

400 - Somatic Responses to Stress

With Steven Bruce and Anji Gopal

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Steven Bruce 00:26

Turning to today, I have one of my favorite guests back in the studio this evening, someone who always gets great feedback from the audience, and I'll tell you why she's one of my favorite guests. It's not just because she delivers great information, which she does. It's not just because she's really good at working in front of the cameras, but she also provides some hardcore evidence for what is often put across as a bit of a fluffy subject. Now, she'll probably punch me for saying that, but I think you probably know what I mean. The key thing is, with this guest, you get really good value. You get things you can use straight away in the clinic, things which you can get tangible results with for your patients and things which are evidence informed, so you can defend your treatment protocol if anyone ever asks. And that's Anji Gopal for you, Anji, welcome back to the studio. It's nice to have you here.

Apologies for calling what is one of your core subjects yoga a bit fluffy. I didn't actually mean yoga is fluffy. I just meant that the way yoga is sometimes portrayed can come across as a little bit new age, rather than evidence based. And of course, it's been around for a couple of years now, hasn't it

Anji Gopal 01:37

just a few!

Steven Bruce 01:38

so there's so there's a little bit evidence behind it. Why are we going to talk about somatic responses to stress?

Anji Gopal 01:47

So I don't know about your viewers today, but so I'm an osteopath as well as a yoga practitioner, and I think I would categorize the 2020s as the decade so far of stress, and I would say that most patients that walk in my clinic have are dealing with to some degree or other, the after effects, or the full effects of stress on their bodies. And I think it's really important that we recognize how stressed people are at the moment, and all the reasons why that might happen. And then how can we as manual therapists or people working one on one, as practitioners? How can we help with that, even though we're not talking therapists

Steven Bruce 02:34

All right, we have the COVID pandemic, which must have, we certainly caused a lot of psychological, emotional and physiological distress in people. So there's a bit, there's a big trigger for stress. But what's different about this decade

Anji Gopal 02:51

we started off with COVID. So, and if you just think of how that shock affected, there we were collective shock, as as nations, at an international level, at national level, at societal level, in your town, in your neighborhood, in your street, in your family? So we started off with this big threat. And it wasn't even a perceived threat, but actually, to some it was a real threat. And then following on from that, it feels as if the news cycle certainly hasn't stopped, has it? without getting political, climate change, international conflicts, government changes, cost of living, crisis, economic distress, all these things are layering up on us as societies, but also us as individuals, and then also the other thing within that, I think there's been a lot of ill health. I don't know if everyone you know would agree with that, but within our networks, within our families, within our friends, a good degree of ill health as well, and all of that is creating this sort of stressful load on us as individuals.

Steven Bruce 04:09

and I guess COVID was at the start of the decade, but actually, the effects are lingering on aren't they, as they probably are, from all sorts of other viral injuries to our system, but COVID more, perhaps obviously, than others. I don't if you you've seen the shows I've done with Malcolm Kendrick, who is a GP who talks a lot about cardiovascular problems and is famous for railing against the over prescription of statins and the whole statin hypothesis. But I do remember reading in one of his books that he was saying, well, and he was just postulating this. He wasn't saying, "this is the solution to cardiovascular disease", but he did point out that the stress response could be very significant in cardiovascular disease. Now I don't know if cardiovascular disease has changed over the last 10 years or so as a result of stress, but it certainly has effects beyond the obvious, the ones that we used to think of.

First of all, let's just do some bit of basic revision. I'm sure most people watching will know, but what's, what is the physiological mechanism of stress? What's going on?

Anji Gopal 05:18

I think, first of all, if we think about the stress, so stress is a threat, real or perceived. Number one, that's what's coming at you. If it's me coming at you because you've called Yoga, woo, woo, or COVID, or whatever else it might be, that's the threat perceived or real. And then what does the body do with it? So, number one, we're embodied beings. We are a mind body complex. And I think, sometimes, well, certainly in the medical world, we, we've got the body doctors in one building and the head doctors in another building.

Steven Bruce 06:04

and then we probably talk about how we deal with the biopsychosocial components of disease,

Anji Gopal 06:08

but actually, as humans, we don't work like that, do we? It's all in one. everything happens all in this interesting, complicated creature that we've got sitting here. So, it's useful to remind ourselves what happens when we are under stress. So you've got two things. You've got the stress number one, and then you've got the response to stress. And often this is happening without, conscious, understanding.

Steven Bruce 06:42

I'm glad I'm sitting further away!!

Anji Gopal 06:44

the moment I reach over there, your body is preparing yourself for that onslaught. So the senses are first of all registering that incoming threat, and then we have this whole cascade that happens in the system. So, the pituitary gland releasing adrenaline, and then that flooding through the system, the fight flight fright response that we talk about all the time.

Steven Bruce 07:14

just when did fright get added? It always used to be the fight or flight response

Anji Gopal 07:17

I don't know, but now fright is there too. But that actually, you know that startle response actually is probably what happens first, and then you, then you fight or flight after that. So actually, the fright is that startle response, isn't it?

Steven Bruce 07:34

I can accept that. But for most people in the sort of stress that we're talking about, this is a much more insidious onset, isn't it? So, the more they can't meet the mortgage payments, because that's gone through the roof, because interest rates have gone up, and they're worried about war in the Ukraine spreading to the rest of Europe and so on. And so gradually they're getting more and more tense. There's less of that sudden fright, and it's just a gradual escalation of stressors. So Does that just mean we've got a continual escalation of adrenaline in the system, cortisol in the system, and does that maintenance of high levels of cortisol have a physiological effect?

Anji Gopal 08:11

then you're starting to get into the sort of realms of adrenal fatigue, and then we're starting to get into, chronic stress patterns, which indeed, thinking back to the, cardiovascular system, what do we get there? We get these sort of metabolic syndromes. That's a quite an interesting phrase, that combination of chronic inflammation in the body, leading to statins, hypertension, weight gain, all those things, and a lot of that is from these chronic responses. As the body starts to get more tired and tired dealing with these things. So we've got to keep reminding ourselves that stress affects every single system in the body. I don't think there's one that you could think of that wouldn't be affected by the stress response. So even from the skin, that's more perhaps the acute stress response, the hair standing on end, and then to continued fatigue of muscles that are very tense. We'll talk more about that in a moment.

But you know also the heart and if you remember heart rate variability, I think we talked about it last time when we were talking about breathing, that's how well your cardiovascular system responds to stress, ie, how quickly it fires up, but also how quickly it lowers down. And that's where, in chronic stress situations, the heart rate variability actually shows that you can't let go. And so then we sort of lose sight, or the body loses sight of its baseline, and all of a sudden, we're working in this chronic stress environment.

Steven Bruce 09:57

You've obviously, you've put a lot of systemic responses to stress on your slide here. I'm not gonna say you're starting with this one, because it's one end of the line, but you've got digestion slows down. Why?

Anji Gopal 10:12

Well, if you just think of the acute stress response, you know you're running from that tiger. You don't have time to digest your food, you know. But for some people, the digestion speeds up. So you might get people patients who've got irritable bowel syndrome,? And those sorts of syndromes and systemic things are happening, but we get digestive changes.

Steven Bruce 10:42

we have that expression where it scared the shit out of me, which actually is based on a physiological response if, if you're that scared and that stressed, it can have that effect on your digestive system.

Anji Gopal 10:53

remember that all these the visceral systems mediated by the vagus nerve,, which you know so and those autonomic nerves, the fight, flight, fright and the rest and digest. we know that they're not just two sides of a pendulum, a one up, one down. It's a bit more complicated than that. But, those systems work in, in parallel and in hand, in hand. So if one's really fired up, you're not going to be able to get, as they say, the rest and digest.

Steven Bruce 11:25

what about tunnel vision? Then, do we mean that you're only able to focus your mind on one thing? Or are you saying there's an ocular response?

