Shockwave Therapy – Ref314

with James Woledge

18th July 2023

TRANSCRIPT

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Robin Lansman
Hello, and welcome to this evening show. It really is great to have you with us. I'm Robin Lansman back for an unexpected second appearance in the house chair because, as you probably know, Steven has had to rush over to France last week when the clear was rather unwell, I'm delighted to report that she is now much better, although nobody so far has been able to tell her what the problem actually is. Well, I'm sure when she actually finds out, she'll be thinking it might make an interesting case for discussion, perhaps. Anyway, Steven doesn't get back until tomorrow, which leaves me holding the fort. And tonight, it's the topic of shockwave therapy that's the centre of attention. I have James Woledge in the studio with me to tell us about it. And we have some state-of-the-art kit that he'll be using to demonstrate on our model a little bit later on. James himself is also an osteopath. And he's been lecturing and clinical mentoring in shockwave therapy and has been doing that for about the last five years. James, welcome.

James Woledge
Thanks for having me. Thanks very much. Yeah, I mean, just a little bit more about me. I am an osteopath of 20 years and I got into shockwave therapy about 10 years ago, I have been teaching about seven years now. And started out teaching at Leeds Med, on Sports Med MSC course and my background was always wanting to get into sports injuries more and soft tissue disorders. And ultimately, that led me about 10 years to go to investigate what seemed to be this new thing that was coming out. I'd never got into machines before. I was a traditional osteopath. And so I looked into shockwave therapy and embarked on that journey.

Robin Lansman
Can I slow you down just a little? What kind of motivated you to go from what you were doing into looking at new options, because I think that's always interesting to know a little bit about your background story. What drove you?

James Woledge
Well, that traditional practice, the traditional way that I used to treat was great. And that was my background as being a purist osteopath, so to speak. But in the practice, I was in a very big practice, I tended to you know, I like treating foot disorders I seem to get interested in plantar fasciitis, tendon problems and it seemed to be that the other guys in the clinic weren't interested. So I take these on like, right Okay, let's try and throw everything at it and realised that even though my background was in sports type stuff, my knowledge was poor, one. The knowledge I think I got from the British School of Osteopathy at the time wasn't great on those things. And so I just started investigating other ways in which I could help these patients particularly you know, the chronic stuff, the chronic soft tissue disorders.

Robin Lansman
We will come on and do a lot of talking about that but going back to the whole thing about I guess feet, particularly, I mean, you mentioned that was a key area of interest or a key thing that drew you so what was it about feet?

James Woledge
I have no idea. No, I mean, I think that they just presented, plantar fasciitis if anyone sees those conditions that I just you know, the top of the body, migraines and headaches are really hard to create a challenge.

I like a challenge and plantar fasciitis you know; they'd come in and you'd give them a week or two of respite and they still keep coming back and dreading getting out of bed in the morning. It's a really wearing horrible condition. And everything I threw at it just seemed to be really resistant.

Robin Lansman
When you say everything you through at it, what do you mean by everything?

James Woledge
Well, the usual hands-on stuff, I tried acupuncture I did all sorts of various taping courses which work, but it's the short term, taping works for the two days and then patients slowly started to realise that you know as soon as they don't tape it, it becomes quite arduous. Orthoics, I make my own orthotics, I still do, I heat those, heat mould them, tried that, of course the stretching, make sure the calves loose. I mean everything you care to name it I went on course about it. And then actually an old colleague who's not an osteopath anymore, he worked for one of the big companies and I was still chatting to him as friends, and he said you got to get on board with this new thing. This was 11, 12 years ago. And I was a bit resistant to it because you know, I was at an osteopathic age where, you know, we could do everything with the hands and to plug a machine in was a little bit too much of a challenge. You know, it was sort of some suggestion that you weren't being a very good osteopath, if you plugged the machine in, you must be good with your hands. But I went and met him, and I got one on trial. And the rest is history, really, because I had had this group of patients that I wasn't getting anything with. And then I tried it. And because I'm about long-term change, I pretty much did three treatments and then followed them up a month later. And that's the long term change the shockwave brings about, that's the bit that got me. It's not just giving a quick fix for a week getting back in. I wasn't interested in that. And I still am not in practice. I don't see maintenance patients. I have my own beliefs about that. And I don't like doing it.

Robin Lansman
Sorry, give me your beliefs, it's good to know your beliefs.

James Woledge
I'd like to find it, fix it and leave it alone.

Robin Lansman
That sounds very osteopathic.

James Woledge
Doesn't it, weirdly? But osteopathic practices are sometimes in geared up to get people to come in for checkups and maintenance stuff. And I just don't believe that. I think that with these conditions, particularly that I deal with, I quite like to get in, do the treatment, set them up for the fact that I'll take them say 75% better because tendons still take nine months to get better. Plantar Fasciitis does. Give them a realistic prognosis, empower them to look after themselves. But I'm there to make sure I kick them out of that chronic phase. And this is what shockwave can do.

Robin Lansman
Have you suffered yourself from any injuries, chronically, or otherwise?

James Woledge
Now I've got a really grumpy old knee. But apart from that touch wood, I've always been okay, I'm getting grumpy thumbs now. I do less with my hands now to be honest, I give them a rest. Because my various shockwave machines kind of step in where my thumbs would usually have been.

Robin Lansman
What percentage of the time would you say you split between hands on, we'll call it traditional, whatever that means osteopathy or actually using the shortwave?

James Woledge
To some extent, you know, from a palpation point of view. And still that sort of connection you get with your patients, I still touch every patient regardless of whether I use a machine or not, whether it be to find out where I'm going with a machine or some traditional soft tissue stuff. But I'd say that, you know, say this week, 75% of my patients now are chronic tendinopathy, chronic joint stuff, plantar fasciitis that I would use my shockwave machine with, there'd be 25% of patients that I would do my traditional osteopathic stuff that you know, neck stuff where shockwave has no place. I still do hands on stuff for about 25% I'd say.

Robin Lansman
Okay, so you're kind of niching a little bit, I guess.

James Woledge
Yeah, niche specialist stuff. And when I teach this, I make sure that people would, you know, you set yourself up as a specialist tendinopathy. Chronic tendinopathies are probably more prevalent in primary practice than osteoarthritis now. We've got the data to say that that's probably your number one thing you're seeing, it might be that we're now understanding the tendinopathies are more commonplace, and we probably misdiagnosed them in the past. But tendinopathies is probably the more common than general osteoarthritis.

Robin Lansman
Getting more common?

James Woledge
No, it's always been more common. Our understanding of what is a tendon problem, for instance, the lateral hip, the outer hip, that forever would have been referred pain from the back, or arthritis of the hip, or in some cases a bit of sciatica because it travels down the leg a little bit. Now we understand that GTPS, as we now should call it, which is your gluteus medius tendinopathy is probably the most common of all tendinopathy problems or the most common tendon problem. And I think historically, when I left college that wasn't even on the radar. It was trochanteric bursitiy. But actually, we now know it's hardly ever bursitis, it's tendon. And so you know, all of those patients with pain on the outside of the hip pretty much are a tendon problem. But actually, that might be news to some people tonight, always it's referred pain from the SRJ or whatever else. Sometimes it can be but the number one thing around the areas is a tendon problem.

Robin Lansman
But still differential diagnosis is rather imperative.

James Woledge
Absolutely, yeah. And so when we teach this and we're saying, look, you can get into Shockwave, what you're really doing is setting yourself up to say, I'm a tendon expert, I specialise in tendons stuff, niche, or specialism and the shockwave is the thing that allows you to break through that chronic picture, to get them better amongst your other skills. It's still embedded in a whole network of treatments that you would otherwise do anyway, hands on included. So it's not excluding osteopathy, it's not excluding hands on. But it's bringing in a skill set that is, you know, mostly borrowed from physiotherapist for rehab and loading programmes and so forth.

Robin Lansman
Right. And people getting this in the NHS. I mean, it's available I understand in the NHS.

James Woledge
Yeah, so yeah, we've had NICE guidelines dating back. It's the 20 year anniversary of the first NICE guideline, which was calcific tendonitis of the shoulder. And you know, there are four others, there's five there are NICE guidelines for and that's plantar fasciitis, Achilles tendinitis, the calcific tendonitis of the shoulder, tennis elbow, I mentioned five?

Robin Lansman
Not quite, I think you're on three and a half.

James Woledge
Four. The other one will come to me tennis elbow, calcific tendonitis of the shoulder, Achilles, plantar fasciitis and GTPS. So lateral hip, there's your five and so yeah, 20 years of that and so if you go to the Royal National in Birmingham, the Royal National Hospital, they got shockwave, so Thomas's have been doing it for at least 10 years. So if you're in the right postcode, shockwave will be available, whether it be focused or radial, which we might talk about later.

Robin Lansman
But within the physio context, it's not being looked at in an osteopathic way if one can say that, how does that sit with you that kind of statement, that question about how it's contextualised within the care plan?

James Woledge
Oh, I see. Historically, the number one thing which everyone talks about with plantar fasciitis is, with shockwave is plantar fasciitis. So it's quite a lot with podiatrists and treating heel pain. But I'd say that when we're, you know, doing courses and teaching it's a fair mix of osteopaths, physios, podiatrists and chiropractors across all four. They sit in the room, there's 20 people, there'll be a fair mix of all of those. But really, what it's saying, I go back to the start is if you're an osteopath, and you want to treat these conditions, it's the number one evidence-based modality that you can use alongside your graded loading programmes and so forth. And I think from when you graduated a little bit before me, but 20 years ago, there was still this sort of, you know, you're in that bracket that does this, and you were in that bracket

that does that. And I think now, my colleague's a physiotherapist and we share ideas all the time, and we're pretty similar. You'd be hard pushed to see the difference between us, he does more hands-on work in private practice, I did be more loaded programme rehab stuff, and patients don't care, in my view. They just want answers, and they want guidance and a plan. And they rarely know that I'm an osteopath, call me a physio half the time, I remember that used to be annoying to me but not now.

Robin Lansman
Why? Because they didn't know the difference, or they didn't see the difference?

James Woledge
Yeah, they sort of didn't know the difference, but I also used to probably be quite snobby about me being an osteopath. And I was really proud of what I did. And that's ebbed away, and I just realised...

Robin Lansman
You're no longer proud to be an osteopath?

James Woledge
No, I'm not. I think I was so proud that I thought I was a little bit more significant in the world of musculoskeletal health care. But now that I've learned so much from other professions, I realised that was nonsense. We've all got plenty to offer, whether podiatrists, chiropractors, physios, whatever else. We've all got our skills, so it's really about the skill set that you do your post grad in. If I'm going to be a good tendon person, doesn't matter whether you're an osteopath, physio, podiatrist, go do the tendons stuff. And then, you know, as I say, the shockwave is a part of that.

James Woledge
And the people who come on the course, you mentioned them being all different professionals. What do you think draws them to come? I mean, I presume you ask them, but what do you think's going to drive them?

