Victoria has complimented you on the demo. She says they're great demos. Thank you very much. So well done on the ballet supervision. Let's say we've got the camera angles, which is always a challenge on these things. Because obviously, we tried to work out what we're going to do in the demos, but it will vary depending on the questions and how it actually happens on there. I

Anthony Padgett
think you described his winging it.

Steven Bruce
I didn't, I never had it. But, um, I'd say we've had, we've got 476 Viewers, and still we haven't had anyone brave enough to come in on the video link, which means we've worn these bloody air pieces for no good reason whatsoever. So there's going to have to offer a prize I think for the first person who's prepared to go live on the video and ask us questions that way. It's too late now, because we're almost finished. My theory one just to clarify what she said about hyper flexible patients, she says that they can often present with a functional scoliosis. And that may be that that was the purpose of her question.

Anthony Padgett
Yes. And if it is a functional scoliosis, and you can correct scoliosis, you're gonna have tight muscles on one side and longer than the other. So if you can, like balance that out, I think I think that was the thing that impressed me most about about this particular technique was how the scoliosis seemed to correct even the structural ones which to me

Steven Bruce
but yeah, Okay, and this is the final one, Claire has said that their personal trainer, wherever she works, the one she sends patients to uses these resistance cords, and she thinks that ace, good, good, but we're now at a time. So I mean fly by. But I'm so grateful for you coming in and just hoping that people have got some really useful stuff out of that. But thank

you very much treasure. Well, there we go. That's your lock for this evening, I'm afraid, as I say, hopefully, that's added something to your armoury of techniques for the clinic. And let me know what you thought. I mean, you can send me an email or leave us a review that would be nice, or give us a call, we'd love to hear your feedback on what we've done tonight. And what we do the rest of the time,