Anji Gopal 11:35

There's an ocular response. Actually, there's a really interesting paper that I will share in the references, about how stress and chronic stress can affect the eyes.

Steven Bruce 11:44

I'm intrigued by that because I just thought I was trying to work this one out. When I saw the slides earlier on, I was thinking, Well, I don't believe that I get more focused in my mind when I'm stressed. In fact, I find it harder to concentrate on things.

Anji Gopal 11:59

It's an interesting ophthalmological study actually, where the eyes and the vision and the focus are getting more and more tense. And I suppose, if you think of it in the really, all the chronic conditions are just an exacerbation of the acute ones. I mean, think of how your eyes feel. We'll do maybe practice some of this in a moment. But how do your eyes feel after you've been sitting and looking at the screen and you've put your eyes under strain?

Anji Gopal 12:45

you can see the visceral effects on the liver. And then that's where we might get our cholesterol levels changing, blood pressure rising. So again, these sort of metabolic syndrome widespread effects on the body. And then, if you think about something like fast breathing, which is also on the slide there, how would that for us as musculoskeletal

practitioners, how might that turn up in the physical system? So we're also seeing, perhaps more obvious surface, if you like, presentations of chronic stress

Steven Bruce 13:21

I hope we're not going to see too much of that fright response in the clinic. Are we? We're going to see this more chronic manifestation of it.

Lucy here says the fight fright freeze might be a better way of describing the response. Some animals use freezing as a defence mechanism by playing dead, and they then have a big Shakedown before running off when the danger is past, some people also freeze when faced with a stressor, rather than fight it or run. And yeah, I can live with that, I'm not saying it's necessarily a good response. There was that old story, if you if you've been chased by a bear, you should lie down and play dead. And I remember reading something that it's a load of rubbish. It just kills you quicker.

Anji Gopal 14:04

But think of what it's like when the boss walks past you and looks over your shoulder,? That's a freeze response, there.

Steven Bruce 14:11

No, no, you're supposed to look busy at that point, not freeze.

Anji Gopal 14:15

I actually disagree, though that we wouldn't see the startle response in clinic

Steven Bruce 14:21

Are you saying that I'm intimidating?,

Anji Gopal 14:25

No, you're not, but I think we do see the startle response in clinic

Steven Bruce 14:31

in what sense?

Anji Gopal 14:33

manifesting in neck tension, chronic patterns

Steven Bruce 14:39

That's chronic, isn't it, it's not the startle response itself. But I was going to ask you about that. Maybe you're going to cover this later, because it's, it's going to say, well established, I don't know, well proven, that a musculoskeletal manifestation of stress is that the shoulders become more tense, the neck becomes more stiff. Yeah, why? Why the shoulders? Why the neck?

Anji Gopal 15:02

Will have a play. We will have a play

Steven Bruce 15:06

on our tame Scotsman

Anji Gopal 15:10

no, let's have a play now, and maybe the viewers can join in. What would happen if you know so say the bears coming to you, I'm going to be nice and I'm going to play nice. Now, what would you do? Just what would your physical response be?

Steven Bruce 15:26

I'd be simply hoping that I could outrun you. What would my response be?

Anji Gopal 15:34

The physical response, to that shock is this pattern. So everybody at home maybe just think about what would be the worst thing that could happen?

Steven Bruce 15:55

the bogeyman in the cupboard. You open the cupboard and you go, "Ah!"

Anji Gopal 15:57

That startle response. The mortgage letter or your electricity bill after the cold snap that we're having at the moment,? Who knows? it's that feeling. Okay, so we've got, all of a sudden the respiratory system involved. You've got your accessory muscles all up by your ears, then you don't breathe. And if everyone at home could just hold their breath, even in this position for the next minute, we would be mimicking, actually, probably 30% of our patients that walk in the door,

Steven Bruce 16:30

Again, we're probably going to get to this a little bit later, more practically, but it's still one of those difficult questions to ask in clinic, isn't it? To get to the root of the non musculoskeletal causes of musculoskeletal problems, or of pain, for example, and we're going to talk about that later.

Anji Gopal 16:52

Well, you know, pain has a relationship with stress. There are myriad research papers.

I suppose, anecdotally, many of us might find that a stress in someone's life is the straw that breaks the camel's back. People's body is so adaptable, the neck, the spine, the low back, it can cope with all sorts of things. But actually, what's the trigger or that precipitating factor, often it might be a stressful event. So I think we've got that on the one hand. And then, if your patient is under chronic stress, where is that going to show up in their wider health? Again, coming back to this mind body complex, we're not just this, squidgy and bony machinery walking around, having being under chronic stress is going to influence how you sleep, how the body heals. how you hold yourself. All of these factors are involved in our patients, wider health and their healing. So it is important. But I think we perhaps as manual therapists, shy away from asking or inquiring or even feeling that some of that is our remit.

Steven Bruce 18:10

Lucy has come back to say that she often sees patients who've got stuck in that initial startle position, holding their breath, tight, diaphragm, high adrenal tone and so on. What she hasn't

told us is what she does about it and how effective it is. But she'll come back to us with that I expect.

Anji Gopal 18:25

Well, many of us have done the, training courses or CPD, where we do work on the diaphragm, or we work on the sternum bone, and all of this area that feels as though it's, in that, in that pattern. And so, I think many of us would recognize it as a physical, physiological response, if that makes sense.

Steven Bruce 18:47

Do you think they're teaching this in colleges these days? Because it was touched on when I was at college, but I don't recall being taught to look at the stressors, look at the what you can do to

Anji Gopal 19:05

I don't think we are and I but I say that of the wider medical, our medical colleagues as well, we talked a lot about knowing what the bio, psycho, social sort of model is, but not necessarily how to handle some of those wider aspects, if you like. And certainly, we've talked before about chronic low back pain, because that was the work that I did in the NHS for many years using yoga based methods. we know that chronicity is often driven by non musculoskeletal factors. So as manual therapists, even though we're working with a body, we're working with a human and so actually, for me, I feel that if we're not asking those questions or understanding those stressors, or perhaps even helping unwind them in the way that we can in a legitimate way, actually. We're short changing the patient.

Steven Bruce 20:02

Hannah's just said that she read a paper suggesting that lifting the shoulders, engaging the traps, is a behavior that goes back to the common ancestor we share with other great apes, and that ancestor would do it when threatened to appear bigger. I eat cakes - that makes me appear bigger, as my wife will agree.

Anji Gopal 20:25

I think, probably all these things are evolutionary mechanisms to protect you against something.

I don't know if it's still a fashionable book, but when I was training Sapolsky's, "Why zebras don't get ulcers". Do you remember that? So it's Robert Sapolsky. He's a big bearded anthropologist, I think, or perhaps psychiatrist, and his book is why zebras don't get ulcers, and it describes why herd animals are less stressed than predator animals, and also, but in the context of, why have human beings given ourselves this chronic stress response? It's a great book. It talks about the physiology of stress, about pain and about the you know what to do about it as well.

Steven Bruce 21:15

My first question is, do we know that zebras don't get ulcers? But I like the title of the book, and I'd love to read it.

Christina has said that it's on the McTimoney record card to ask about stresses and emotional traumas. And it is on our case histories - we would do it. But I just don't remember being taught much about how we handle it when we find them in college, which is the critical part there isn't it.

