Academy of PHYSICAL MEDICINE

Transcript

Primitive Reflexes
With
Bob Allen

APM - I so really enjoy these broadcasts, and I know I'm really looking forward to this evening's broadcast, I've got a personal interest in the subject matter. And we have a very special guest, a man who has been studying and practicing in the art of retained primitive reflexes for over 20 years. He trained with a chap called Peter Blythe, who's the founder of the Institute for Neurophysiological Psychotherapy. I knew I was gonna get that wrong. But he's since been excommunicated from that college. But it doesn't matter, he has full books despite the fact that he's virtually anonymous on the interweb, you can't find him through his website because he hasn't got one. He's hard to track down, but he's a very busy man, because he is a very successful practitioner in, as I say, the science behind retained reflexes. Bob Allen, welcome to our studio. I bet I got a lot of that wrong, and you're gonna correct me very shortly. But you are slightly unusual perhaps, in that you are, in the jargon of the profession, a service user, aren't you? You came to this business because you are a person who has retained reflexes yourself, or had.

BA - On great reflection, yes. And it took me a lot of years to realize that the people I was working with were just markers of my --

- Oh, so I assumed that because you had some problem related to this, you'd gone through treatment yourself.

- No, no.

- Oh right. So how in retrospect do you think it was affecting you?

- Um, as a child I certainly suffered chronic shyness. And when I talk to the people who come in these days, we delete shy and put in fear. So we don't believe in shy. Physiologically, there's no such thing. Or at an emotional level there isn't such a thing. But if you add in an errant fight-flight reflex, so you've got too much stress chemistry in the system, then that is either gonna make you very externalized, or very internalized. And if you're very internalized then you might become, or you might be perceived as shy. I was also an A class student at the beginning of my studies, and just went downhill.

- Because?

- Because if you have developmental delay, if you have these retained reflexes, if the central nervous system isn't complete, then you tend to be building on sand the whole time, you miss concepts, you miss early concepts. And so when the next bunch of concepts comes round, you have nothing to build them on, you have nothing to connect them with.

- We've actually brought up three different terms, or expressions, or I have over the course of my introduction there. One is primitive reflexes, one is retained reflexes, you've now mentioned developmental delay. Could you tell us what those are?

- Yeah, so developmental delay can be illustrated by the retained presence of primitive reflexes. The primitive reflexes develop, roughly they're appearing at the end of the first trimester, and they prepare us for birth. They help in the birth process, and they are there for our survival after birth. And basically they are responsible for teaching the baby brain everything. From balance coordination, eye movement, the list is extremely long.

- And is the list of the reflexes themselves equally long, or are there relatively few?

- Yeah, there are over 100 primitive reflexes. We look at a small crowd, the most important ones whose function is responsible for getting us to work with gravity. Understanding down so that we can understand up, so that we can gain center, so that we can gain level. So that we can, if you like, run the operating system. It's just like the CD-ROM you used to put in your computer to upload the operating system. And the reflexes can really be seen, in some way, as exactly that. So if these reflexes don't go through their process, then the functions associated with them will become problematic.

- Right. What would you typically expect to be the problems?

- Well first of all, there's no typical. There's a lot of atypical. There is a lot of paradox involved with primitive reflexes. If you had two people with exactly the same strength of asymmetrical tonic neck reflex, for example, they would be handling it in completely different ways depending on how they accommodate it. So if you've got somebody with physical intelligence, for example, then the reflexes that allow us physicality, and allow us balance and coordination, it just won't bother them, they can accommodate it. So, run the question by me again.

- I was asking what you might see in a patient who had delayed or --

- Now the list is long. Basically, you're going to see people with dyslexia. Dyspraxia, ADHD, ADD, any of these children will have neurodevelopmental delay. There is something that goes with this that if the physical system is immature, then so will the emotional system be. So immature central nervous system, immature psyche. So we can see anybody from those children who are very late to walk, very late to speak. Those children who are extremely fussy eaters. Kids with fine motor skill issues, handwriting problems, physical problems, balance and coordination. Children who are producing way too much stress chemistry who will be gathered under the umbrella of hyperactivity.

- Right. And can you fix these things? Can you fix ADD, hyperactivity?

- What we can do is bring the central nervous system to a point of balance. I wouldn't want to sit here and say that I cure ... We can change the way function works. So we would expect to see changes in school, changes in handwriting, changes in reading, changes in physical function. We would see changes in behavior as well.