James Woledge
Nothing more obvious than just they know the evidence base. They know that the evidence base for plugging a machine in, back in the day would have been ultrasound if one had ultrasound machines. And you know, and now that the NICE guidelines actively dissuade you from using it for loads of conditioning, dissuading you, not telling you to use ultrasound as a modality. But the evidence and the amount of level one research and so forth for shockwave is just better than anything else you can plug in the wall.

Robin Lansman
So going back maybe to ask the question, since you've mentioned ultrasound, it was on my mind to bring it up. I mean, traditionally, I know when I, I mean, I've actually been in practice 35 years, so quite a while. physios used to say sometimes the crystal or whatever it is, the core thing inside the ultrasound isn't even in the machine. And we're using it. Now, would you perhaps just explore a bit about, ultrasound was certainly a very popular modality, was using something that you put jello on, and you kind of like treat it that way. And that was done for tendons for years and years and years, as far as I know. And laser

therapy as well. There's two different things there. But laser therapy has also been used or reported to be useful for tendon related issues. So what's happened to them? And how do you sort of sit with that?

James Woledge
Ultrasound still has a place, it has mostly a place in acute injuries. So if you can get ultrasound, the only evidence that really exists, if you can get hold of someone in the acute phase, within two or three days, there's some that say that it actually needs to be on the day. So football clubs still use them, you know, quick turnaround, come in, you've had a knock on the ankle, it may well enhance healing by using ultrasound on that acute injury. But for chronic stuff, as far as I'm aware, someone might come and correct me at some point, there's hardly anything at all. So most physios now that I know do not have an ultrasound machine, it's definitely become a bit passe. Laser, on the other hand is on the up, I would say. And the only thing with laser is that there isn't any good quality studies. There are lots of studies on rat hind limbs, the only thing that I know of that exists, which is for NICE guidelines is recovering from mucosal cancer of the mouth. So it's a good tissue healer in some circumstances. But that's the only NICE guideline it does have. It doesn't have any guidelines for musculoskeletal pain. And I get this sometimes on Facebook or whatever other forum I'm on, where people have got a certain amount of money to spend. Oh, should I do laser, should I do shockwave and I'm a little astonished at that because it didn't take too much time on Google to look at the research for shockwave, for our stuff, which is musculoskeletal pain, and for laser, but lasers got from how it works, it's got some really good potential, but for some reason there isn't any great quality studies out there yet to say it does some fantastic stuff. Probably has a place to work alongside so a few people doing a bit of both. But if you had an ulcer, you know tissue healing, laser's quite good at that stuff, but not for musculoskeletal. It's not great yet.

Robin Lansman
Okay. And what about I mean, in terms of the placebo effect, because I read, you mentioned somewhere 60 to 90% success rate? Is that with shockwave?

James Woledge
Yeah.

Robin Lansman
I mean that kind of presents a bit of a conundrum in terms of how definitely effective things are and how do you couch that?

James Woledge
Those numbers were probably on the fact that when you look at all of the conditions that it's got guidelines for, whether they'd be NICE, or whether they just be good level one trials, we know that the lower extremity, the weight bearing tendons do particularly well with shockwave, whether it's radial or focus shockwave.

Robin Lansman
We can come on to the difference, cause I know there's a difference. I've got a question, actually, that's come up from a gentleman called Steve Bass. What evidence is there on heel spurs in symptoms of plantar fasciitis, or the connection, I presume he means.

James Woledge
So I'm lucky enough to be in my clinic, I've got a foot surgeon. And so I learn lots from him. And there are some times where the nomenclature around heel pain has moved on a lot. So heel spurs are not correlated with heel pain. So it's a bit difficult to say what it does...

Robin Lansman
When you say it's not correlated, I mean, clearly, people come in and say, I've been told I gotta heel spurs, radio my GP.

James Woledge
Yeah. Yeah. Radiographically, it may be the case they have a heel spur, but it's thought to be that heel spur as a consequence of traction on the plantar fascia, which creates a bony growth like it does your tibial tuberosity. It's a consequence of time and ageing. It's not the causative factor in their pain. In all, but point 1% of cases. So it's not something we talk about really, the modern way we should discuss it actually, is that it's plantar heel pain. That's now the new term. Plantar Fasciitis is possibly on the way out. So plantar heel pain is what they have, but the plantar fascia is the most, the nociceptive item there and that's what shockwave treats, is the most of the soft tissues. So in effect, if I think what he might be asking, does it have an effect on the spur? Would it break it down? That's what a lot of people ask us. Probably not at all. If it's a bony spur, the shockwave energy is not enough to break that, but people get better and I've had plenty of them. They've got heel spur, all their pain goes away after treatment.

Robin Lansman
They are being told they got a heel spur.

James Woledge
They can have, via ultrasound, I'm a sonographer as well. So I scan these and they've got a whacking great heel spur. And you know, I don't make much mention of it because I know that clinically it's not relevant in most cases, but patients get better in the heel spurs still there. It's just the fascia that you're treating, not the heel.

Robin Lansman
Okay, I've got another question from Lisa OP. Who says, does James know much about TECAR?

James Woledge
TECAR. That's, you know, the sort of conferences I go to, TECAR is also on the up a little bit. It was a long time ago.

Robin Lansman
Do you want to explain what it is?

James Woledge
I don't really know that much. So I'm going to be...

Robin Lansman
Maybe what it stands for. Maybe Lisa could send us message back in and explain what that is.

James Woledge
Yeah, I don't know that much to make a comment. But there's not much on it. It's got a lot of press at the moment, but I don't know of any evidence.

Robin Lansman
So maybe Lisa, send us in a revision of your question. That will be great and helpful. So going back to the placebo business. Yeah. What's the, because obviously, like going back to the ultrasound idea, that was often used and kind of, you know, some of the benefits like with lots of therapies, the placebo effect is in there as well.

James Woledge
So going back to that lower extremity, really good for shockwave, the upper extremity, not so much. So if I were going to pick my perfect patient, it would be someone plantar fasciitis or lateral hip pain, they work really, really well. So if you got a tennis elbow or golfer's elbow, not so good. Still better than most things. So it still is there.

Robin Lansman
Well, how do you explain the difference?

James Woledge
We don't know. I don't know why one is more effective than the other, i.e. lower extremities and upper extremities, we simply don't know the answer.

Robin Lansman
So lower extremities seem to come out better...

James Woledge
They do.

Robin Lansman
Is what you're saying.

James Woledge
So there's some of those studies on plantar fasciitis are 80%, and some of the studies on tennis elbow 50/50. And that is literally how I say that to patients. It's about 50/50 for anything in the upper extremity. It's about 75, 60 to 75%, depending on their comorbidities, all the other things that we usually tell patients, you're not going to do that well, because unfortunately, you smoke, you're overweight, and there's all that sort of thing in it as well. But most of the studies support that sort of region of improvement over a three-month course. The placebo bit, I love placebo like everyone else, we should embrace that. And it's just a part of what we do, right? Well, you can't not be part of the placebo, can you, I mean, as soon as you therapeutically have an alliance with the patient, you know that placebo to some extent, their belief in you

is going to have an impact on their outcomes. There's no doubt about that. But that only usually lasts in the short term. I think there's some studies that say about three to four weeks, and if you don't see them for three or four weeks, that placebo effect drops off. But the key point with shockwave, which I always really liked is long term follow up studies. Most of the good quality studies, long term follow ups to a year. It beats steroid, it beats almost everything else which is usually measured over three months. Long term stuff where placebo has gone out the window, shockwave continues to improve these patients.

Robin Lansman
So would you say, I mean, again, a rough guess but how many of the people who come in and see you have already had some sort of heel steroid injection, or some other kind of invasive, slightly invasive treatment?

James Woledge
Yeah, so plantar fasciitis and lateral hip, for instance, people are very keen to steroid dose. Because it's an easy injection, you don't need ultrasound guidance. I'd probably say about one in 10 have failed steroid before they see us or failed interventions of other sorts.

Robin Lansman
Well, you only see the people who are coming because they haven't succeeded, I guess. So I don't know how to measure it exactly. But quite a lot have had the injection?

James Woledge
Yeah, lots. Yeah. I mean, almost, half of my shockwave stuff is lateral hip and plantar fasciitis. I'm gonna guess that I probably see 30, 40 a month easily. And you know, you're talking about five or six of those would have been steroided before, fail steroid, tends to go to shockwave and failed shockwave tends to go to steroids, they're really the only two things outside of our hands that are really going to change these patients, particularly with plantar fasciitis. But most people know that it's a 50/50 hit for a steroid. It's about 60, 70% for an ultrasound guided steroid, getting it right into the right bit. But a good portion of those people after three months return to baseline, and that's where shockwave continues to improve, but the steroid drops back to where they were. So I've seen hit patients where they've had literally seven steroid injections over two or three years, because they just go back every three months and have another steroid for a tendon disorder, ultimately, because they were diagnosed with bursitis. And it's not bursitis. But you inject steroid into a grumpy tendon, it gets better, short term.

Robin Lansman
Okay, let me just come back to here for a sec. Because diathermy better known as TECAR therapy, an acronym for capacitive and resistance energy transfer. That's what I've been told here. And it's a therapeutic technique that uses an electric current with frequencies in the medium frequencies of the radio band. That's diathermy and also someone from Google. I'm not sure who provided this. But Google have said shortwave is used to break down adhesions and calcified tissue as well as stimulate blood flow. So whereas the TECAR electric magnetic waves are aimed at the target tissues to produce heat, drainage and stimulate cells involved with inflammation and healing, so there's some crossover in effect, it seems.

James Woledge
Possibly, I have no idea. They've got to be like the laser, they just, you know, do the research, prove it actually happens, as opposed to on a rat hind limb, or in a petri dish. I don't know. I mean, if someone wants to come and tell me the TECAR's got that evidence, great. We're gonna look at it. I'm not, you know, biassed against anything else if it's proven to work, it's just that those things interesting and not that well proven yet.

Robin Lansman
Well, it'd be interesting, anyone listening who wants to mention what they use. Because probably there will be people, would be interesting just to hear and contrast or compare and contrast?

James Woledge
Yeah, there's no doubt there's anecdotal, like, I've got some good colleagues that I've, you know, gotten to know over the years of doing this. And they use laser, and they are absolutely convinced it's brilliant. So you know, it probably is, but if I was going to spend 20,000 pounds on a machine, or even 30,000 pounds on a machine, I would just go with my sensibilities, which will be I've looked at the research, I can genuinely say to this patient, there's a good 70% chance I'm going to get you better based on all these studies. I like that about shockwave, because it's got some definitives around the science, whereas the other stuff, it hasn't yet got that. So if you have equal budget to spend on one versus those other things, that's just where I would go.

Robin Lansman
And that's what you've invested in.

James Woledge
That's it. Yeah.