Anji Gopal 21:38

So that's the question, what do you do with that information, and if you think it's relevant to your patient's case, do you need to address it in some way? So I always ask. And then I suppose, using some of the yoga based skills, which will go through and their physiological exercises, really, they definitely have a place. I'm not a talking therapist, so I don't do that, but I know that I can help reduce some of that, essentially, sympathetic, chronic sympathetic tone,? Yeah, and

Steven Bruce 22:11

I guess we have to be very careful. And we say this whenever we talk about the sort of the different aspects of health, we've got to be careful to stick to our own remit, to do only what we are capable of, and we've had shows in the past where some of the comments we've had would suggest that people feel if a patient unloads their emotional stresses on them, they feel that they should then start trying to offer some support and so on, when perhaps signposting would be the better thing, and put them in position where they can get trained medical help. The danger being that while our willingness to help might be useful, if something goes wrong, then we haven't helped the patient, and we're probably putting ourselves in danger.

Caroline just brought something up. She's pointed out that SIRPA training enables practitioners to effectively treat the physiological responses to stress, such as chronic pain, anxiety, psycho-physiological disorders and so on. And we've done, I think, two SIRPA shows with a lady called Georgie. I can't remember Georgie's surname, which is very embarrassing for me, but that's the effect of stress. Here. I'm in front of the cameras. I can't remember.

Anji Gopal 23:18

So there are lots of ways that we can bring that into our clinics in an ethical and moral, ethical, moral way. And I think everybody's got to work out where they lie on a spectrum of how much they want to get involved in that.

Obviously anyone that's working in chronic pain or with patients with chronic pain will also have an understanding of those other mechanisms that might lead into that. So the SIRPA training, Mindfulness Based Stress Reduction training, breath work, Yoga, teaching all of these mind body interventions are useful. For me, though, if we think about this sort of split of the body of body doctors in one building and head doctors in the other, and they're not even head doctors, they're the mind doctors in the other building, the head doctors are in their third building over there. what we risk doing sometimes with the purely talking therapies is we then miss the embodied bit. And actually, what we're seeing now, I'm seeing is a lot of talking therapists now circling back round to embodied. Google the word embodied. how does it feel to be in your body? What I know is that I would I refer as soon as I feel, there's a stress or a mental health issue that that needs dealing with. I often say to patients, actually, you need to go and speak to somebody about that before I'll treat you.

Steven Bruce 25:04

Do you have psychotherapists in your own clinic? No. Does that mean, then that you've spent some time building up a decent relationship with those other practitioners so that you can develop this sort of less of a compartmentalized approach to help.

Anji Gopal 25:20

I've got an awesome Rolodex, if anyone ever remembers what that is, but a really good network of contacts. But I've spent a lot of time building it, because I fundamentally think that, and this might be a bit controversial, that we shouldn't be all things to all babies, men, children, women, everyone. That actually, specializing isn't a bad thing. And if you're really good at something, actually, you stick with that. And that's not to say stay in your lane, but I'm really good at certain things, but for other things that I was trained to do, say at university, at the BSO or whatever, actually, I'm not as good as you might be. So I send patients off to other experts all the time.

Steven Bruce 26:08

I seriously doubt that you're not as good as I am treating patients,

Anji Gopal 26:12

I think that's maybe a sign of maturity in practice and actually stick with what you're really good at. And if, if you know that there's somebody out there that's better at knees, for example, or whatever it is, than you are, you have a duty to that patient to put them in front of that practitioner.

Steven Bruce 26:31

And we had a very eminent orthopedic consultant on the show on one occasion who was asked a question, and he had no qualms about saying, I have no idea about that. And I thought, well, there's a measure of a person who's confident in his own skills and doesn't mind saying this is outside my area of expertise. Go and find someone else to deal with that.

Christina, who commented earlier on, says she has done counseling courses, so she always allows patients to talk, if they want to, and explains how that can affect the body.

That might call into some sort of question, not question Christina, that's the wrong thing to say, but when a patient comes in expecting, if I put it in blunt terms, they're expecting to get their neck cracked, and then they get talked to for half an hour. We need to be careful at managing that patient. Perhaps.

Anji Gopal 27:17

For me, it's all about sign posting the patient

Steven Bruce 27:23

agreed Yes. But in this instance, the practitioner who they might expect to be giving them their musculoskeletal therapy is now talking to them. And there are those patients who come to osteopaths or chiropractors thinking, I'm just going to be cracked or have this muscle rubbed or whatever else, and they wouldn't expect to be talked to, and we need to be good in our communications, to make sure they understand why we're doing what we're doing.

Anji Gopal 27:52

A couple of things that I've done lately has brought us to this presentation, if you like, or this topic today, I've been working a lot in workplace wellness. And employers, obviously, they're driven by largely economic drivers, but also they're noticing there's a lot of workplace absence or sickness. You will have seen all the statistics. a lot of people are sick at the moment, and so lots of surveys, and lots of, in-house surveys coming out about, what is it that's going on, and stress, overload and burnout are really high on the agenda. So I've been working with a company with their 1000s of employees to look at how we can help them in the workplace. Ideally, they'd all come on yoga retreat with me, and I'd look after them for a week and send them back, renewed and ready for the corporate fight. But we can't do that.

But how is it possible for us to break the stress cycle much earlier in the piece, earlier in the picture, than before you end up burning out. Actually it would be really good to just remind everyone of the human function curve. It's quite an old model. I can't remember now who it was drew it up, but it's in a lot of academic papers, and this shows that actually there's a level of stress that we need in order to function. If we were all just lying around drinking pina coladas all the time, we'd soon get bored. I would anyway, so this graph here shows the axis axes of performance and then pressure,? So remember, there's eustress and distress. So eustress is good stress. If we're thinking about the sort of etymology of it. So, you'd be bored - you need a few prods

Steven Bruce 30:02

We see that very evidently in children who go to school where they're not being challenged, don't we, their behavior changes quite dramatically at home sometimes

Anji Gopal 30:10

I'm terrible if I don't have enough to do. Just cause havoc. if you don't have enough pressure, you're going to be bored. So you need something to get you out of bed in the morning. With the right amount of pressure in whatever aspect of life, Not just work, study, parenting, whatever it is, actually, we're going to get good performance out of someone. They're in their lane, they feel that they're in the place. they're doing their duty societally, or whatever it is, and off they go.

However, unfortunately, at the moment, many people are sort of working at the top of that curve where pressure starting to get too much to handle, and the body gets fatigued, body and mind. Everything's a bit tired,? You don't sleep as well, dragging yourself out of bed, all of those things, and then we sort of start to fall into exhaustion, ill health, and then in the end, breakdown or burnout,?

I don't know if you still work in your clinic as much, but those of you watching at home, I'd say quite a few of our patients are coming to this point here, and perhaps where they've been, sort of economic pressures of not being able to pay for regular treatment as well. Perhaps we're seeing people more at this stage than at the top there,

Steven Bruce 31:28

this is a schematic. It's a diagram. There are no numbers on it, so we don't know at which point you burn out or anything else. But if we were able to do that, I'd expect the right hand side of that curve to be a bit more dramatic. We've talked in the past quite a lot about central sensitization. And I wonder whether when you get to a level of stress, it flips a switch, which

you mentioned earlier on, where all of a sudden, things start to fall apart very quickly. So it's not quite such a predictable and gradual process, I would have thought. And as you say, if we can, if we can get to people before they're anywhere near that stage, then that would be good

Anji Gopal 32:06

How can we break that cycle? Remember, this has got fatigue. It's also an ill health. It's, we're talking about everything,? It's within the body, tissues. It's within the mind, emotional, behavioral, it's all there. It's all happening all at once.

So how do we manage to catch the response to stress before it becomes too much of a problem. And this is where the somatic cues of stress, for me, are the first thing. Looking back at that first slide, this is what happens the moment you get a stress what would you notice? Stress starts to exert its evil influences on you. What will people notice? And in the workplace, they notice headache, eye strain, neck pain, back ache, perhaps digestive problems,

Steven Bruce 33:05

probably in the early stages too, they would come to one of us as an MSK practitioner, and they wouldn't realize those things have happened until you ask them the questions, because it's an insidious process.