- How much research is there behind all this?

- In my world, at the moment, none. We have a research program beginning. But there is a lot of research going back to the 60s in terms of the effect of primitive reflexes. And the effect of primitive reflexes in children with brain damage. And then laterally, this is where Peter Blythe comes in, then he's noticing that children with learning problems also had retained primitive reflexes. And this raises a bit of an issue. Or it raises a bit of a statement. Because technically, neurologically, you can't, if you have retained primitive reflexes, it is a cast-iron sign of brain damage.

- Right.

- So a lot of the research, and a lot of the publicity, a lot of the work, has been, this is what Blythe was very much interested in, was proving that these children clearly weren't brain damaged, but they clearly had retained primitive reflexes, and they were having issues with function, or behavior.

- So who is it that specified that you had to be brain damaged to have retained reflexes?

- That is a medical solid.

- Is it?

- So conventional medicine --

- I'll give you an example, Stephen. We will very commonly see retained Babinski reflex. And that's a cast-iron marker for some kind of insult. But we see it day in, day out. Simply because the Babinski reflex is part of the developmental pattern. So we see a Babinski reflex that has, if you like, simply switched on, and then stuck. So they haven't developed into the later adult plantar reflexes.

- Okay, and how important is that? That you develop into the plantar reflex?

- In that particular respect important because they're the interface between us and the ground, and us and gravity. So if fundamentally we are walking on immature feet, then it's going to affect our gate, our posture, our movement.

- And I think it's fair to say that conventional medicine does recognize that there are people with no apparent symptomology that have up going plantar reflexes, and I think they don't like the term Babinski reflex, do they any more?

- Probably not.

- I think we all understand what's meant by it, but as a technical term.

- Yeah, big toe extensor.

- But from what you've said, conventional medicine recognizes the presence, or the existence, of primitive reflexes, developmental delays; it knows that that sort of thing happens.

- Yeah.

- Is it simply the fact that there's no research into how you can address those problems through the mechanisms you use?

- Very little. What is accepted is that primitive reflexes are part of our development; they're tested for at birth. If they are present at birth, then the birth team are happy. But nobody really is looking to test kids who are five years old, or ten years old, or any age in fact. The primitive reflexes and all the adult reflexes that follow them should really be in place by the third year, by three years after birth. Everything should really be pretty much in place. So if you're looking at retained Moro, or retained asymmetrical tonic neck reflex, with a child who is five, seven, nine, 12, whatever, then that's a very aberrant reflex.

- So given that these reflexes could be present well beyond those ages, would you say that, have you any feel for the percentage of the population who have those retained reflexes, who do suffer some adverse symptoms?

- It's a difficult one to comment on, because all I can tell is that 100% of the people who come into the practice have developmental delay.

- But of course they're attracted because of the nature of the practice, aren't they?

- Yeah of course. Now I'm just talking about the children. But if you look at the parents, then you'll see another generation that also has developmental delay as well. So it's very unusual for me to see kids who come in whose parents don't have this. The two tenets we use are, developmental delay is hereditary, and in adults, developmental delay attracts developmental delay. Or what we say is Moro attracts Moro. So it would appear, if this model is right, that this is now in the system. And I suspect, and it would be an interesting thing to do, but pick any school, anywhere, and we'll go in and we'll test every child in the school, and I think you'll find that 90 plus percent of those kids will have retained primitive reflexes.

- Of all children?

- Yes. That's my personal opinion. That's my personal opinion.

- And yet we don't regard them all as problem children in any way.

- Especially if they're good.

- Yes. No I said, when I did my introduction, I said that some of these broadcasts that we do are more challenging than others. And I'd never met you before this evening, and yet you shook my hand at the door of the studio when I met you this evening, and instantly diagnosed that I have retained reflexes of some sort. Which is kind of intimidating, because I've had, as far as I'm aware, no significant problems in my career or my education.

- I did have a head start.

- Oh did you?

- Yes. Because when we spoke on the phone, you told me that your daughter had, I don't know whether I've crossed a boundary there

- No no, it's fine. I've got two, so nobody knows which one.

- Okay. But really the main cue was looking in your eyes. So in the same way as an osteopath you are going to size somebody up by how they stand, the position of the shoulders on the spine, the position of the pelvis then, we can see a Moro reflex walking down the road.