Robin Lansman
So but you said about 75% of your practice is now treating the plantar problem and the hip.

James Woledge
The plantar and the hip. But because I scan as well, I see lots of shoulders, calcific tendonitis of the shoulder, so yeah, 75% of my working day is scanning and using shockwave as part of that process. Yeah, for all the tendons, lots of Achilles as well. Patellar tendons, not so much. We just don't have many footballers in hockey players in our practice. They tend to be the patellar tendons. But yeah, golfers and tennis elbow this time of the year, that's probably becoming more common as well.

Robin Lansman
And how do you biomechanically assess people then apart from actually doing treatment, because the issue, well, one of the things I'm seeing is that obviously, there's a pain related drive for people to come and get fixed, which it often is, in lots of practices that treat all sorts of musculoskeletal problems. And so then how do you contextualise the heel or other part that's inflamed or sore or foot or hip within the framework of them as a patient, as a whole entity holistically, one might say.

James Woledge
Yeah, so if we go back to let's just pick on Achilles and plantar fascia again, because that's probably the most interesting biomechanical area where the research has really changed over the last 5, 10 years. So we go back about 15 years, it was all about they're protonating too much, they need these shoes, this orthotic, dadada and then we realised that that wasn't a simple bit like you know, core stability for low back pain, we realise that wasn't as simple as that either. And so, if you looked at the research for whether a tendon is grumpy or the plantar fascia is grumpy or not, compare those two groups. There will be very little to back up a biomechanical process or biomechanical predisposition to that, it's really just load. It's just you've loaded the tissue too quickly by too much. That is much more the evidence, rather than, they've got too much pronation here or their knee's in valgus too much or whatever else. Or, for instance, pelvis is doing something it shouldn't, okay? But it's really about they've loaded it too much. When you go through the case history and you start to learn about tendons, you pick out those parts, where they've just suddenly dumped a couch to 5k. But they've raced through the last stage. And their Achilles is just...

James Woledge
So their training programme is suspect.

James Woledge
Yeah, they've done too much in too short a time. Or they're doing the same amount, but their health has deteriorated. Either way, it's overload to the tissue.

Robin Lansman
Holistic context, in terms of that whole person...

James Woledge
Yeah, it's still a good portion of my brain, that's, you know, going back to those physiology days at university that says, you know, your tissues are just, I say tissues several times in the room, I try and take them out of the idea that this a tendon, this is your tissues are just being overloaded.

Robin Lansman
So how would the state of health of someone, let's talk about that for a minute, affect the outcome or the likelihood of the improvement from having shockwave therapy? I mean, is there a type of patient I mean, to choose your type of patient?

James Woledge
We're getting there. We're getting with that simply because, you know, we see, I see them as a tendon disorder problem. And now the evidence is that if they've got some underlying metabolic disease, diabetes, thyroid, that's one thing that's a big predisposition for these diseases, and not allowing them to get better in a normal timeframe. We've got data on smoking, data on obesity, now we're starting to get data on, you know, where the fat is on the abdomen. So you know, carrying more white fat here, that's more inflammatory, that's not gonna allow tendons to get better very well. In lots of the tendinopathies, it's female slightly more than male and the big one with females now, there's lots more evidence coming about about perimenopause and oestrogen's effect on collagen. And whether you turn over the tendon,

get it healing in an appropriate way, lay down the right collagen, is somewhat dependent on your hormonal balance, which is why we think women get it more than men.

Robin Lansman
Right. So then we're going back to shortwave, for those cases where there's a metabolic issue, rather than a biomechanical issue, perhaps. So what's the sort of the way of approaching that with shockwave?

James Woledge
Sorry, I always just sort of caveat, it's always shockwave within. Right. So, I spent a long time on a whiteboard in my room talking about all of those health issues.

Robin Lansman
With the patient.

James Woledge
Yeah, they can change, and they should change. And I will often say, look, you know, if you don't change these things, it might be six eight treatments, and it's going to cost you this much. If you could take these changes in your life and you know, lose a bit of weight here, do this with your blood sugars and perhaps have a chat with your GP about your hormonal health, because you've told me that you're getting hot flushes, and your memory's a little lost at the moment, and, you know, so on and so forth. Perhaps you need to touch base with your doctor about your HRT, or whether you're having any or not, because all of that will support the outcomes for my intervention, which will be graded loading programmes, getting you back exercising, and shockwave because I'd rather shockwave a nice healthy bit of tissue, because part of what it does is this regenerative effect, it's giving everything a stimulation in going right, come on.

Robin Lansman
So is it less likely to be effective on a, I'll call it degenerative, but on tissues that are not running as optimally?

James Woledge
Yeah, same with our hands, you know. I'd rather tackle some tissues that get a good red response. And you know, they're healthy. And I know that's embedded within someone with a good cardiovascular system, good lymphatic drainage, all that sort of stuff. That's the same as shockwave. I use shockwave as an extension of my fingers. It does a few funky things. But it's the mechano transductive input into the body that says to the body's tissues, would you mind just crack on? You know, and I use my hands for that, I usually do, but shockwave is just a little bit more impactful, and has a few extras on top.

Robin Lansman
Okay, we'll come on to some of the things, I've got a couple more things here. From a marketing point of view, how did you start with shockwave? Do you use Google ads?

James Woledge
Well, no, I don't. I've never used Google ads. Back in the day, I had a fair reputation for dealing with these sorts of problems. And a few of the osteopaths that I used to work with in other clinics knew that I liked

them. And I just you know, so I've got this machine, seems to do wonders for this and the other. So they sent me a few of those. And then I suppose in a 20-mile radius, I've now become, you know, the go to clinic for that sort of stuff. But you know, bit of Facebook ad stuff occasionally, really optimising your website. And ultimately, it's in room, getting it across to the patient, if you've got a chronic problem lasting more than three months, and you've tried them, so now I have the advantage of seeing lots of patients with failed other interventions. And they come to me with the expectation that I'm the person to deal with these difficult problems. And then it's up to me to educate them to say, look, this is a decision that I think you should make based on the evidence, your choice is now, you've done the physio, you've done the exercises, there's not much left. Yes, there's a steroid injection, but most people don't want to do those anymore, risk of rupture. There's a shockwave machine that can help you with pain relief and start to supercharge your tissues a little bit. There isn't much else. So you have to do the job in the room and educate patients that are about to make a decision about the cost of the treatment, which is a bit more, but actually...

Robin Lansman
It's more expensive, having shockwave.

James Woledge
Yeah, but yeah, yeah.

Robin Lansman
They're having less sessions of other things? What proportion more, out of interest?

James Woledge
That's a difficult thing because I'm not in the classic mold of seeing patients you know, if I see a patient more than three or four times, it's unusual, because I tend to be in and out and give them what they need to do. The shockwaves, three to six sessions, and I double my charge in effect, my fee is 58 pounds, slightly less now 58 pounds to see me and 95 for the shockwave, the additional. So I have, I do scans as well. And I just up lift and say to patients, look, I think this would benefit you, we can charge a bit more because the machines are costly, and I have to service them, and patients understand that.

Robin Lansman
And how long is a session of shockwave therapy as in, an individual...

James Woledge
The actual mechanics of it? Yeah. Five minutes.

Robin Lansman
Just five minutes?

James Woledge
Yeah.

Robin Lansman
I do they get other treatment at that same time?

James Woledge
Yeah, as I said that the whole point would be that I always have half an hour, it will last usually half an hour, I'd say, because it's the whiteboard, the education, how the exercise is going this week, touching base with, maybe the diet's changed. Have you seen your doctor? It's all of that around the five minutes. There are some cases where I've, you know, four sessions in, we've done most of that. And it might be a 15-minute treatment. There are lots of people that chop the sessions down by half and charge the same amount. I don't really get that. I don't think that's good value care. But anyway, that's up to them.

Robin Lansman
Okay, and I've got a question from, I've got one from Louise White actually, says if you were spending up to 30,000 pounds on a machine? Well, actually, it actually goes to what I've just said, actually about what you're charging for treatment. I mean, you've got to work that out if you're investing 30,000 pounds.

James Woledge
Yeah, I get asked that a lot. And that's fair, that's a lot of money, that's the expensive one. So focus shockwave is proper lithotripsy or proper shockwave as we would say, that's the expensive stuff. Hardly anyone has got that, that's a bit extra. Most people have got radial pressure wave, still called shockwave. But it's not quite shockwave. But that's somewhere between I don't want to get into prices. But let's say somewhere between seven and 10, 11,000 pounds. That's usually quite an easy buy in for most clinics starting out on this journey.

Robin Lansman
But going back to what we said earlier about Google searches or putting it on your website, do you think it's, what can I say? I mean, the branding, the shockwave name, do you think that pulls people in any way just because of having something...

James Woledge
A little bit of USP and now I would say, because we do some Google stuff sometimes to see what's going and it's a searchable term, it's way more popular than it was 10 years ago, when I started this, it was very fringe. Now patients are aware, they get online, and you know, there'll be all sorts of things about shockwave treating your tendons. So patients come now much more to us and go I understand you do this, and I want this.

Robin Lansman
So they're pretty sold on it before.

James Woledge
Yeah, absolutely, yeah, the marketplace is now awash with clinics with it. So there's just more out there on Google. And paying for, going back to that question, because that's important is that when we teach this, it would be really important to say this base, like you've got to be a tendon base clinic set yourself up as a tendon specialist. And so my physio and other people that work with me in clinic, I see them three

to six times, but then they might see my colleague physio, three or four times on the back of that, that specialist rehab, who've got a treadmill, we do gait analysis, you know, so it builds not just the people you see with the machine at the end of the machine, it builds a whole network of patients that come to see you as a specialism. That's where it really gets paid.

Robin Lansman
How do you deal with the feedback, can't say the feedback, but you've got a patient coming in, you ask them how they're doing, I guess, is that the normal way? How would you kind of measure improvement? How do you actually gauge whether it's working and it's hitting the spot?

James Woledge
There are some well researched aids to measurement like the foot function index. So there are some things you know, literally, how many steps a day. So for instance, a patient I saw today with tibialis posterior tendinopathy. So I treat her three times. And you know, you make, in my clinical notes for those, you would say that what's your walking distance, 250 steps roughly, and standing time because it's a real biggie with that condition, I can only stand for literally a minute or two. And she's come in today and she's now standing for over 15 minutes, and actually will causing her to sit down is her back, not her ankle. And she's now walking if I remember, up to a mile she's fine. So there are those general metrics we should use with anyone, really.

Robin Lansman
Okay, could it shift then? So it's interesting what you said about it going from, you know, what was a tendonitis to her back? I mean, how does that connect in terms of one thing shifting onto another?