Anji Gopal 33:17

Maybe some of the viewers might put in other things that they're seeing, but TMJ pain. I would say this year I've seen more neck pain than low back pain, and I would say that's been, that's been quite a shift. And for me, many of the patients are literally in this chronic state of dealing with the what's coming next, sort of feeling. So, can we train people to notice those cues? So in the workplace, that's what I'm doing. Can you notice those cues, and can you do something right there, and then that just stops the next level from coming

Steven Bruce 33:56

here's a thought for you, just before we go do some practical. I don't know to what extent you treat teenagers, young adults and so on, but we're fond of saying how they spend a lot of time on their phones or their devices using just their thumbs. But I would imagine in the first instance that that automatically is causing them to overuse their upper traps, isn't it? But also when you're playing, I don't know what sort of role playing games they are playing, but those games themselves can induce quite a lot of stress, can't they, because you are constantly either trying to beat just yourself or a virtual enemy, on the competitor on the on the screen, or possibly online your mates and other people. It's a bit of a fight that's going on there.

Anji Gopal 34:42

So I've got a teenager and a 20 year old. And two boys at that. So that I'm quite familiar with all of this, this stuff, I'd say it's an excitement, potentially also a stress. But then also, now, much of their time seems to be spent on Tiktok, which is these very quick firing things

Steven Bruce 35:06

Are they not quite relaxing, because aren't they generally quite fun?

Anji Gopal 35:09

I think it just develops a little element of anxiety that you're not watching the next one. And what happens if you put your phone down? And I think maybe even, if you're too far away from your phone, how does it feel? Even that's causing a level of anxiety.

So, for me, it's that "constantly on". And remember one of the ways of dealing with stress, is rest. And actually, we're just not getting enough rest. And watching Netflix or playing on your phone is actually not rest.

Coming back to yoga, or some of the practices from yoga, it is about learning how to rest.

Just one thing on yoga, sorry, before I before we go over there, if I can. Buddhism and Hinduism and the yoga philosophies all start with the premise that life is suffering. So actually, really different to the Western outlook of, everything's great, and if you get a pain, what bad luck.

the Eastern traditions actually start with this: human life is quite hard. What can you do to make it more easeful? And from Buddhism, one of the sayings is that there are two arrows of suffering. So the first arrow you've got no control over. And that might be the mean boss COVID, Donald Trump. I don't know - whatever it is. The only arrow you've got control over is the second one, because the second arrow of suffering is your response that you shoot at the first arrow and again, that's quite empowering, when you think about it.

And I would have these bodily reactions to some of the practices that we're going to do. I hope this isn't too much philosophy for a Tuesday night, but this is dealing with that second arrow of suffering. How can I modulate, moderate my response to the stressor?

Steven Bruce 37:17

I think one of the challenges would be knowing what responses that are open to you, if you've not considered it before, nobody's talking about it before, and whether it's Buddhist teaching or yoga teaching or anything else, it doesn't really matter if somebody's prepared you in some way to respond appropriately, then it's going to help, isn't it?

Anji Gopal 37:40

That's exactly it. Just as you don't need to come at things from a talking therapy or a body therapy, I wouldn't hit a new patient or run at a new patient with Buddhist philosophy on day one. They don't need to know that. They just need to have the awareness of what's happening.

Number one, we are in a great position to say, "what do you notice in your body?" And can we teach them? And can we help them? Because remember, exercise prescription is open to all of us, within our registration, in the regulation and in the way we work.

Steven Bruce 38:17

Yes, and one thing to think about. We are going to move across there in about 10 seconds. Rachel says, Can you teach practitioners to recognize that they're suffering and need to take action? Because it's easier spotting it in patients. It is much harder spotting it in yourself, isn't it?

Anji Gopal 38:33

It really is. And actually I've got written down on my piece of paper. Number one, you've got to work out how it works for you in your body. Because, I'm a teacher, I suppose, and I think we're all teachers as manual therapists. We're not just therapists, actually. We're there to educate our patients about their bodies. But you can't teach something unless you know it. I think we have to do the work first in order to be able to effectively, offer it out.

Steven Bruce 39:02

Let's go and see if we can teach a Scotsman something. I'm not sure if you met Neil when you last came up here, but Neil's my key assistant in the APM team here and has been with us for quite a while now, and he volunteered very kindly for this, because he thought you'd treat him nicely. Yes,

Neil Doctor

I'm not stressful.

Anji Gopal 39:25

You're not stressful. No, are you stressed, though, that's the other question.

Neil Doctor

We'll find out after this

Steven Bruce 39:34

we try to make him stressed by dumping him in on things like this.

Anji Gopal 39:39

So I guess the question is how can we help our patients who walk in the door and we feel that stress might be part of their presentation? And I think number one is we have to have that in our mind as walk in. As a patient would walk in we'd automatically be assessing their gait, for example, or how they're holding their shoulder, or whatever else it might be. But once we've talked to them and we feel that there might be a stress element to their presentation, how do we start to help them unwind?

Steven Bruce 40:17

Are there some typical clues that you look for, or is it just straightforward, they sound stressed to me.

Anji Gopal 40:22

I'd be really interested in what everyone at home thinks. But for me it would be, the neck, around the shoulders, jaw pain, those typical presentations that we might see that might have an element of stress. They don't sleep very well - when you ask the case history, not much sleep. I always ask what's going on at home? Are, other things going on at home? They'll say, Yes. I don't need to necessarily know on day one what they are, but they will tell you,?

Also, they might talk really quickly. They're not taking a breath. They might start to make you feel anxious. But if I came in and I was talking to you like this about how my neck hurt and

my leg hurt, and then my dog got run over, and then the wheelie bin got put out on the wrong day. And does that make you feel? Stressed? Yeah.

So, could we notice as practitioners, when our patients walk in like this? I mean, there's some big clues. Some of them will cry, be upset. But just notice, if you get that feeling, how do we defuse it? So the easiest way is for us to talk really slowly. So I would say, Hi, how are you doing? I would start to breathe slower. There's good evidence to show that if you, as a practitioner, breathe slowly, the other person will start to slow their breath. Just notice the difference in how you feel, if I talk like this, very quietly and calmly and slowly to if I said very quickly, All right, Neil, how's your back? so all of these just subtle body language cues. Already you're starting to take the tone down

Steven Bruce 42:06

I've noticed that in a certain social situation, as well as in clinic, when you get a person talking to you and they're rapid fire, my instinctive response is to do exactly the opposite and try to just calm this conversation down. And sometimes they'll mimic that, and it becomes a more comfortable conversation as a result. So that's not fixing it, is it by you slowing down? That's just making him slow down for a minute?

Anji Gopal 42:29

That's making him slow down for a minute. But remember, we're going to, then at some point, do a treatment. And we want that treatment to have the best effect that it possibly can. And there's always an element of healing going on in the body. From an osteopathic point of view, the body has a self healing, mechanism. What are we doing? We're trying to put that body, that person, in the best state that he can possibly be to receive a treatment.

Steven Bruce 43:01

Out of curiosity, how long do you give your patients?

Anji Gopal 43:03

Always an hour. Well, an hour slot. So 50 minutes minimum,

Steven Bruce 43:08

pretty unusual, isn't it? I mean, most people are doing 30 minutes for follow ups. I get the impression it's 30 minutes for follow ups

Anji Gopal 43:14

But then my patient cohort are chronic, generally, patients with chronic pain, or chronic back pain or chronic musculoskeletal pain, so there's often something else going on, so we have time to be slow and time to breathe slowly.

And then I would often also say, take a few breaths, have a little walk around. But the psychologists and psychotherapists talk about completing the stress cycle,? So something stresses you. You notice that it's stressing you, you have to do something to get rid of it. And there are a whole host of Evidence Informed ways of doing that, movement, breathing, being out in nature, having an interaction with someone that loves you, having a hug. That oxytocin. Lots of different ways in which we can do that.