- What gives it away in my eyes?

- Then it will be a pupillary response. So we enlarge the pupils. It's one possible clue, because there are many others.

- Interesting though, because I opened the door to you, what should my pupils have done? Slightly brighter outside, but also I'm pleased to see you, so therefore my eyes should dilate, shouldn't they? My pupils should dilate.

- Well, this is my first take of you. And so that's all I can do.

- On the defensive aren't I? Which you've said is a trait of developmental delay. But you also said aggression is a trait.

- Well, we're talking about people with retained, inappropriate fight-flight responses.

- Ah okay, inappropriate.

- Inappropriate. So very thinly and very crudely you could say that people are either caught in fight or they're caught in flight. Now I would say when I was a kid I was caught in flight, or even fear paralysis.

- Meaning?

- Fear paralysis response precedes the Moro reflex; it's a very very early freeze response. In utero. I've had people sit down who will speak to my forehead, or speak to

my ear. Because they have difficulty with eye contact. And so you can feel the tension, you can feel the anxiety. You can see the anxiety. And when you test people hands-on, then sure enough they have cold sweaty hands; they have all sorts of bits and pieces going on. It's no different to the sense, I know if I do a presentation for osteopaths, I'm very very aware of how I'm standing on the stage because I know I'm being analyzed. I'm being looked at through osteopathic eyes. And in the practice we'll stand at the window and watch people walk past. And you can see reflexes.

- So you're not that busy then?

- This is just a glance. Lunchtime. But you can see, you might not see a Moro reflex walk past, but you will, for example, see a tonic labyrinthine reflex. So these are people who walk tilted forward, and who tend to walk up on their toes, or with a reflexive heel lift with each step. So you can see these living reflexes still active in people.

- This is suddenly making gait analysis much more difficult, when we've got to think that it might actually be nothing to do with the gate, it could be retained reflexes.

- Yeah.

- Part of what we want to get from this evening, of course, is the sort of thing that we, chiropractors and osteopaths and other physical therapists, might recognize in our own practices, or something that we might pick up on in our practices that we should then say well maybe we should carry out a few checks, or refer to someone like yourself. Is that something you're going to be able to do in the course of a very short broadcast like this? 90 minutes. I'm not suggesting you can teach us your skills in 90 minutes.

- Well we have a little star, waiting in the wings.

- We do, yeah.

- And he's very very, kind of --

- Well just before we do that, we do have a start waiting in the wings, and he's all keyed up, and I've just sort of set him back down on his heels again. We keep talking about children. Do you only deal with children?

- No, no, no. I would think 20%, 25% of my caseload is adults.

- And what sort of age range of adults? Are we talking young adults, or?

- Well age range entirely is from; the youngest child I've treated was eight months. Up to 74 years. So adults coming in, they will be perhaps experiencing panic attacks, anxiety states. They may have problems with sleep. They may have issues with non-specific headaches, non-specific neck pain and back pain. Simply because of A, the amount of tension being caused by a recumbent Moro response, an inappropriate fight-flight response. And the fact that the body is trying to hold itself up in time and space without the correct postural, adult reflexes.

- Okay. We predictably have some questions already, saying what the hell is a Moro reflex? Some don't know the word.

- Okay. Moro is the precursor to our adult Strauss reflex. And the Strauss response is a three-phase reflex. We're thinking beings, we use the cortex. So the Strauss is we startle, we release stress chemistry into the system, brings us back to the here and now, we then evaluate. Okay, we can do that because we can think. And basically, it is evaluation as to whether we're in danger or not. And if we perceive ourselves to be in danger, then we will go into fight-flight routine. And we will decide then whether we need to run for our lives, or stay and fight for our lives. And we'll produce different chemistry depending on which we decide. And that's an appropriate response. So if you like the final response is triggered by a thought process.