James Woledge
Well, that would be part of my normal, you know, that's always there in the background, I can kind of get with that. But one of the things that I think when you become confident in dealing with tendon problems, is saying to patients look, your pain, rather like back pain, is not at all correlated with the chances of you doing damage. It just isn't. So giving patients the confidence that says, in scanning helps, you scan, so they're no tears here, it's just a grumpy, sensitive tendon. And actually, if we compare you with somebody who avoids all exercise that causes discomfort, so this person just waits for it to go away. And the person that exercises with tendons, this person come back in a year, does them way better than the person that avoids all pain. And you give them that confidence. And you know, that's probably a more useful intervention to stop them getting knock on effects elsewhere.

Robin Lansman
So how much pain relief, going on to how it works, we're going to talk about the different types of shockwave in a little bit, but in terms of pain relief directly, what sort of effect and how quickly are people likely to feel a change that is measurable and useful and so on?

James Woledge
Well, what's really nice is that, you know, if we use sort of high frequencies stuff, so within a treatment, they will get off of the couch and think you're a genius. And, you know, you're not, it's just that it's rhythmical bashing of the tissues if you like, and that creates a big pain gait, nociceptive or antinociceptive

response. They get off and they walk away, they can't believe it, they can't wait to pay you. But then you have to coach them. That's a short term, you know, perhaps 2, 3, 4 hours, and it will come back and settle into what it normally does, you do get and we still don't know why, you still get within one or two treatments people that have had something a year and they come in and they haven't got any heel pain in the morning. We truly don't know why that happens. But it does happen. But what we usually say to patients is that the outcome really needs to be measured about a month after your last session. It's the tissue regenerative process knocking them out of an inflammatory, chronic inflammatory phase.

Robin Lansman
So you're saying some people might get up and say wow, wow, wow...

James Woledge
Well, they all do.

Robin Lansman
They all do. But what happens then in the interim, or how far apart are your treatment sessions?

James Woledge
A week usually, sometimes twice a week, but you have to coach them, that this is only gonna be two to four hours otherwise they get bit spoiled, send you an email, so you say look, this is only short term, this is you know, a joke and so it's just so you can go and pay me on the card machine or whatever. But it's just that's it two to four hours, but I'm not concerned about it and I say to patients next week, I will ask you how you've been but I won't really care what you tell me and that gets a little laugh as well because I do care, but actual between treatments up and downs, it's not relevant for tendon problems. It's where they are a month afterwards.

Robin Lansman
So how does it change from being so variable to stabilising?

James Woledge
We think it's due to the fact that you know, these chronic conditions have got some degree of, this is still theorised peripheral sensitisation, some element of central sensitisation, they're getting not classic inflammation in the tissues, because this idea that we don't call it tendonitis anymore, we call it tendinopathy. And there's no inflammation, we sort of come halfway back from that and say there is inflammation, it's just sort of grotty, chronic inflammation, which is not going to allow the tissues to heal. When we think the shockwave have some impact on trying to drive some of that out, substance P, calcitonin gene - the nerdy stuff, not for me, but it helps to clear the tissues out if you like, clean the tissues up. And then allow the tissues to move forwards. That seems to take 2, 3, 4 weeks, perhaps.

Robin Lansman
So quite a few weeks.

James Woledge
Yeah, in between. But a tendon, if you look at any data on tendon healing is nine months, it's the hardest thing to get better. It really is, which is why I found them so challenging. You know, muscles have got great blood supply, they're six weeks, bones, great blood supply two months, three months and then you enter cartilage ligaments four, five, six months, and then nine months for tendons. I think people are just a bit afraid to tell patients, this is going to be nine months. So I say to them, look within a couple of months, I'd like to get you 75% better, but the remaining 25%, that's Mother Nature, that's not my job. That's just you getting better over the next five, six months after that.

Robin Lansman
Well, I guess research is always an interesting one to find out some absolutes. So I've got a question here. What I was gonna ask this actually, thank you for Chubs for saying what are the contraindications for Shockwave?

James Woledge
Chubs?

Robin Lansman
Yeah. Someone you know. Yeah.

James Woledge
What are the contraindications?

Robin Lansman
Yeah, contraindications. The question was on my mind as well.

James Woledge
Gotcha. So the ISMST they're sort of the world governing body of all things to do with this and they tell us what we should be saying and doing and contraindications, they are very small. So 10 years ago, there was lots for instance, the one that we'd get was you weren't allowed to treat it over the thorax. You know, the sound wave is gonna give you a pneumothorax. At normal energy levels, you're fine. So that's a normal energy level, you know, is something that most people can tolerate on the ribcage anyway, so even that's now not worried about, it's not the cause of pneumothorax. But the only ones that are over the foetus in a pregnant lady, so actually, if someone's pregnant, they can have treatment on the plantar fascia. The soundwave is not gonna go anywhere near, so it's only on the foetal area, and then it's someone with no malignancy. You don't treat those. And that seems rather obvious. And then if they're, anticoagulation is pretty high, if they're on Warfarin, quite high-level stuff. Probably best not to do that. But some of the other ones, you know, I've treated with consent, with doctors' advice, saying yes, probably, okay, just warn the patient, the more they can bruise on the new ones, Rivaroxaban and all the other ones, but heavy dose Warfarin, let's say, heavy dose Warfarin, someone's 75 and their tissues are, you know, not great. I wouldn't use it. I mean, because you're getting into that realm that we talked about earlier. Their tissues haven't got enough in them to respond well to the treatment. So the contraindication is just foetal area, malignant cancer and heavy dose of Warfarin, that's the only three really, otherwise it's super safe.

Robin Lansman
Okay. And I've got a question here, which actually, someone missed earlier on. What does shockwave actually do? I mean, I think if you want to say it again, but how does it feel like, I think we're going to do that in the demonstration.

James Woledge
Should we feel the differences?

Robin Lansman
Should we save it for then?

James Woledge
No, we just touched on it there. The pain relief is supposed to do with C fibres. You know, there's some evidence to say that we can break those C fibres that have grown into the tendon, forgot the word now. So basically, with a chronic tendon problem, you can create nerve endings that grow into the tissue with little blood vessels, and there's some potential breaking of those strands of nerves, you can do with shockwave, mostly high energy stuff, but it's just anti-inflammatory. We think now, it's not got that sort of pro inflammatory thing. We're changing the words on this now. So it's not like it's creating a new, amazing inflammatory episode, we think mostly it's anti-inflammatory, clearing out the gunk. So that's the pain relief aspect. And then the other aspect, which is the regenerative stuff, really giving a boost to things like tenocytes, we know that they flood into the area, and you're getting appropriate collagen laid down after shockwave as opposed to inappropriate collagen. So it changes the fundamentals of how the cells work apparently.

Robin Lansman
There's some apparentlys, some theoreticals.

James Woledge
Yeah, there's a lot of theoretical because you know, when you start talking about cells in humans, it's almost impossible to say exactly what happens. So we have got also rat hind limb studies showing you this, that and the other helps. But there are also some good Doppler studies after treatment, that sort of stuff that say blood flow increases, there's a number of mechanisms, they get a bit nerdy, but if you google then they're there, but pain relief, and regeneration, both together, that's kind of what it does. Yeah. And mostly for chronic stuff, it's really when someone's had it for more than three months, Yeah, that's the real thing.

Robin Lansman
Okay. And would that weigh in if it was six months? Six years?

James Woledge
Seemingly not. I've had some people that have had, you know, for instance, I can remember a clergyman that had it for 10 years, plantar fasciitis, in the three months point after his last session, boom, gone, nothing else had done it in 10 years. So you can get some really, really ingrained chronic stuff, and it changes them out of that chronicity.

Robin Lansman
Okay. We've had a few people asking just in terms of brands of machine, how many different makes are there of this kind of product?

James Woledge
A few. I can only speak of mine, I've had mine 10 years, and it still starts every morning. It's great. So STORZ is the biggest company. It's a German Swiss company, they've been going for probably 15, 16 years, they actually make the big lithotripters for kidney stones and for cardiology, which is used for as well for treating the vessels in the heart, and ultimately, a focus shockwave is a small lithotripter, small version of the ones they use on kidney stones. That's where it came from originally. STORZ are the big ones. There are other companies. But you know...

Robin Lansman
That's the one you've had for long term.

James Woledge
Yeah, I can only speak of mine.

Robin Lansman
Okay. And then someone has asked again, and we mentioned heel spurs, but in terms of reducing heel spurs. And we've sort of talked about it...

James Woledge
Take the influence away from the bony spur. And it's really important to get patients off that idea. If they know they've got a bony lump on the bottom of the heel, that's not a great long-term feeling in their brain. Bony lump is never going to get better, and they become fixated on it. They want you to break it up. I do get that.

Robin Lansman
So there was a bit of, can I say, NLP a little bit of an...

James Woledge
NLP?

Robin Lansman
Well, using words in particular ways.

James Woledge
Well, I think that's important, isn't it? I think that using words, you know, is what we do, we should be embracing it all the time. We know full well that we shouldn't say that someone's got spinal pain because they got a disc out of place, and I'm gonna put it back in. It's the same with those conditions. We shouldn't be saying damaging words to people, right?

Robin Lansman
Okay. And we've got another question. Well, again, we've sort of mentioned a bit contraindications to implanted cardiac devices. I presume that's not obviously working on the heart. But in the vicinity.

James Woledge
No, it's fine. It's not an electrical device. I mean, it's a soundwave. It's of high energy soundwave. So it's not electrical, even though it's called shockwave. It's the shockwave as in, you know, jet flying overhead, bang, breaks the speed of sound, your greenhouse, back in Concorde days, your greenhouse would go, right. That's the shockwave impact. And so it's not electrical, it does not have any impact on hearing aids, on your heart pacemaker.

Robin Lansman
Okay. And probably, is it worth mentioning the different two types you alluded to earlier? There's the more focused...

James Woledge
The cheaper machine, the standard, sort of you started off on your shockwave journey, just a radial pressure wave. So that's, well, that's probably where we should go over and talk about it was, you know, because talking about it and shall we? It might make sense. So one's expensive, one's not so much. And they do slightly different things, but there's a big overlap. It's only when you really get into it that you...

Robin Lansman
Shall we ask Matt to come across?

James Woledge
Yeah, yeah.

Robin Lansman
Yeah, and we'll join him in just a second. So we're gonna have Matt in as our model. Yeah, to talk about a couple of these things and answer questions. Well, I'm gonna carefully detach this to take over in case you get the questions while we're over there. So if you want to pop over, yeah. And keep bringing the questions in as we go.

James Woledge
Hello Matt. So the buy in one would be the one underneath. So this is a radial pressure wave device here. This is basically in the gun, let's call it a gun, we have a projectile, a bit of metal, ultimately, inside a tube. So if I take that off, that little hole there, it slightly pops out beyond the hole, okay, and hits the back of that bit of metal there.

Robin Lansman
Is that like McTimoney Chiropractic?

James Woledge
How dare you?