So how can we help our patients? Some of that is, I think, our work and so what I would do, in practical terms, is I would start slow. I would sometimes just ask the patient to lie down and breathe, to start their treatment. But perhaps before that, I would also ask them to do a little movement. So the simplest thing, often, especially if they come in with this sympathetically charged, fight/ready-to-go is just to do the very simple shoulder roll. So are we all right to go? So you can do this, sitting down, you can do it, standing up, just to let your arms be relaxed, or maybe even stand up. Maybe I would say to them, and you know the viewers, some of them have met me before. I'm not really embarrassed very often. So I would just say, Come on, just have a little walk around or walk with me. And I would say, let's have a little walk and just walk around and shake things out. So maybe give your legs a shake. Shaking is a movement that is considered to help release the stress

Steven Bruce 45:23

with some evidence behind it, or is this proven?

Anji Gopal 45:27

I need to go and check. I need to go and check. But if you think osteopathically, Ayurvedically, the science of yoga, we're talking about unblocking things that are blocked.

So the rule of the artery is supreme. We want to get a little bit of movement. So having shaken your arms, just roll one shoulder back and roll the other shoulder back, and you can get them to do this. You could get them to do it as a part of your assessment.

How does that feel in your neck and shoulders. Is it painful? So everything obviously always in a pain free range. But why not ask them to do some little movements like that,? And then, along with this, is like a military thing. Okay, there you go, and then the other so before we go into more movement, I would also suggest that they just breathe. And the simplest breath, and we've done this so many times now, is the so let's sit down just for a minute, so inhaling through the nostrils and then exhaling through a soft, open mouth. So inhaling and exhaling. You don't get low blood pressure, do you? Okay, so if you feel like you're gonna faint. So carry on. Do a few more, inhaling through the nostrils, exhaling through a soft, open mouth. So not a foo, but a it's called the physiological sigh. Is there's all sorts of papers and stuff on it now, but it's yoga! invented here first - slow yoga breathing.

Steven Bruce 47:18

We did a few shows with the late Leon Chaitow, and he put a lot of emphasis on what he called a sort of a breath to blow out a candle. It was more of a pursed lip breath than just an open mouth.

Anji Gopal 47:36

Yeah, there are lots of different ways of breathing, and they all have slightly different mechanisms that they affect, yeah, but this one is considered to lower vagal tone. And again, there's a lot of stuff about the vagus nerve out there at the moment in research and studies.

And what do you notice? Do you notice anything? With that sighing out-breath. Just feel relaxed. You can feel like a letting go, definitely, definitely letting go. So I would say, let's just sit and just breathe a few times. And if you feel a little anxious about doing that, one way to do to throw that into your consultation is as you talk, you just talk as a practitioner. I would

just take a breath, you know. Can you give me your address, please? Sigh. Oh, okay, where are we today?

And just adding in those sighs is going to encourage the patient to just mimic a little bit. And I'd say, oh, why don't you sigh? do you feel like yawning? That would be another thing,?

Steven Bruce 48:44

It must also be very helpful that if you've got an hour with a patient, they don't feel rushed at all. It's not so you're desperately trying to get the case history done and the assessment done so you can do a bit of treatment and then get them out of the door.

Anji Gopal 48:54

No, but then, I don't think that manual therapy is just the be all and end all of helping our patients. So I think there's more to it than that. So we would start, so I would start getting them, just to give it, have a little shake and a little relax, the physiological sigh. So people can go and look that up. Really helpful, really helpful. Also, you could do it, with them lying down.

And then my favorite thing for getting things moving and for again, not just in the clinic, but for exercises you're giving your patients to take away with you, one of my favorite things is the arm swing.

49:39

He still looks very tense!

Anji Gopal 49:42

so, can you be floppy? May I, may I move your arms, yeah, just let go. Let go. No, no, let me do it. Let me do it. Let me. Let me be in control. Let me be the boss, yeah, let go, let go. Floppy, like a pendulum. There you go. That's better.

Steven Bruce 50:03

I I just want to prove I can do this better than he can.

Anji Gopal 50:09

So if we think that a lot of the somatic tension ends up in the shoulders, this is quite a nice feeling. Can you go higher as long as you don't have pain? So what are we doing? We're moving the shoulders. We're getting all the trapezius muscles oxygenated, yeah. And we're also because in a moment, if you're happy to do this, but don't do it if you're going to hurt your shoulders. Want to take one forward, one back.

Steven Bruce 50:38

Coordination?

Anji Gopal 50:41

Yeah you've got it. You got it? Yeah, okay, stop,? Everyone at home, though, would notice, and if they're doing if you're doing it at home, we're also articulating the thoracic spine and all of these rib connections,? And hopefully you've also laughed while we're doing it, yes, so, so just swing and laugh with me. Not like hahaha, but just, it's funny, yes, but whether you

can do it or not it again, what are we doing? Lowering the tone. And there is evidence actually about laughter, reducing stress. It's one of the things that that gives us that break.

Steven Bruce 51:21

It's hard to be stressful when you're laughing. And how long are you going to do this for with a typical patient?

Anji Gopal 51:27

A minute or two. And I would say, people working at home again this, these sorts of things are really helpful. So, this is what I would say to the patients who are desk homeworkers, the minute you notice your neck and shoulders ending up here, then Ha, sigh out the breath, roll your shoulders. None of it's rocket science. And then just walk around, swing your arms and then come back. Now, the other thing that you could do if you grab a seat, if you're walking around at home, and again, this is what you might be telling your patients. There's real good evidence that looking at nature comes and breaks that stress cycle as well. So get them to look out of the window or look at a pot plant. Yeah. I mean, genuinely, the color green is really calming. So what? What might you encourage that? Could you have pot plants even in your clinic? Right Thinking about and again, what are we doing with the patients? Are we just, manipulating a joint or are we encouraging their system to move towards better health?

Steven Bruce 52:34

So in terms of a clinic and a treatment room, typically, if you go to an NHS practitioner, whether it's a GP or a physio or it will be a stark white walls with computer desk, treatment table, lino floor and so on. What would your ideal treatment be?

Anji Gopal 52:57

It's got some green plants in it, and then it's got me as a you as a kind, welcoming, calming practitioner. I think that that's probably better than, or, than the environment.

Steven Bruce 53:12

I wondered about this, because the image that we have in my own clinic is it's got paneled walls and nice floorboards and some carpets on the floor, rather than that clean, stark lino that you get in an NHS environment. And I just think that looks nice and warm and reassuring, but that could just be me wanting to be snooty about my

Anji Gopal 53:31

I think it obviously helps. It makes everybody more relaxed. It makes the patients feel more relaxed. But at the same time, I don't think you need to have, full on whale music and incense, and I don't have any of that, at the end of the day, it's about making them feel comfortable. And if they're going to be, if it's all too white or shiny or, or even carpeted and beautiful. For some patients, that doesn't work either. So for me, everything is in moderation.

Steven Bruce 53:57

it's worth remembering the patients are all different.

Hannah sent in a comment a little while ago talking about some clients who will sigh or yawn during treatment you've seen, and that's a good response. I take it.,

Anji Gopal 54:10

yeah, it's considered to be a really good response, isn't it? It's that let down, the move towards the parasympathetic nervous system, and we can see that in breathing practices. About eight minutes, sometimes it takes to get to that stage, but that big inhalation and the big exhalation, in cranial osteopathy, they talk about that a lot as being sort of a switch in the nervous system. So that's what we're looking for. And perhaps yawning is another thing, so you can always and obviously this means your brain's got to be working as a practitioner on many different tracks. But if you yawn, you're going to get them to yawn as well. Yes. And so those sorts of things, for somebody who's really, really, really tense, how are you going to help them move into that

Anji Gopal 55:16

so, should we do some more stuff?