- And the reflex itself is that readily identifiable? That's quite a process you've just talked us through there. Is there --

- That's the adult fight-flight reflex. That's it, simple. What the Moro is is the precursor. And the Moro reflex is switching on around about nine weeks, between nine and 12 weeks of pregnancy. And it forms to give us a primitive version of the Strauss fight-flight. We are born premature, simply because of the size of our brains. And these reflexes are here to keep us safe until we can start to look after ourselves. The Moro reflex is one of the most powerful of the bunch, and the Moro reflex is a two-phase reflex. Startle, no evaluation phase, now we're not set up to think yet, let alone react. And so what we do is we go straight into fight-flight, we go straight into adrenal response. And anybody who's had small children will see, you startle a baby, and you get the Moro reaction. And then baby will change color, scream, and you come pick baby up and look after its needs. And that Moro reflex will be triggered through any channel. So it will be triggered by movement, sudden movement, sudden sound, loud noise, sudden changes in light. Changes in temperature, pain. So it really is there for the safety of the baby.

- And lasts for how long? At what stage should that have gone?

- It should, by six months, it should be beginning to inhibit. So that's what a Moro reflex is, it's there for our initial survival, but it really becomes a massive block if that reflex doesn't inhibit.

- One question before we go on, and I'm conscious Lucas is waiting patiently for us outside, we'll be with you in just a second, Lucas. Caroline has asked a question; sometimes our viewers actually announce themselves, which is nicer for us. But Caroline's asked us a question. Is this a modern or recent phenomenon, or have these traits existed back through generations? Now I assume the traits have existed, but how long ago was this recognized?

- When I trained, we were taught that this was being caused by some kind of problem in early pregnancy. So it might be a stress, it might be illness, it might be a toxic

event, it might be environmental. Nobody was really very certain about what was causing it. It's only in the latter years that I realized, purely experientially, that everybody comes in has an entire family who have the same issue. So this will go back as far as mothers experiencing stress in early pregnancy goes back. But I think now it has exponentially grown, and I think now that it's not so much that, you know so many mums would say, I had a lovely pregnancy, Bob. And it was a real puzzle to begin with. But I think now it's just become part of the system. And it's now an hereditary factor.

- Okay. One of the questions here is how does one recognize or identify retained primitive reflexes clinically, what are the range of tests one could apply? I suspect we won't go through the whole range of them. And specifically what would you do with someone considered to be ADD, ADHD, ASD? I'm not sure, what's ASD?

- So autistic spectrum disorder.

- Oh of course, yes.

- So this, I think, is the opportunity to introduce Lucas. Lucas, would you like to come and join us please? And Lucas, thank you for coming in, I'll get out of the way.

- Right, firstly, thank you very very much for helping out here, it's beautiful. I'm gonna ask you to do some very strange little tests. Okay, are you up for this?

- Yeah.

- Can you pop yourself on your hands and knees; line your knees up with, that's it, beautiful job. All right, now, if I bring your hands there and there, wonderful, wonderful. And all I'm going to do, I'm just gonna bring your head down to midline, and I'm gonna turn your head to the left. Very good, very good. Turn around to the right. Beautiful job. You sure you haven't done this before?

- No.

- No? Superb. Okay, I'm going to explain what I'm seeing here in a few minutes. That is absolutely brilliant. Lucas, thank you very much. All right, relax, well done. Thank you Stephen. Would you mind if I have a look at your back? Pop yourself down; pop your face on there. And if we just have a look, one there and one there, head to one side so you don't get a flat nose. That's it. And Lucas, what I'm going to do is just stroke down your back like this. You've got the difficult job here, mate, you've got to keep still. All right? Just go and lift your T-shirt up, that's lovely. Right. It's a bit tickly, this one, isn't it? Can you feel your back moving?

- Yeah.

- Yeah. So this is a little reflex that helped you be born. And it's very tickly. Thank you very much indeed, fantastic. Lucas, can you stand up now. And what I'm gonna ask you to do, is come and stand over here. And can you see the camera up in the corner there by the corner of the desk? Yes. Keep your eyes on the camera, arms loose, and right on the outsides of your feet, and now walk towards the camera. Beautiful job, beautiful job, that's it. Wonderful, wonderful. Can you walk backwards, Lucas, please? That's it, beautiful, beautiful. Right on the edges, right on the edges of your feet. That's lovely. Cool, cool, cool. Now just a little bit different. If you put your feet further apart, just a little bit further apart. Can you walk, this is a little more difficult, can you walk on the inside? Walk like this. This is what we're looking for, the position of the hand. Backwards, Lucas.

- I'm glad you're not asking me to do this.

- Fantastic. What a star. Thank you very much. Thank you very much. Can I try a couple more things with you?