James Woledge
A little bit different. So what that creates is this pressure wave. A shockwave by a physicist standard would require a lot more energy. So strictly speaking by a nerdy physicist, this is a pressure wave device, not a shockwave device, but hey ho, it doesn't really matter. So that creates the pressure wave that comes off the end of there so that in there, cameras might not pick it up. That's a pneumatic device with air being sucked in the back of it, which creates pneumatic pressure for the bullet in the gun to hit the back of that, that creates the bag. So it makes a loud noise. Some patients get a bit concerned by that. And you start off nice and low, and then you get the patient used to the feeling of it. So it's a bit like being Jack hammered. It's a bit of a like, a bit abrasive, you definitely know it's going on. And the thing about this is that all the energy that this delivers is delivered at the skin surface and then penetrates slowly into the tissue. But as it goes into the tissue, the energy gets really depleted, it gets dispersed.

Robin Lansman
No, I don't know.

Robin Lansman
So how long? Yeah, we're gonna demonstrate.

James Woledge
And with all things that are based on sound you need a gel interface like you would with sonography, doing scans and so forth. So to give you an idea of one versus the other, and I'll do this on you in a minute if you ask me nicely.

Robin Lansman
Thank you very much.

James Woledge
So for treating plantar fasciitis, you know, it's a very simplistic type of tool. And we use the patient's feedback to say, oh, that's where my pain is. And one of the good things about Shockwave, as opposed to you're saving your thumbs, the plantar fascia, when you start scanning these is fairly thick, and it's fairly deep. You can't really get there with your thumb. So a lot of the times I use shockwave to also identify where the problem is exactly. And we know that the outcomes for shockwave therapy are better if the patient's involved in that. They say, well, that's my pain, all the time having a conversation all the time with the patient saying, where's that your pain is? I think going back to therapeutic alliance, it's quite nice to get involved and take the fear out of it. Because everyone does think, oh, it's a machine, you've plugged in, is it electrical? No, it's just the soundwave.

Robin Lansman
So if the area isn't hurting...

James Woledge
You're in the wrong place. Pretty much, it's more about the pertinence of their pain. So I could put this on his shin now, he wouldn't like me for doing it. But that's not relevant to his maybe symptoms. If he had plantar fasciitis, I want to reproduce his heel pain. And shockwave therapy, particularly focused is really

good at reproducing the pain of the patient. And they think that's, I think, therapeutically that's really important. You know, we deal with the hands that we feel that bit and the patient says, oh, that's my pain, that's a good thing for them to feel that you've empathised with their pain. And shockwave is brilliant for that, they go oh, that's exactly what I feel like it needs. I often say that, you know, like we do when we do a strong treat with the hands or a strong message or whatever. They feel like that's what it needs, you know, as an instinct, I think that's therapeutically quite helpful. So that's a low energy soundwave that comes off the end. But it's quite a lot of noise. But it is also quite painful to have done. Where focus shockwave comes in...

Robin Lansman
Just a couple questions on that, what sort of frequency... I mean, obviously, it has a certain rhythm to it. How would you choose that? Or how would you decide...

James Woledge
If we're trying to get depth into the tissue, so the plantar fascia on him. It's quite a large chap who's got a bit of tissue, a bit of fat underneath, we might say, the lower the frequency, or the lower the Hertz, the deeper it goes into the tissue. So if I dropped it down to bum, bum, bum, bum bum, it's sort of, that's gonna get deeper into the tissue.

Robin Lansman
Is there anything to do with the tolerance of the patient? Is it less painful or more painful, depending on...?

James Woledge
More painful to have lower frequency. So we always say that you want to start off high, that numbs the area a little bit, and then you drop it down to what you think the depth you need. So if I was treating his proximal hamstring, which is deep in there, I would start off, you know, at 12 to 15 hertz, which is what it's at now. Then I'll drop it right back to, with him, big old hamstrings, you drop it down to you know. And then it takes longer than five minutes do the treatment. But, so you can play around with that variable, and just simply how much the air compressor is pushing through. So now I've whacked up, he wouldn't like me doing that now.

Robin Lansman
So intensity and frequency can both be modified.

James Woledge
Yeah. Like, if anyone's into scanning sonography, ultrasound scans are the same. Frequency is depth, but just has that effect. Yeah. So you can play around with those things.

Robin Lansman
How dos that feel, can I just ask, because I didn't have a go yet?

Matt
Yeah. You feel it.

Robin Lansman
I don't think you're mic'ed, but you say you could feel it in what kind of way?

Matt
It's like a, very slight, not pain, but I can...

James Woledge
Let's engage you in the mini experience. So I wouldn't choose to use this on your elbow. And I'll drop the bar back a bit, but you will just get the sense of it being, hit quite a bit. It sort of feels superficial when a bit ouchy, that's what most people describe it as. Yeah. And that energy level is significantly less than the focus shockwave. But it's much less painful to have.

Robin Lansman
Can we come on, I've got questions rolling in. Bridgette asked, should you wear ear protectors?

James Woledge
We don't think so, no.

Robin Lansman
It wasn't that noisy.

James Woledge
No, it's not that noisy. No, you don't need that, and the vibrate we get asked a lot and you're gonna get white finger or anything else, these STORZ in particular, they've done more research than any other company by a long way. And it's all CE approved vibration damage on your hand, none of that. None.

Robin Lansman
Okay, I've got another question from someone called Dramatic Mind. What can go wrong with shockwave machines? I went on a shockwave course, and they said they'd had a colleague who'd had overtreated heel spur to a level that it never calmed down again. Does this sound right? If so, how do you ensure that you don't do that? It put me off getting one.

James Woledge
Oh, I see. So a colleague with an overtreated, heel spur. Well, heel spurs, they're coming up a lot, aren't they? I don't know, don't know what to say about that. It's an individual case, I have no idea. It's very rare that you do shockwave and there are any side effects, side effects are well known to be almost zero. Like, bruising literally is about it. Apart from the fact that like anything else, when you're putting a lot of energy in, it can flare you out for two or three days, be a little bit sore for two or three days.

Robin Lansman
So what could last two or three days is the soreness.

James Woledge
The soreness as a response can, not often, but can, so you would tell patients that it might happen. But we should do with hands on treatment, this could bruise a bit. And because I've worked quite hard with you, and you could be sore for a couple of days.

Robin Lansman
And someone's ask, Jane has asked, can you treat through clothing?

James Woledge
No. Gotta be against the skin. It's got to have ultrasound gel, a conductive gel. And it's got to get on the skin. Yeah, otherwise, nothing works. Yeah.

Robin Lansman
Okay. And so moving on. Yeah, do you want to tell us about the other version?

James Woledge
So, the one on top is the focus device, which is a true shockwave. So the energy levels are, in terms of touching on the skin, about 10 times more. But by the time, the point with this is that the energy will come out of the end here. And we have these little adapters that change the depth.

Robin Lansman
So 10 times more...?

James Woledge
Energy.

Robin Lansman
Of the mechanical?

James Woledge
In that one.

Robin Lansman
10 times more. Wow.

James Woledge
Yeah, well, in fact, significantly more than that, actually. So what happens with this one, the radial device will send its energy out and then it disperses like that. So by the time you've gone to three centimetres in for the energy where you want it, it's lost, cause it's gone over there and over there. So the amount of energy in the tissue breaks down quite a lot. This one is a constant beam of soundwave. But most of the energy will then, what we call cause a cavitation. So the soundwave, like a bubble bursting is about a centimetre off the end of here.

Robin Lansman
So you actually see the pressure on the skin.

James Woledge
No, you wouldn't see that because it happens inside. The whole point of this is that you don't, if you could, if you can imagine designing one of these, you'd say, well, I don't want to waste any energy on the skin or the fat. That's not where I need it. I need the energy inside where the tissue is. And this one does that. This one does not give you any energy at the skin surface, it gives you all the energy inside, and you can calibrate it to go as deep as up to 12 centimetres.

Robin Lansman
Wow.

James Woledge
A lot deeper and no loss of energy, I'm trying to think of an adequate. It's like a Dyson.

Robin Lansman
Okay. 12 centimetres is....

James Woledge
Yeah, I mean, I treat the posterior hip, behind the hip. So for instance, the posterior capsule maybe piriformis. In side lying, that's a long way in, some people with, depending on their habitus, if I can politely say that, you know, you need six, seven centimetres, eight centimetres in through fat to get to where you need to get. And if I took that off and put that against the skin, now we're talking out here is depth. And no loss of energy on the way in and these like a hamstring tendon is a big old tendon. And if they're really crying, they're really horrible conditions of proximal hamstring tendinopathy. And you can get in there with this.

Robin Lansman
Okay, and so actually, someone's asked this question, Myore has said, are there any type of insertions contraindicated?

James Woledge
Insertions of tendons I assume she means.

Robin Lansman
I presume so, yeah.

James Woledge
No, not contraindicated. The only contraindications are those three things I said earlier.

Robin Lansman
Right. I mean, okay, so the risk factor, going back to contraindications, something deeper than you can palpate, see.

James Woledge
Yeah, absolutely.

Robin Lansman
But then. So there is that little risk factor, if you haven't spotted, let's say, someone had multiple myeloma and didn't know it.

James Woledge
Oh, blimey.

Robin Lansman
Well, I'm just saying that that could be the case. It happens.

James Woledge
It can happen. Yes.

Robin Lansman
Okay. So just to broaden the risk, one has to look at the downside as well as the up and obviously that would be a factor. So certainly, you know, seeing people in practice, those things do come up. So Anthony asks, is it okay to treat around a trochanteric bursitis.

James Woledge
Okay, so we're in the realms of heel spurs again. So we think that only about somewhere in the single figures of lateral hip pain would have any bursary involved at all. And a really good study done by the Society for Orthopaedic Surgeons that just deal with hips, 2019, and I spoke to those guys that did the study, and that, you know, we know that we treat bursas all the time with shockwave, and they seemingly don't react badly at all. Most GTPS is just a tendon. We need to move away from trochanteric bursitis. It's still used in GP practices. Okay, but a trochanteric bursitis when you see one, you literally see it, it's literally that big. So if it's a tiny bit of fluid that you see on an ultrasound scan. We think it's not clinically relevant.

Robin Lansman
What about infra patella bursitis?

James Woledge
Oh sorry, I thought you were talking about GTPS.

Robin Lansman
Well, we were, but there's other bursitis.

James Woledge
No, around other bursitis, around the knee. Yeah, they're obvious. But they can happen independently of the tendon problem. There are some joints like shoulders, it's very difficult to get a subacromial bursitis without a Supraspinatus tendinopathy, it's almost impossible, they go together. So we've sort of lumped

those together as subacromial pain syndrome now. GTPS is called that because it's likely to be the tendon plus a little bit of the bursa, plus the periosteum. We're not, you know, but mostly, it's the tendon, but it doesn't dissuade you from using shockwave on it.

Robin Lansman
And what about using the shockwave directly on muscular tissue that's contracted?