Steven Bruce 55:18

Yes, do some more stuff.

Anji Gopal 55:18

So for ease of thinking. We're thinking about perhaps someone who might be at work who's got the neck forward... what else are they doing? They're looking at the screen all day, and I saw some research recently about how we're increasingly looking at your smartphone, you've got your things on the on your iPad,

Anji Gopal 55:45

And so what we're not doing is we're not using the full range of our eye muscles, and again, coming into if you think about that sort of where the eyes and the optic nerve, they plug straight into the brain. So the more you're driving these senses, actually, again, you're getting tension. And most of us, I think if we do, should we do a little massage, and then we might do some eye exercises. So I quite often give eye exercises, yeah. Okay, so first of all, just put your fingers on your temples and just rub around there. So look, you could do this to your patient if you wanted to, but you could teach them to do it for themselves. I feel that if I can train, teach my patients how to look after themselves, I've done a better job. So relax your jaw as you do that. Remember that temporalis attaches into your jaw. How does that feel? Does that feel nice? Yeah, it does. And then if you take your index finger and thumb like this, and then just roll around your eyebrows. So pinch your eyebrows. Pinch like this. Look, pinch and go outwards. Have you got any tension in your eyebrows? Does it feel sore anywhere?

Anji Gopal 57:16

Mine feels sore, but then I've been looking at my screen all day today. So if we think about some of the muscles that work, the eyes and the orbit and the ocular system, with if we're doing squinting, actually these eyebrows often, they're little trigger points in there, and we can get those worked out. And then also, just underneath, you can just get that moving. And then the simplest of simple eye exercises, because everybody forgets that we've got muscles that move the eyes. And so squeezing and releasing your eyes a few times. And so in the yoga world, you would do everything you know either five times, or, a certain number of times. But if we just do a few times without thinking too much, and then moving the eyes

from side to side, and this is the movement that we've that we're not doing at the moment. Okay, so just allowing the eyes to go from side to side, starts to again, quieten things down in the mind,

Steven Bruce 58:27

he's moving his head while he's doing it

Anji Gopal 58:29

Are you? Yeah, it's quite hard. And then close your eyes. And then the last thing, I mean, we can do all the different eye movements. So you could do diagonals and circles and all that sort of stuff, but thinking that, if you're we're looking very close on and we're very focused. And again, that's just drawing in the prefrontal cortex into everything that you're doing. And we're trying to reduce all of that tone. You look at, take your finger, you look at your finger, and then you look at the furthest thing you can see. So focus on your finger. Focus, focus on the furthest thing out that you can see. So really, taking that it's the opposite of the tunnel vision,? Take your field of vision as wide as you can, and just take the brain away from this focus of the spreadsheet, or whatever else it might be.

Anji Gopal 59:33

So the eye movements and also the stomatognathic system - the eyes link into the neck as well. So we're going to end up, then, hopefully, just reducing some of that necktone, but also then all of that vagus nerve, anti vagus nerve system of this is there.

Steven Bruce 59:55

If you're going to do some, let me call it conventional osteopathic treatment. You're going to crack his thoracics, where would you fit all this into the process? Do all this first? Or does it not matter?

Anji Gopal 1:00:06

I would do some of it first, like the shaking and the arm swings. Because if you think about it, the arm swings is preparing the body to make it easier for me to work the hard breath. I would tend to try and do a few times as well before, because, again, that just drops the tone of all of these hypertonic muscles. And then stuff like this, I would give them to take home, and we would practise it, and quite often we'd record it on their phone, so they've got something to work with at home.

So then come and lie down for me, and bend your knees, and then we would just work a little breathing. And, I think the breath is just perhaps the most powerful part of the human, as well as the most underused one. Really, we don't think about it, but actually, it's beyond doubt that just learning how to breathe in and learning how to breathe out at the same rate has a whole physiological knock on effect. It reduces pain levels, reduces anxiety. Can improve sleep. I mean, all these different studies are out there. Can reduce muscle tone, reduce stress.

Steven Bruce 1:01:33

Is it the rate at which you're breathing in and out that matters, or is it just equalizing? Because in days gone by, I seem to recall, people, so you breathe in quickly and then breathe out really slowly.

Anji Gopal 1:01:44

So that also works, and again, there are hundreds of different Pranayama or breathing techniques. But I want to do things that are really easy. You can teach people to breathe in and out and up and down and all that sort of stuff. So for me, the two breaths I use most are the sigh. And remember, if you were being chased by the bear, you would not do a sighing out breath. So the sighing out breath just tells your nervous system you're all right. And so you even can write a post it and stick it onto your workstation to say sigh. So the sighing out breath.

And then secondly, just starting to notice that I'm breathing in, and starting to notice that I'm breathing out. So just breathe in. Forget that there are hundreds of people watching you. Yeah, relax your jaw. And then just starting to notice, and working with them to count. As I'm inhaling, I know I'm inhaling. As I exhale, I know I'm exhaling. Just slowly starting to breathe in and starting to breathe out.

And where I would put this breathing is I would do it at the end of the treatment. Again, I've got time, but I would just encourage everyone just to take a few minutes of resting at the end of the treatment before, not just a click clack, and then jump off the table, put your shoes on and out the door.

But actually, we're going to have to do more work on breathing, so first of all, just noticing, can you notice yourself breathing in? Could you even breathe into your belly? Yeah, and breathe out. And so, if you haven't learned how to breathe, it takes a little time.

Okay, so inhaling and exhaling, and there will be some contraindications as well for breathing, even like this, some people might get quite anxious, so we would stop. The breath might start to catch. So for people that aren't used to breathing, then this might be actually too dramatic.

So how would we do it? Then we would do it with movement. Breathe in, breathe out, breathe in, breathe out. Just learn while he's in this position, sitting. And so, if it was an office worker, I do it sitting. What could you do under your desk when you start to feel stressed? If you've got a dog, what could you do while you're walking the dog? If you've got annoying children, could you even load the dishwasher with an in breath and stand up with an out breath? Yeah, we got to multitask. We haven't got time to lie and breathe all day.

Steven Bruce 1:04:29

Is there anything more active he can do, anything more active you can do?

Anji Gopal 1:04:32

Yes, loads of things. All right, so if we go back to the things that break the stress cycle. Okay, so we've talked about moving a little, breathing a little, crying is one of them. So if they cry, actually, it's often a good thing. Laughing, we talked about, we talked about nature.

One of the other things is to make a noise. Okay, yeah. And so how would we do that? I always think of my two children when they were little. Thankfully, no one ever lay down in the

supermarket and had a tantrum. But a tantrum is a really good way to clear out the shit. Because we get to the end of the week, or you get sometimes it just feels like it's all piling on. So could we have a tantrum? A tantrum? When did you last have a tantrum? Okay, should we have another one? Have you got any reasons to have a tantrum? Many, okay, many. So do you want to how would we have a tantrum? Okay, we go. So just start to bang. I would probably get them down on the floor, but we'll do it here on the table. So make a fist and bang. What else would we do with a tantrum?. Just have a yell.

Steven Bruce 1:06:03

you might want to warn the hypnotherapist in the next treatment room!

Anji Gopal 1:06:07

How does that feel?

Neil Doctor

Oh, I feel good.

Anji Gopal

Do you? I mean, genuinely,

Neil Doctor

yes, yeah, do Yeah.

Anji Gopal

So everyone you need to go get down on the floor and have a tantrum.

Steven Bruce 1:06:18

And the workplace is going to be healthy.

Anji Gopal 1:06:19

But it is really, it's really clearing. Okay. Now, is this osteopathy? What do you think?

Steven Bruce 1:06:30

Well, you've given some physiological reasons why this could be useful. And our job is not to apply a specific techniques to make people better. And if we're applying knowledge of anatomy and physiology and movement and breathing. Yeah, of course it's osteopathy. It is chiropractic. Of course it is.