- Okay.

- Do you mind? You all right so far?

- Yeah.

- Yeah? Okay. Bit of a funny one this. What I'm going to do is ask you to keep your eyes on the camera. Feet together. And what I'm gonna do here, if you can keep your body nice and straight, I'm gonna tilt you left and right and forwards and backwards. Okay?

- Okay.

- I'm very strong, I won't drop you. And you keep your eyes on the camera. Ready? Well done, you, well done. Good. Wonderful. Leaning forwards. Good boy. And last one, back. Wonderful. Now, what happens, Lucas, if we try and test for a Moro reflex, do you think? Can you hold your arms there?

- Yeah.

- Can you close your eyes? And what I'm gonna do, tilt your head back a little bit as well, that's it. What I'm gonna do, I'm just gonna tilt you back off balance a little bit like this, and ha! Got you. Whoa, you all right?

- Yeah.

- Phew, I thought I'd lost you there for a moment. Right, we need a little light to look in your eyes now. Now you keep looking straight towards the camera, Lucas. That's it. And here comes the light. Beautiful job, well done, well done. And we'll

come to the other eye now as well. There we go. Nice and gentle. That's lovely. Fantastic, wonderful. How did we do?

- Good.

- Yeah? You did fantastic, you did fantastic. You know, I think I wanna say thank you very much, and we can leave it there. Because you've been an absolute star, thank you very much, Lucas, beautiful job.

- So that was very interesting.

- But what do we think?

- But what was going on?

- Okay so. We can become a little bit more specific now with the reflexes themselves. Each reflex has a physical property. So a few minutes ago I demonstrated the Moro response.

- Doesn't everybody do that? If you prop them up --

- If I pushed you backwards, if I pushed you over backwards, what would you do with your arms?

- I don't really know, I haven't thought about it. I think I'd jerk outwards.

- I think you'd find that you put your arms down to break your fall.

- Right, oh I see yes.

- So if you got a retained Moro, your arms will automatically want to come up and out. Which of course is what we saw a moment ago. The first reflex I looked at is the asymmetrical tonic neck reflex. The ATNR reflex is responsible for how we develop midline, how we develop tracking skills, fine motor skills, how we integrate upper-lower body coordination, left-right body, left-right hemisphere integration, it's a big 'un.

- Now, asymptomatic.

- Asymmetric.

- Asymmetric, I beg your pardon. Asymmetric tonic neck reflex. Now asymmetric must be bad, because we want to be symmetrical, don't we?

- No.

- Right, okay, that's the first thing I wanted to clear up. When I first heard the expression, I thought oh obviously what we're looking for is asymmetry, because that's not good, and we want to be symmetrical. So what exactly were you looking for there?

- A pediatrician will well know this; any birth team will well know this. You put a baby on its back, turn the head to one side, and the jaw limbs will extend, the occipital limbs will flex.

- I see.

- Turn the head the other way, pow. And it's asymmetrical purely because of the shape that it throws. The adult reflex that follows it is also asymmetrical. It just needs to be; I don't want to go too far into this, because we've got a lot to get through. But what I was looking with Lucas, when he was on all fours, was what happens to the arms when we turn the head. And I think what you saw was the jaw arm straightened, the occipital arm flexed. So for me there is a retained asymmetrical tonic neck reflex there. And each of the other reflexes --

- So it's a greater response than you'd expect to see.

- I don't expect to see anything. Because you can have somebody present as having the appearance of having a strongly retained particular reflex, but when you look at the reflex, it's not particularly strong. So there can be a mismatch.

- If you did that same test on an unsuspecting adult, you would see some degree of what Lucas displayed?

- You might. Although as adults we're likely to have locked everything down. But you can see, with some adults yes, you can see it, and you can see it clearly. Other adults, you might see, it's almost a change in the tone of the skin almost, or just a shift in what's going on in the shoulders. But on the whole, adults won't present with a very strong ATRN reflex.

- Okay. You went through in a particular, the sequence that you went through there, is that the normal sequence you'd go through.

- No, these are just one or two of the tests that we carry out. We could go on and look at vision tracking, convergence, balance.

- Okay, in this instance you started with the neck reflex, and you got what you believe was a positive response. An inappropriate response from Lucas. So you then did the tickling test, as I want to call it, the stroking test. What were you expecting there? Was that just Lucas being tickled, or was that a response that's abnormal?