James Woledge
That's actually, the radial will be good for that. That's where you, you know, in an advanced setting, like you know, mine where I treat it a lot and see lots of those conditions. You do the radial with the muscular stuff, because it treats a broad area. And then you get this out and you use it on the tendon, like the insertion of the Achilles.

Robin Lansman
So you're using a bit of a combination of the two.

James Woledge
And then I'll use my hands, and then I'll use a graded loading programme, it's not a standalone, or it's not just you know, I'm a shockwave guru. No, I'm just a tendon guy that uses these tools to get where I need to get with chronic stuff.

Robin Lansman
Okay, Jiwa was saying, I think that's how you pronounce the name, would shockwave aggravate hairline fractures. Let's say there's a little hairline thing or even a shock, you know, even, what's the word, forgot of the word. So one of those hidden fractures, you don't know you've even got.

James Woledge
Yeah, like a stress fracture.

Robin Lansman
Stress fracture, that's the one.

James Woledge
Back in the day where we used to use a tuning fork to vibrate the bony ends, you would get that with that.

Robin Lansman
Immediately.

James Woledge
Yeah, you'd get immediate pain response, quite good diagnostic tool. There are actually a couple of Orthopaedic Surgeons I know in Germany who's once been on my podcast that uses it as a bit of a diagnostic tool.

Robin Lansman
So would that be something to avoid?

James Woledge
No, no it's actually more, there is really compelling evidence for nonunion fractures, treating stress fractures and treating nonunion fractures with shockwave, brilliant evidence, high level, level one stuff. And the reason for that is the mechanic transduction. So if you're not able to weight bear through your tibia, because you've got this nonunion fracture, you're not creating osteogenesis, you're not creating those pieces of electric forces for the leg. You're literally using sound waves to put in what you're missing. So I've treated three or four nonunion tibias and they were all timetable to go into revision surgery. And all of them didn't. I got the surgeons permission, and always got that but, four, five sessions.

Robin Lansman
Obviously, he gave permission but how did he connect to the process and what you're offering?

James Woledge
He didn't reall. There is a device called an Exogen device, which is the wearable ultrasound device. Bupa approved, NICE approved as long as you got nonunion after nine months. And I just said to him, look, it's soundwaves. It's all the same, but a mine is really high energy, can really help bring this along and he went yeah fine, do it. But I thought it was ethical to ask his permission. And the patient obviously, and they all didn't have to go into surgery. It's brilliant for that.

Robin Lansman
Okay, got another question from Kathy Mee. Do you perform a diagnostic ultrasound prior to shockwave or work on clinical judgement alone? And apologising if this is already covered, but not I don't think quite that way.

James Woledge
The luxury of now being qualified in that. I do use it a lot.

Robin Lansman
Did you qualify in that first?

James Woledge
No. I've only qualified in this last year. So that was a long haul. We've got a postgraduate in that. So it's difficult, but it's well worth doing. Because it fits with what I do as a practice. But yeah, the clinical judgement for nearly all cases is absolutely fine. The occasions where I do see a bursa in the absence of any tendon. So the retro calcaneal bursa of the heel, that's quite common, and you damn well think it's an Achilles tendonitis or Achilles tendon problem, it isn't tendon inspired.

Robin Lansman
So the diagnostics, coming in to diagnostics, if you're not evaluating it, I'll say osteopathically but if you're not evaluating it fully or adequately, with hands on, with evaluations of other sorts, the ultrasound is almost key.

James Woledge
Yeah, well, no, I wouldn't say it's key. It's just you, if you see as many as I do, if you see not as many, it's just numbers, I'm gonna pick out one or two a month where I scan it and go, oh, that's not what I thought, then shockwave's therefore a waste of the patient's money, but it's not gonna cause any problems, even if it was just a bursa, just be a waste of my time and their money, and I don't want to do that.

Robin Lansman
Wouldn't make it worse and wouldn't make it better.

James Woledge
No, just wouldn't do anything.

Robin Lansman
Okay. And someone asked here, are there any novel uses? I think we've covered a few, novel uses of shockwave therapy?

James Woledge
Novel would be now, so novel would still be probably nonunion fractures, even though the evidence is pretty good, but we don't see enough of them in practice in the world in which we have it.

Robin Lansman
We wouldn't be advertising with, come in with a nonunion fracture, we'll sort it out.

James Woledge
No, no, no, that would be a bit ridiculous in a way. That's why I partnered up with a surgeon to agree it, you know, because they were the primary carers in that. There is lots of work going on now with chronic pelvic pain, prostatitis, there's a massive study at London Bridge on post prostatectomy. So it's one of these things is angiogenesis with focus shockwave, promoting blood flow into the penis.

Robin Lansman
We're going to come on to that when we sit down again, I think we'll leave that just for a minute. But erectile dysfunction, I know is something we might check that out.

James Woledge
That would be one of the novel ones.

Robin Lansman
That would be one of the novel ones. So we'll talk about that in a little bit. But going to this sort of boosting blood flow, is it also about boosting blood vessel proliferation, new blood vessels?

James Woledge
Yeah, that would be it. So angiogenesis, new blood vessels growing into the tissues or around the tissues in the case of tendon disorders. So we think it probably has some elementary effect on stem cells and proliferating the right kind of tissues. So, stem cell will become a tendon, if you put shockwave over the

tendon, it will become bone if you put it over the bone. So it seems to just promote wherever you put it, it's boom, done. So in cardiology, they put it over, they put it over the vessels of the heart, but they also use it to, it's high energy, they use it to destruct the calcium layers within the arteries, before you go in and stent and the outcomes are brilliant for stencilling.

Robin Lansman
But with the surgeon on hand.

James Woledge
It's all surgeon stuff. Yeah, we're talking million-pound version of this is used to soften up the vessel walls to make the stent go in better. So in cardiology, it's a big new thing for that.

Robin Lansman
But much higher energy.

James Woledge
Much higher energy than this. And more targeted, as you'd imagine you want it to be targeted.

Robin Lansman
I think you do. Yeah. So do you want to demonstrate a little more with the other head, the other version?

James Woledge
So this is the one, it's focus, this is proper shockwave, much higher energy. So if you think about what that felt like on your arm...

Robin Lansman
I'm getting a little nervous.

James Woledge
You got a wet shirt. This is, you'll feel it, but not nearly in the same way. So if we put that on and just sit it there for a while, and move it up. So this would be where you'd be treating a tennis elbow at the top. And it takes a bit of time to build almost, you'll start to get a sense of what most people would describe as a sort of, like a teeth achy, in the out of it, the elbow.

Robin Lansman
It feels like you're pressing harder.

James Woledge
That's right. Yeah, it's a pressure sensation. I'm not pressing at all. And you know, that there, the energy that I've just put into your elbow would be magnificently more than the radial pressure wave that we did put on there that feels like it's boom.

Robin Lansman
Well, that felt a lot more uncomfortable to be fair.

James Woledge
Yeah, so insertional Achilles tendon problems, which are notoriously painful, they wouldn't like you much for treating them with a radial device. So it's a nice way of getting energy in deeper and making the treatment more comfortable for the patient. And I get lots of patients having had radial before two years ago, say oh, do you use a shockwave? And they're sort of bracing themselves, and I go no, I haven't got that type of machine for this condition, it will be more comfortable. And they go oh, that's much nicer.

Robin Lansman
I had someone earlier actually, slightly upset, I think, but I've mentioned McTimoney in relation. I think you were a bit as well.

James Woledge
I don't really know anything about McTimoney.

Robin Lansman
No, but this sort of idea of pressure. But I've got another question from Antony McTimoney. He actually is just come online with a question. So how is this intervention...

James Woledge
His surname is McTimoney?

Robin Lansman
Well, I don't think so. Well, that would be interesting. How is this intervention different to an MLS laser treatment? I mean, that was one of my questions earlier, laser treatment versus what we're offering here.

James Woledge
I don't really know that much about laser. I don't. It's just imparting again, it imparts a lot of energy into the tissue. So they've got those things in common. There's some mechano transductive thing where you're putting energy in, and your body transforms that into a cellular process, because that's all mechano transduction is. My massage does the same, your treatment does the same, hands-on stuff, it all does the same, which is energy in, gets converted to cellular mechanisms and then your body cracks on and does it right. Okay. So we're just a promoter and a pusher and the body does the work, right? That's osteopathic, isn't it? Laser, I truly don't know. All I know is that the evidence isn't great.

Robin Lansman
Okay. And I got another question. So good we're getting so many questions. Myore again comes in, said, sorry if it's covered, but can we work with hypertensive patients using this modality?

James Woledge
Yeah, no problem. As long as they're not high Warfarin, high level anticoagulation.

Robin Lansman
What about anywhere near, for example, a DVT?

James Woledge
You would want to scope that out, right? That part of your mechanism of saying, look, you know, I think this calf is not a calf problem per se, they got DVT. But yeah, I wouldn't treat anywhere near a DVT. If I thought I had a sneaky suspicion of it, they need to go for all sorts of other reasons. That wouldn't be great.

Robin Lansman
No, it wouldn't be, you're absolutely right. So I've got another question here from Vladimir Levacioff. So sorry, here's the qualification in what, I couldn't hear at the beginning of the broadcast, what's your qualification?

James Woledge
Osteopath, sonographer. That's about it. So I've got a PG cert in ultrasound, diagnostic ultrasound, MSK analyst.

Robin Lansman
Who, I'll say is allowed but I mean, you're registered. I'm registered. Yeah. So in terms of using this type of equipment, could someone set themselves up as a shockwave therapist and buy the machine?

James Woledge
If they get a distributor or manufacturer to agree that. Well I know that the vendor, the UK distributors for STORZ they would have some rulings on that. So we would probably argue that and don't quote me on this necessarily, but sports therapists, degree qualified, that sort of thing. They tend to be absolutely fine with radial devices. As soon as you get into focused, we'd probably want them to be an AHP or clinician. So I have surgeons come to my talks and sports Docs use this a lot, but they mostly go with a focus device. And in Germany in Europe, you have to be a medical doctor to use the focus device because of the energy levels. In this country we don't have that. So you can be an osteopath, physio. You can use both.

Robin Lansman
But you do need to be registered in one of those professions.

James Woledge
You will be asked by the manufacturer before they sold it to you, you are this, aren't you, you are this. Because we ultimately, you know, we teach for them as well. We would say to them, look, we don't want people just using this per se and not really being safe with it, not knowing what they do.

Robin Lansman
So differential diagnosis is still key.

James Woledge
Yeah, absolutely. Yeah. At the very least you're wasting their money, you shouldn't be doing that, should be offering them best evidence care. This is what we're doing here.

Robin Lansman
Okay. And we've got another question from Chubs. Where can we find your podcasts and further information? I think Steven said he's sending out, everyone who's listening today will get an email.

James Woledge
The shockwave therapy podcast is on all platforms go to Apple podcast, wherever else, and it'll come up. I haven't done one in a while, but some of the early ones were all about the mechanisms and how it worked, interviewing people that are experts in that, you know, if exactly want to drill down, the podcast does all that.