Anji Gopal 1:06:45

Phew. I'm glad you said that.

Anji Gopal 1:06:47

Any movement, so I would always try to put movement in - active movement for the patient to do it. If they've got arm or an elbow problem, or a shoulder problem, just get them to loosen things up a little before you start to work on it. As long as it's not painful it's got to be a positive thing. And also, from a pain point of view, you're reinforcing with them that they can get through it

Steven Bruce 1:07:16

some patients leaving your treatment are very happy, I'd have thought, ,

Anji Gopal 1:07:19

yeah I want them to be. Neil, thank you, go and have a tantrum every day, and then tell me at the end of the week how you're feeling.

Neil Doctor

I will do thanks very much.

Anji Gopal

And at the very the very least, look, he's got that sort of parasympathetic flush. Can you see it? the blood's all back in your system, and you're on the road to healing, even if we don't do anything.

Steven Bruce 1:07:49

Robin sent in a comment about what I said earlier on, about patients coming in and demanding a click. I don't care what you do, just click this. His words are, whenever I hear a patient with neck pain say something like, I don't care what you have to do, I just want it fixed. Which is nearly what I said. He'll always investigate their stress levels, and almost always finds that they've got some combination of persistent physical occupation or environmental stress. When they reflect, they conclude as a driver to their attention. I'm not quite sure I understand that sentence

Anji Gopal 1:08:21

I think it means when they recognize it. it's the penny drop moment, isn't it? But actually, I don't just have neck pain. I hate my boss or I hate my wife or whoever.

Steven Bruce 1:08:35

And because it's Robin, and you might not know this because it's Robin, he says. And having done all that nonsense, he normally suggests barefoot shoes. Yes, of course you do Robin!

Somebody called SOS osteo says Do you gently talk throughout your treatments to find out more about their general well being or their thoughts in a relaxing manner? Or do you prefer practice with quieter treatments, allowing the patient to breathe and decompress for the best somatic response

Anji Gopal 1:09:06

in the greatest osteopathic style, it depends. Some people need to talk, and I'm not a talking therapist, but I will let them talk. And some of them don't, and often I ask them, actually, I ask them, if I think there's something going on that they're not letting go of, then maybe I will, I will inquire, but if it's something they don't want to talk about, I won't talk so. And, with breathing and asking people to be quiet and to, let the benefits of the treatment sink in. Some people need that safe space. But again, because I have a longer treatment time, I can, in a way, do both.

Steven Bruce 1:09:50

Lucy sent in an interesting observation here, one which you probably don't really fully appreciate until you start wearing glasses. Lucy says that varifocal glasses stop you moving your eyes, which she says is worth considering, and points out that she's just got her first pair, and they're awful. And I think I know what she means with this. I used to wear varifocal glasses, and the worst thing I found is that I had to tip my head down all the time to see hazards on the ground because the bottom of the glasses wouldn't see them. And now I've switched contact lenses, and because I'm long sighted, they're weird contact lenses. But as Claire, my wife, will tell you, it means if I'm reading a book, I'll turn my head that way because that's the one that can see the book. And if I'm looking further away, I'll have my head turned the other way because that's the long distance lens. And that sounds silly, but actually, I notice the sort of tension in trying to read things

Anji Gopal 1:10:44

I've got varifocals as well. And yet sometimes you find your head in this position. And again, it's the noticing that's the key. And people need, we all need to notice these habits and these tensions that we're putting in before we get to the point that we have to actually call somebody like you or me and come into the clinic. I know this is probably not a great economic model, but we want people to have that awareness of what's happening in their body before they do it. So perhaps, if you've got new varifocals, they do take a few weeks, don't they to settle down, but, take them off, give your head a little move around.

Can I tell a little little anecdote?

So I went on an Ayurvedic retreat a few weeks ago. There were Indian doctors, but it was in Italy, Ayurvedic doctors from an Ayurvedic Hospital in India that had come to treat Westerners in Italy. And I went in and I had my consultation, and I said, look I quite often get neck pain, I quite often get a stiff neck. And he said, Well, that's because in the West, you don't do the wobble So, and I wanted to share that, because actually, I've been doing the wobble just a little. It's quite hard for Western people to master that. Indians from India do a little wobble, and actually we don't do we. We hold our necks quite still. And so actually that's so that perhaps we could do, like a good theory, a group exploration of whether a little neck wobble loosens.

Steven Bruce 1:12:22

I think the biggest lesson you had from your Ayurvedic retreat was that, since they didn't have tea, you discovered that tea has an effect on you.

Anji Gopal 1:12:29

Yeah,so we want to talk about my PG Tips. I love tea. Or, I did love tea. And then I went to this retreat and they didn't have tea, which was really upsetting, or coffee or sugar or any stimulants at all, but they didn't tell you that before you got there. And so in four weeks, because I've been back three weeks, I've only had four cups of tea. But what I notice is that when I have cup of tea now, or maybe I did anyway, I get slight palpitations, and so I've stopped drinking tea. I've got water in my cup. Anyone that's looking?

Steven Bruce 1:13:01

But you have had four cups of tea, so occasionally the craving gets too much for you.

Anji Gopal 1:13:06

Yeah, just it's, well, I think it's habitual. It's about a habit. And all of these things are habits,? And so can we put in good habits in our workplace and with our patients to help them lower the tone and help them notice these triggers? That's the key for me is, can you notice the triggers? And then what do you do when you notice them? And I would say that in my patients and students, after 10 years working like this, the number one thing is the Ha breath is the thing that people love, just doing that before you yell at the kids, before you put the key in the lock,

Steven Bruce 1:13:48

you teach your kids to do a Ha breath.

Anji Gopal 1:13:50

Yeah, but I'm their mum so they think I'm an idiot.

Steven Bruce 1:13:58

Yes, if they want your advice, they'll give it to you.

Biliana here has said that she would love to know who organized the Ayurvedic retreat, and we'll share your details. Is that alright if we share your details? Are you happy to give that sort of advice?

Anji Gopal 1:14:13

Yeah, you can look on the Instagram. Look on my Instagram.

Steven Bruce 1:14:16

Are there good Ayurvedic, Ayurvedic retreats and bad ones?

Anji Gopal 1:14:20

It's really, it's a bit of a minefield this, this one is only for a few weeks a year, and they've finished their season now. So you won't be able to go on that until 2025, but I'll tell you what I thought of everything, if you get in contact

Steven Bruce 1:14:39

How long was the retreat itself? A week, okay? And just a week without tea was enough to really annoy you.

Anji Gopal 1:14:47

No, it was just the two, first two days without tea that annoyed me. And, because it was Ayurvedic, they didn't have any. And all of us, there were 15 of us, everybody had a blinding headache by day two. So withdrawal headaches from caffeine and sugar, and because they were Ayurvedic, of course, there was no ibuprofen or paracetamol.

And so the treatment was a medicated paste on the forehead tied up with a band. So we all were walking around looking like karate kid for for 24 hours, and that was to soothe and cool the head in order to take the effects of the headache away. So, really interesting. we could probably do a whole show on about on about Ayurvedic. You've had an ayurvedic doctor there, haven't you before.

Steven Bruce 1:15:35

We've had so many shows, I've forgotten we might have done. Annie here says I ask some patients with really restricted cervicals to rotate and side bend. Notice the limits before and after of the eye movements, and the difference can be astonishing.

Anji Gopal 1:15:55

So the eyes and the neck and again, you know the somatic effects of the musculoskeletal effects of stress, quite often, are sort of up here,? The other area where they are, just as a quick aside, is the pelvic floor,? So the lower body, in response to the someone running at you with the fist, is that little contraction of the pelvic floor down there so often, is that, could that be a contribution to back pain?