- This is a muscular response from a skin stimulus. So this is the Galant reflex. Let's call it a spinal reflex, because there are quite a number of them. The spinal reflex is there for the birth process, as far as we're aware. We don't know a great deal about it. Nobody seems to know. In the neonate, if you stroke down from halfway up the back to the hip, then the whole hip will move out, we've got a complete flexion on that side. So the process of birth triggers the reflex and essentially helps us swim down the birth canal.

- Right.

- After birth, it appears to be redundant. If it remains in place then typically you'll have people, well let's say the kids have ants in their pants, they can't sit still. This reflex is being triggered by clothing, waistbands, chair backs. And it's very difficult for them to stay still, they can also be very surface over-sensitive, let's say. So they're often the tickly kids. To the extent that you'll have children who don't like being touched, who don't like being held. It's too much for them.

- I think I'm seeing a pattern actually. You spotted me as being a sufferer, if that's the right expression, at the door. When I tell anecdotes about myself, they usually involve me not having any trousers on. And I'm reminded, I'm reminded some years ago I was at my parents-in-law's house with my ex-wife, and my mother-in-law had come back after an evening of a few convivial sherries with some friends. She wasn't drunk, she doesn't get drunk, but she was a bit merry. And I was getting ready for bed. She came into our shared room, not that I shared with my mother-in-law, shared with my wife, obviously, and my reaction was to fall on the bed face down and talk to my wife, because my trousers were undone. And I just knew she was gonna come up and tickle me. And she did, she came up and she touched my back rather as you did there and my reaction was to fling my arm out, I think I nearly broke her forearm. It wasn't because I was trying to be aggressive or anything; it was just an instinctive reaction. But I think that's just cause I'm ticklish.

- I think if we'd seen you at Lucas's age, we would have seen --

- I was a horrible child at Lucas's age.

- I wouldn't like to comment whether it's changed. I think it was a front. To be honest, we're not born horrible. All right, we've got conditioned response, and we've got parental conditioning, and life experience, but if you're left with a raging Moro reflex that leaves you full of adrenaline and cortisol the whole time, life's not that easy. Life's very challenging. So your horribleness, to quote you, I would imagine would've come from that. Just to finish off with the spinal reflex. These are the kids who don't like labels on their clothes; they don't like wearing certain materials.

- Because it just irritates the skin and causes them to --

- Yeah. And you made me smile when you started to talk, your anecdote. Because a lot of the kids will come in, the mums will say, just gets in and takes all his clothes off. Because that's when he's most comfortable. One of the other things that is associated with a retained spinal is enuresis. And even day wetting and soiling as well.

- Really? How interesting. And a parent's normal response to that will be to go to a conventional medical practitioner.

- Of course.

- And do you get referrals from conventional medics saying I know a chap who can sort this out?

- Not very often, not very often. We're normally the last door that gets opened.

- And is that because parents have just come to the end of their tether, somebody has said, there's this chap down here, he's a bit of a hippie, spooky chap but he might be able to fix your child.

- Hippie ... Left field, yes. You know, what we do does seem, I mean it just seems completely normal to me; I've just been doing it too long.

- Well exactly, and I'm being facetious, of course I am. Because the same must apply to craniosacral therapists, because the conventional world doesn't accept craniosacral therapy or sacro-occipital therapy, and of the chiropractors. And yet we can see tangible results from that therapy. It's just that there isn't a multi-million-pound organization doing research.

- Hallelujah, we're on the same page here. When I've worked with osteopaths, and we've done study weekends and workshops, very interesting to put an osteopath on a plinth and have three or four other osteopaths in contact, and then do a spinal process, or some kind of stimulation. Because those sitting round can really feel what's going on, it's quite an extraordinary thing. Can I ask some questions from our audience, before they get fed up with me for ignoring them? Matthew Davis has sent in a couple, thanks Matthew. The first is, is the intergenerational link hereditary or familial? And if 90% of people have got it, is it actually a problem? By hereditary he means genetic, by familial he means learned or acquired.

- I think probably this is, I would mean it as genetic rather than anything else. Scientists have begun to uncover markers in the brain that are associated with dyslexia. And I wonder whether actually what they're seeing are markers of developmental delay. We just don't know. Sorry, what was the rest of the question?