Robin Lansman
Well, I think there's nothing like getting lots of questions, no matter what you do. Cause it's a good test, puts you on the spot, but it's useful to explore the topic.

James Woledge
Chubby could just message me.

Robin Lansman
Well, yeah, that's true. Is there anything else you want to demonstrate or discuss?

James Woledge
No, I don't think so. I think it's as obvious as one feels like, ow, and one's like, not so bad, it just has a lot more energy. And strictly speaking, that's shockwave and the other one is a pressure wave, but it doesn't really matter.

Robin Lansman
So maybe we could just talk about going back to the placebo. Do you think there's more value in what they're feeling when it actually feels more uncomfortable than when they don't know they're feeling as much?

James Woledge
I think there is that slightly odd thing in us humans that says, yes, you're giving me, you're reproducing my pain. And that really hurts. Therefore, it must be doing me good, right? I've got a sports massage person in my practice. And you know, she's really strong and patients, they will say that, so I used to see this other sports massage therapist, it didn't hurt nearly so much, it must be doing me good. I don't want to make comment on that. I have no idea what's going on there. But there is something therapeutic to that as a placebo, isn't there. But I think the key point, therapeutic alliance with shockwave, it's such a winner for reproducing their pain. It really does do all sorts of things that you can't do with your thumbs.

Robin Lansman
Right. And there's a lot of stuff, sorry, just before we go over and sit down again. You got stuff in the box. They look like those things from a Nespresso.

James Woledge
So you talked about the muscles. Yeah, right. So STORZ have put a lot of money into r&d over the last sort of several years. And so it's a way of, there's all sorts of things here to change the way the beam of sound comes out. And there's, I don't know whether the camera can pick out these sorts of things on here. So it distributes the energy differently in the tissue. So if I was treating a great big calf, like his, this is a bigger surface area, and it has a bit more punch. So you can change that depending on what condition and how chronic it is. How big the calf is. They've done a lot of work on trying to give you many options for different things. That would be a general soft tissue approach for your glutes and hamstrings. You've covered all the area and under a couple of minutes it's done. More superficial there.

Robin Lansman
But in a much lower frequency, much lower intensity.

James Woledge
You can change that still. Yeah, but that's just surface area. A lot more myofascial work. So there's some good stuff on myofascial treatments with shockwave, good evidence as well. So there is that muscle component you talked about, yeah. And use different heads for that. Focus is just what size, you know, you have a spacer to then give you the depth, because the energy always comes out the membrane there, a set distance. But if you put something in between, it's making it so that's more superficial.

Robin Lansman
It's a bit like your focal length with the lens sort of thing.

James Woledge
Exactly. Yeah, yeah.

Robin Lansman
Just on this display at the back, do you maybe just want to explain what that is.

James Woledge
So this is in charge at the moment, this is linked to the focus device, so I can change the energy levels, focused, it's millijoules per millimetre squared. That's quite important. So when you're looking at the research, if people do want to look at this, if you see bar, that's a pressure measurement, which is always associated with bar pressure of this, in the same way you'd blow your car tire up. But with focused, it's millijoules per millimetre squared is a measurement of energy. So if you see research, it says MJ, millimetres squared, you notice it's a focus shockwave they used for the research, which mostly is done on focused. Or bar, it's radio. So you can fiddle around with these. And the amount of shocks and hertz, if you like as well, tells you about shocks. And the built in with the STORZ is this rather useful thing where you can actually put it in a presets, evidence based guidelines for those conditions. So it's all pre loaded into there.

Robin Lansman
You don't have to overstep the mark.

James Woledge
But the nice thing as well is that ultimately, you still are in charge with the finger. So experienced users tend to use this less. It gives me a rough framework, but it's here I can change everything depending on your feedback. I don't want to give you too much pain. Yeah.

Robin Lansman
No, fair enough. Thank you. You didn't get too involved. You've got a bit of gel on your ankle, but apart from that, is there anything you want to ask?

Matt
No.

James Woledge
He hasn't got a mic on.

Robin Lansman
I'll translate.

Matt
I haven't got any questions.

Robin Lansman
You're okay. Okay. Well, thank you anyway, yeah. Should we go back across?

James Woledge
Thanks very much, cheers.

Matt
No worries, cheers.

James Woledge
Your heel will feel lots better later.

Robin Lansman
So yeah, I mean, we've got a question that says what's an AHP?

James Woledge
Oh, allied health professional which we are, along with physios and podiatrists and the others. I'm not sure about chiropractors.

Robin Lansman
Chiropractors I believe not at this stage.

James Woledge
They're still clinical professionals.

Robin Lansman
I think they're wanting to be, but yeah.

James Woledge
So let's include them with that. Yeah, let's include them with my concept of using focus, I know some chiropractors and they are brilliant. Yeah, you can be a brilliant osteopath, brilliant chiropractor as far as I understand.

Robin Lansman
Okay, and so should we have a little chat? Is there anything else you want to bring up specifically? I know you brought some slides; we've probably covered a lot of those.

James Woledge
I've already forgotten.

Robin Lansman
Have a quick shuffle.

James Woledge
If this is, that one goes forwards. Just about the NICE guidelines are put in there before the clinical trials, which is there again, energy levels gets a bit boring, just the energy levels are loads more with a focus device, and that's a shockwave lithotripter. The other one radio, were used to be called a lithoclast. That's just a bit of a difference.

Robin Lansman
So that was a breakdown. As in for kidneys stones.

James Woledge
Kidney stones, yeah, that's right. So extra corp is all known as extracorporeal shockwave therapy, ESWT. And that just means outside the skin and in, but lithoclast originally, which is the development of the radio, interesting was where they actually went off to the urethra into the ureter, and had little bang, bang. And that's the radial device is that there's literally a metal bump, and it goes up against the crystal, you know, and smashes it that way. But it's quite fun and nice to come from the outside in, which is what a normal lithotripter does, right?

Robin Lansman
What you mentioned funny, I was talking the other week to a cancer specialist who deals with head and neck cancer. And I think she was talking about manual therapies. And she was talking about distributing cancer cells through disturbing the tissues. Yeah. And apparently, well, that was obviously a big concern of hers, working in the hospital where she works. And I was just kind of wondering, you mentioned that

earlier. But obviously, if there's something undiscovered, like with lots of things, there's a risk factor in distributing cancers?

James Woledge
Yeah, sure. I mean, I don't know. But it makes biological sense that it would, right? And it probably would have more of an impact with a shockwave I'd imagine then with your hand. But look, we were all under that threat every day. And if we're all honest, I've been out 20 years, I probably treated people with cancer not knowing it. You can't always know it, but we have good guidelines on red flags now. And you know, your red flag system should be in place, whether you're using your hands or a shockwave device, I've got a suspicion of something going on here. You need to go off and get x rayed. And make sure that you haven't. So you know, otherwise we wouldn't treat anything with anything ever.

Robin Lansman
So therefore, the unit that we've been talking about in the hands of a professional, in the hands of someone who's got that skill, differential diagnosis experience. I mean, it's critical, like it is in lots of things. It's more when it goes wrong than when it goes right, but it's definitely an issue.

James Woledge
Yeah, the other thing, sorry, I just reminded myself, there is my podcast, of course, which I'm shamelessly, you know, talking about, but I put a link on which I think the link goes on from my PowerPoint, does it go on after this?

Robin Lansman
Yeah, this link will go out.

James Woledge
There's a great podcast on by an American doc, who's done a good overview of all the research I did last year. And underneath that is the actual link and it's open access. So if you want to look at what it does, in a very short timeframe, listen to him for 10 to 20 minutes. He's really erudite on the subject, better than me. And then he's written that paper. So that gets you everything you need to know pretty much.

Robin Lansman
Okay, I've got two or three questions just coming in now. Darcy Jones says can focus shockwave be used for treating chronic facet joint irritation due to degenerative disc disease?

James Woledge
Oh, well, nevermind that degeretavie disease but not one of those things I like using but facet joints. Yeah, there's good evidence, good evidence, small trials, but good quality, small trials. So there was a Czech neurologist that did a good trial, called Nedelka. And he's on one of my podcasts as a guest talking about unilateral facet pain. And he compared that shockwave with steroid injections and radiofrequency which is still the world's gold standard. If you've got a chronic facet problem, radiofrequency is still number one, right? Steroid is just a little bit behind that. Anyway, he compared 20 people that had shockwave, 20 people that had steroids, 20 people with radiofrequency, long term follow ups, which is the thing that's key here, a year later, and it beat steroids and just going behind radiofrequency. So if people are, you

know, about to spend three and a half thousand pounds on a facet joint steroid injection, which is roughly what it is privately, had one today, you can say, look, I can do four sessions of this, 95 pound a go, it's not far off the evidence, even if that one trial needs to be, you know, it's only one trial, but it's got good evidence, and it's no reason why it shouldn't, we think through bony oedema around the facet joints, clearing out inflammation. I do it a lot. And I think I get reasonable results in those really hard to get better patients. Yeah.

Robin Lansman
Okay. And Val says, how careful do you have to be when using shockwave on torn tendons where they're actually torn, supraspinatus or Achilles tendon that's been ripped.

James Woledge
Again, it would be, you know, without ultrasound, has your examination sort of thought, you know, if you've got a suspicion of it being torn, there is no evidence the shockwave is gonna do anything for it. It would hurt more, probably. So I think your examination again, same as anything else, would you really load it up and do shoulder presses on someone who you think that goes suspicion of supraspinatus tear or half tear? No, so it's just going back to those basics of, you know, there's no, the answer there is there's no benefit and I would probably not do it. If I knew that there was a tear.

Robin Lansman
So you gotta pick your case.

James Woledge
You do.

Robin Lansman
And also, I've got Kimamilhouse I think it is asks, can you treat De Quervain's tenosynovitis.

James Woledge
Yeah, some people do. But I think the key point for shockwave is that it, you can truly say in those chronic cases where they failed other interventions, including steroid or otherwise, thats its niche, it's brilliant for that. You can absolutely say that. So in acute De Quervains, there's a better option. If there's always a better option, go for the better option and the better option is a well-placed ultrasound guided steroid injection. So I wouldn't be faffing around with that to be honest.

Robin Lansman
And, to ask you, how close do you go between where the tendon attaches to the muscle or where the tendon attaches to the bone when it comes to the therapy? Because like periostitis...

James Woledge
Yeah. So in Achilles tendon disorders, the insertional tendon disorders are the harder ones to get better, shockwave or otherwise, they're just much harder.

Robin Lansman
So intended insertion points.

James Woledge
Insertion tendinopathy, insertional tendinopathies, particularly Achilles. They're really hard work. But you treat the area, you just have to play around with your hurts to make it more superficial, because it's really superficial. And you lower the energy because it's really painful. But you treat them where the symptoms are. That's it.