Steven Bruce 1:16:28

Yes. And we did have a show not that long ago where we talked about the pelvic floor. And we all think the pelvic floor always needs to be tightened up, but it can be over tightened, and it can, as you say, have a detrimental effect.

Anji Gopal 1:16:40

And that's a stress response too, actually. So you might find that in your back pain patients, actually, they're holding everything down there really tight. And for those of us that don't down in that area, how do you encourage all of that to loosen up. And again, it's the breath. So the HA breath, we all know as manual therapists, the link between the jaw, the TMJ and this sort of girdle here, and the girdle down there, actually we can start to relax.

Steven Bruce 1:17:16

I should know the answer to this question. Do you run courses for osteopaths, chiropractors and so on?

Anji Gopal 1:17:21

I run a yoga for back care teacher training for yoga teachers and any registered manual therapists that want to come. So, in fact, the last one finished today, and a senior spinal physio came on that because she wants to do some of the gentle movements that I do with her patients in hospital, and also a lead consultant in mental health at one of the hospital trusts. So yeah, anyone that wants to come along, or if you know they're happy to work with you,

Steven Bruce 1:17:53

if people took away from this show, simply what you've demonstrated today, the Ha breath is obviously a big part of this, but also, the silly part, the tantrum at the end, and a little bit of movement in between. I mean, that's all going to be useful.

Anji Gopal 1:18:08

Think about how you interact with patients that you think might be stressed, and just start to train yourself to notice some of those cues, the talking fast and not breathing. How do we is, Well, number one, you have to decide if you think this is useful,? So that's a starting point. But then, how do you reflect change your behavior? This is communication and consent in a way,? If we're thinking of the CPD guidelines, how might you adjust your interaction with

them to help them lower the tone. And then, what can you teach? And what can you before that? What can you notice in your own body,? So one of the questions was, what think about after today? What are the what are your three stress responses? I know mine is neck tension number one, and reaching for a cup of tea is number two. But that one we've got to put to one side.

But the clenching of the jaw, the lifting of the shoulders, the sharp inbreath ... I was working with a lady today, one of the students from the course, and every time she was thinking, she held her breath, every time she was really thinking her tongue poked out so the whole jaw was locked up. How do you notice what's happening in **your** body?

And then once you start to be able to be aware of that, practice the Ha breaths, do the shoulder rolls, swing your arms around, laugh at silly things, have the odd tantrum, see how it changes your life. That's what I would say. And then once you've got that embedded, yes, and only take a day or two, promise,

Steven Bruce 1:19:45

Somebody here has said, are you still doing your 6am classes?

Anji Gopal 1:19:56

Yes, 6:45 six, little bit more civilized, isn't it? 6:45, to 7:15, every now and then,

Anji Gopal 1:19:59

Tuesdays and Thursdays, three weeks at a time, and then I need a week off. And what I wanted to do was, earlier in the year again, I think we've got, this is an aside. Now we're on a tangent, but I think we've got really complicated with healthcare. I think we're giving just made everything really complex, and I feel that sort of, simple wisdom is really the way to go.

Steven Bruce 1:20:27

I thought about that and wonder, we find ourselves having to justify what we do in evidential and medical terms in order to establish ourselves with the conventional medical fraternity. And sometimes, actually, it's just simple stuff, which is useful, isn't it, but we are expected to look for the complicated answer.

Anji Gopal 1:20:47

Yeah. I think the world encourages that extra complexity. And actually normal people, we just want our bodies to work, to do better things. So I've set up this, it's called "Wake up with Anji", and it's 30 minutes twice a week, because, actually, I think no one's got time to go to the gym. And I wanted to see if you started the day with a little of these very simple movements, a little bit of breathing and five minutes of just sitting peacefully with me gurning in the background. Could it start your day off in a better way. And actually, the feedback has been brilliant. And I did it as a sort of quasi study. You know better positivity, less joint pain, being in a better mood with their partners and their children, having a reason to get up in the morning, less time on their phone, and actually, all of those things we know are good for your health.

Steven Bruce 1:21:50

I've got a long observation or question here. I don't know which it is yet.

Paul has said, "I use treatment silences as an opportunity to find out more about patients interactions with their environment. After all, I have them for one hour whilst they have control of their body in the environment for the next 23 hours. So anything I and the patient can change or influence in making that environmental integration more energy or movement efficient, can lead to real, lasting benefits".

Simple example, a patient had 18 months worth of shoulder pain. MRI on the NHS showed nothing untoward, but the patient was still in pain. Paul found that she was spending four hours every night after work, lying like Cleopatra on her sofa. Getting her to sit on the other side of the sofa and more upright, reduced her pain by 85% in six days.

So nice stuff, isn't it? Have you got any great success stories that you can share with us? I'm thinking you talked about clenching jaws. What about patients who grind their teeth?

Anji Gopal 1:22:51

Grinding the teeth is a Ha breath and a mouthguard, and also understanding why they're grinding their teeth. If you don't work out why they're grinding, like Paul just said, if she's doing that every day, the one hour that you've got with that patient every fortnight is not going to make an inroad.

So we have to talk to them at some point, because you have to find out why they've got into this situation in the first place.

So success stories. There's one lady that springs to mind, and she's a corporate lawyer in London. Very stressed, back pain. All the MRIs, everything, all been done before. Normal level of wear and tear, some nerve irritation, all that sort of stuff. And the two young children, very demanding job.

But you know what? What did she feel? Her back pain was partly from the musculoskeletal, mechanical factors in her back, but actually much of what it was the fact that she's just really stressed, doing a master's degree on the side, you know. And I think her feedback was, "I realized that how I feel impacts how I feel in my back. And my back pain really is a signal. It's that what I'm doing is too much in the rest of my life".

Yes, but actually, it's not the pain itself. It's a reflection of all the other things that are going on. Now, we didn't find that by talking, we found that by gentle moving, and really I was encouraging her to rest, because for me, there was not enough rest happening in her world.

Steven Bruce 1:24:38

hard to say that though, to a corporate lawyer or a financier in London, isn't it? Because their world, their ethos, everything about it is work, work, work, work, work, burn out at the age of 35.

Anji Gopal 1:24:49

But if somebody's come to you with pain, then they've recognized they're suffering. And so your job is to help them unpick why that might be the case. Look, I don't talk about yoga or

Lord Buddha to everyone. After a while, you get a pretty good idea of who's going to find, that useful.

Steven Bruce 1:25:12

Well, they don't have to know if it's called Yoga, or whether it was invented by Buddha or anybody else, do they?

Anji Gopal 1:25:16

And if they're men, I say they're doing stretching. And if they're women, doing yoga postures, because actually you've got to pitch to the right patient or the right customer,?

Anji Gopal 1:25:30

But also the breathing. The breathing is the key. So actually you will notice that even patients who have digestive issues and there, the evidence does support what I'm doing. So I'm not doing a woo, woo. You've got irritable, gastric pain - let's do some breathing. The evidence shows that all of these things lower the tone.

Steven Bruce 1:25:51

And you've put a lot of references at the end of the presentation that we haven't used for the show, but which I will send out, and presumably the references all show the papers that you referring to there, which is great.

Anji Gopal 1:26:03

And then one final thing coming all the way around to your cardiovascular surgeon. The initial bit of yoga research was done in 1972 (which was a year I was born. So it's a good year) by cardiovascular consultants in a London hospital, and they did a full RCT about breathing as much as you can for an intervention, rather than a pill, with patients with hypertension, teaching them to breathe into a count of five out to a count of five. And then they measured heart rate variability between a group that had learnt that and a group that hadn't, and the group that had learned to do the breathing lowered their blood pressure and improved their heart rate variability. It was published in The Lancet all the way back in those days. So no Woo, after all. Those ancient people knew some good stuff.