Robin Lansman
Again, it's symptom lead each time.

James Woledge
Symptom lead pretty much is as good as good at evidence basis we've got for outcomes for shockwave alone. Yeah, that's their feedback, they will tell you when you're on it. That's, where you need to put most of the energy, back it up with a scan. But sometimes the scan is not as good as the patient feedback. It just gives me a rough idea that I haven't damaged it or torn it, that's what I scan for.

Robin Lansman
Okay. And Peter Robert Smith says, does it benefit frozen shoulder?

James Woledge
Yeah, there is some good data on that. And that's actually, you know, equally for radial or focused, you know, much more about the second phase of frozen shoulder, so they're stiff and not so painful. They're out of that acute nightmare stage. And they're either looking at a really long-haul rehab programme, which they probably do anyway, or they're looking at Hydro distension. But I tend to favour hydrodistention, we've got someone that comes into clinic and does that, and the outcomes are really...

Robin Lansman
So inflating the rotator cuff.

James Woledge
Really good, really fast. The shockwave is a very useful four to five sessions, the trials are done for that, improving range of motion in a frozen shoulder. But they don't do anything for pain I don't think.

Robin Lansman
Why not?

James Woledge
I just think it's too complex a condition to do with your immune system and a few other things that we think are going on. But in the acute stage, I think again, it goes back to De Quervain's. In acute stage, the evidence is overwhelmingly, have a steroid injection, get it into the capsule, calm it down. Once it's calmed down, you can go to the patient, look, we've got shockwave as an alternative here to then get your range back. We've got distension. And some people just go I'm not sticking another needle in my

shoulder. And so they go for shockwave, but as a good clinician, you should be able to offer all the best options, even though they might not be done in your clinic. We should still be saying patients, this is still best option at De Quervain's, an injection or first stage into a frozen shoulder.

Robin Lansman
Periosteal lifting, I mean, shin splints, and for example, tendon insertion, in tennis elbow. That's quite a lot to do with osteitis. That's a lot do with bleeding, perhaps under the periosteum.

James Woledge
Possibly, yeah, possibly all of those things. But then it goes back to what I just said. Is that the options for those, when they're chronic, there are none, are there. There's nothing amazing out there. No one wants to inject them with anything. There's nothing special out there. It's hands on stuff and rehab, and shockwaves got a nice place for trying to reduce the pain of those conditions.

Robin Lansman
But the point of impact of your wave, shockwave wouldn't be on the bit that's most painful. Or would it be?

James Woledge
Yeah, absolutely.

Robin Lansman
You would put it on the periosteal lift point.

James Woledge
Yep. On medial tibial stress syndrome. There's some good studies on that. Right on that really ouchy bit.

Robin Lansman
Won't that be very, very painful?

James Woledge
Well, you reduce the energy. And you increase the Hertz. That it numbs a little bit, and it's very tolerable. I've seen a lot of shin splints and they respond really well.

Robin Lansman
Okay. Well, we've got a little bit of time left. I mean, I think if we haven't, we haven't really covered the erectile dysfunction topic. Just to give things a lift at the end of the programme.

James Woledge
So to speak.

Robin Lansman
So to speak. Do you want to talk us through you talked about, you know, blood flow. That's all important. Do you want to talk us through prostatitis you mentioned a little bit as well?

James Woledge
In my clinic in Suffolk because in the other one, not so much in my clinical stuff I've got a good physio that's qualified in all the men's health approaches. So that would be anything from post prostatitis, pelvic floor rehab. So I'm repeating myself a lot, isn't it? So the shockwave aspect to things like erectile dysfunction, or chronic pelvic pain syndrome, which is the new term for non-infective or nonbacterial prostatitis, which is a really horrible, painful condition, shockwave therapy on the pelvic floor as a muscle, and with hands on work as well, and with stretching and rehab and so forth, as a modality and amongst that has got some fair evidence for these desperate patients. Because it's a really hard to treat condition the CPPs. Erectile dysfunction, there is some reasonably good evidence that the angiogenesis factor comes in and it has also an impact on the same mechanisms by which the PDI fives work which are the Viagra and Cialis so they basically keep an enzyme floating around in the system, nitric oxide as well which basically keeps the vessels patient which allows blood to keep flowing in. It seems to optimise those things in the same way the drugs do, but it seems to have a lot longer lasting effect. So if you take someone that started to lose the impact of those drugs after five years, which is not uncommon, five years is about when they started tail off. And these patients are now seeking help from shockwave. Say how can I boost the actual health of the tissues, but it would be us giving them advice on their diet, us giving them advice on exercise, losing weight, is a hugely complex condition. So yes, but as soon as you mentioned, shockwave, soundwaves on the penis, it becomes this sort of half jokey thing, which is, oh, you just put it on the penis and charge them a lot of money? No, they are way more complex than that.

Robin Lansman
But the people want it complex, I presume people who are drawn to what I know you've got mentioned that on your website, I presume you get some interesting inquiries.

James Woledge
We do. And, you know, some people do like a quick fix, and we just don't take them on. Basically. We filter out patients that understand what their condition is, we only take patients that have seen a GP or urologist for proper diagnosis for CPPS. Or for erectile dysfunction. They've been through the game, we've got a private GP that works in our clinic that also sees them for a screening of things like testosterone, cholesterol, if you're going to go down that route, which is as I say, novel for a reason, because it's incredibly hard and complex. And these patients are fairly desperate, for obvious reasons. So the psychological aspects involved in that we've also got two clinical psychologists that work remotely. So I surround myself with people that know a lot more than me. But I deal with some of those initial conversations, and they can be quite difficult and challenging.

Robin Lansman
So I've got a couple more questions. Amanda Knight says, how much do you charge for hydro distension apparently, there's a very long waiting list presently in the NHS.

James Woledge
I think the guy that comes in does it for us, it's about 250. It's not that expensive. There are other things he charges way more than that. Well, they can't do PRP anymore, physios can't do PRP.

Robin Lansman
Okay, and Rebecca Cole says, my dad has had five sessions of shockwave therapy on an OA knee. So far, it hasn't made any difference. What are they hoping to achieve by treating, you know, OA knees using shockwave?

James Woledge
I don't know. So anecdotally, some stuff maybe happens with knees. But you've got to be pretty experienced to treat a knee and I scan those as well. If it's a really stiff arthritic knee, you'll understand this, early stage of OA, the knee becomes unstable, flopping around all over the place. Ouchie, horrible, nasty, they've got an OA knee that's unstable in a way, shockwave never does anything for that. If they've got a really stiff, achy knee, they're beyond that phase, they get a bit of night pain, they've got quite localised medial knee pain, which tends to be where it is. And they've got some bony oedema on an MRI, that's where the anecdotal and some case studies have shown that it reduces bony oedema, you've really got to be good at picking your patient, really good. And I suggest that that patient wasn't picked very well. It's not a classic one for an OA knee to be honest, you need to really know what you're doing and then still take the patient, I'll try three sessions. And if it doesn't do anything after three, I won’t do anymore, five off the bat, that sounds a bit...

Robin Lansman
So I guess it comes down to transparency and honesty and openness and communication and all those things.

James Woledge
It depends. It depends, you know, that patient might have been really desperate, the patient was really desperate to help them and they didn't charge any extra for it or whatever. I can see that. But you know, my experience would tell me that I wouldn't gleefully take those on. I'll be like making sure they definitely had an MRI, probably is their bony oedema. That's how stiff it is. And really making sure the patient knew this was still novel. That's a novel thing an OA knee.

Robin Lansman
Okay, so we've covered a lot of ground. We have got a little more time just a few more minutes left. Is there anything, well, I'm gonna invite any of the viewers if they got any last questions to ping them in as anything else you want to cover you think we haven't discussed or explored that you'd like to.

James Woledge
No. It's just, you know, what he gave me after many years of just doing osteopathy and I shouldn't say in any denigrating way towards osteopathy. It was a real boost and a pick me up to start to learn about completely something different. And to get your teeth stuck in something that isn't also totally exhausting on your hands. There's no doubt my life is a lot easier now. And I get to take on really challenging difficult patients, I like that. But without killing my thumb's doing it. That's, you know, that's worth the investment itself, I think.

Robin Lansman
Okay, I got Kathy Mee's come up with another question. I think she asked one earlier, have you had much success treating chronic lumbar disc herniation.

James Woledge
I don't use it for them. You're never gonna get a soundwave anywhere near the disk.

Robin Lansman
Yeah, I guess it depends how you approach things. But no.

James Woledge
Well, unless you point it anteriorly. No, no, is the answer, because I don't read them.

Robin Lansman
But fair enough. No, no, no, that's fair enough. Okay. And so, yeah, any last comments? We've got a few minutes left before we...

James Woledge
I can't imagine, I think we have covered loads of stuff.

Robin Lansman
We have covered a heck of a lot, I hope the questions have been useful.

James Woledge
Yeah, different energy levels, focus shockwave, radio pressure wave, both asking the patient you know, did it make a bang bang noise or, you know, there's certainly other, most of the people that have focus shockwave devices are the more experienced practitioners. Sometimes that's quite useful to know if someone has asthma patients. What did it sound like? Was it a tap tap or was it a bang, bang, the tap tap you probably know that they had good quality treatment from somebody experienced, I suppose that's useful to know.

Robin Lansman
But experience does other things.

James Woledge
Totally different than what I do with my machine now, but the courses we run, the educational programme that we run through Ven, there's a thing that's going to be on here as well, where they're running some free courses at the head offices in Liverpool. So as part of me coming on here, I think it'd be very hard to put a code on the one of the things here for free starter courses, one day course, you get to learn all about radial pressure wave, and about how to start off doing shockwave. They're good courses that we run, the educational side of things is massive now compared to how it used to be.

Robin Lansman
Okay, we've got two more questions. They're coming up, how long is the training, well, you kind of mentioned that how long are the courses and how much they cost? You said there's a free option.

James Woledge
It's a free option.

Robin Lansman
Normally?

James Woledge
If you put apm code, but it's a one-day course that gets you started. That gets you started. And then what usually people do is either contact me, I some one to one mentoring now and then, and I go to clinic sometimes, if they've got five or six people, then they can get me to come down, because clinics work in different ways and see different conditions like I do not see lots of patellar tendonitis, I have no idea why, but I see a shitload of Achilles. And so for practices that way inclined, they ask me to go see them.

Robin Lansman
You've also said the results for lower limb seem generally more predictable, slightly better than anything else. And Vicki Brooks has just asked a random one, and she says my daughter has enjoyed listening, as her dance group is called shockwave. Well, there you go. That's good. That's perfect. Well, listen, I'm sorry. Another question, may as well do it just we've got a couple more minutes. Had a focus machine for 18 months. Brilliant for GTPS, and PF, and tendon issues. That's Matt. Clearly a happy customer there. Which is great news, just checking whether anything else has come in. I think that's pretty well getting near the end. So James, thank you very, very much.