- Well it was, if 90% of the people have retained reflexes, developmental delay, doesn't that mean that they're normal?

- Paradoxically, yes. We would have to count this as being the norm. But you know, I've watched the newspapers over the years, and the instances weekly of issues around behavior, around learning, massive issues now about children not being able to learn properly. Why? First of all the teachers get it in the neck, and then the teaching system gets it in the neck, and then the parents get it in the neck.

- The manufacturers of the sugary drinks, or whatever else.

- You know, the sugary drinks, that's just fuel on the fire.

- But his question was, I suppose, if 90% of people have got it, is it actually a problem? When does it become a problem? You mentioned enuresis, well if a child has that, is suffering from that, then presumably the parents would be very concerned.

- Yeah, I think it's a problem if you are not up to speed in your learning, if you're not up to speed in your emotional responses, your social ability, your communication. It's a standard that we say to the parents, how old is he? Well he's nine, Bob. Yeah, but how old is he? And he's nine going on four in a lot of the behavior. So is it a problem? Well I think it is a problem. But it might not be a problem that is being seen by a lot of people, because in a classroom, if you sit in the corner and you do your work and you behave, nobody's gonna really take much notice of you. If you don't thrive academically, well it's gonna be because, perhaps you're not terribly bright. But as long as you behave and you conform, all is well. So these are the guys that really get missed.

- Somebody has actually asked whether your work is based on the work of Peter Blythe, which of course I mentioned in the introduction. Is he the forerunner of what you're doing?

- Yes, he's the forerunner of the latter, the last 20, 30 years of work really have been formed around his ideas and his work. And it was massive. Because most of the work going on before then was to do with the relationship with reflexes and

children with brain damage. So he was one of the first people to go, hang on a second. We've got kids here that don't have brain damage, but they are experiencing levels of function deficit.

- Actually the other half of Matthew Davis's question, was well how do we differentiate between developmental delay and central nervous system damage?

- Well, obviously we have tests within our battery that would flag up a damage scenario. And if that were the case, then we would refer on.

- Right, so tests that go beyond what we've seen this evening?

- Oh yes, these are four of, I don't know; say 50 tests that we've got, 60. We do drawing sets, we do visual tests, there are many many different tests.

- What do you mean by drawing sets?

- So what Peter realized, and what other people associated with him realized, was that if you gave children a set of shapes to copy, very often it would appear that they would just not be able to see what was in front of their noses. On this basis, for example, then these children would be taken a step forward; they would be markers for having developmental delay.

- So if you expect this to be picked up in primary school, or kindergarten? Or nursery school, I should say, sorry.

- And I think the schools are probably the leaders in terms of being able to recognize this now, because they're seeing kids day in, day out.

- And are they? Are they noticing it and recognizing it?

- More and more and more, yes.

- As delayed development.

- Yes, as they begin to understand it. And of course, when they realize, all the figures come together. And they begin to see kids all the way through the system.

- And doubtless you're getting the word out to teachers as much as you can?

- Yeah. From my perspective, it's getting the word out to the parents. The parents see the change, they understand what's happening, they see the change in the kids, the schools see the change in the children, and so there's a dialog between the two. So there is much more awareness now coming.

- I need to address some of the questions that have come in because otherwise people will generally get cross with me, because this one's been here right from the beginning. And Suzanne, this is. Good evening, Suzanne, thank you for the question. Do primitive reflexes have any connection with conditions such as Tourette's? And are hiccups related to primitive reflexes? You frequently see them in the very young, and what's their significance in utero. Do you have hiccups in utero? I suppose you do.

- Do you know what, I can't answer that question. Sorry, Suzanne. However, Tourette's, what I will say about Tourette's, is that you won't find a Tourette's sufferer that doesn't have developmental delay, in my experience. And we treat children with Tourette's with children on the autistic spectrum, children with Asperger's, so we're kind of used to seeing this.

- So there is a connection?

- There is a connection.

- You can't say it's a causal effect. Okay. And if you've treated children with Tourette's, what has been the outcome? Do you feel there's been an improvement in the condition?

- I think ... Yes. Let's keep it as children on what other people call the autistic spectrum. And we see anything from changes in behavior, changes in eye contact, changes in communication modes, all the way through to nonverbal children who have begun to speak. And have begun to, if you like, we use expressions like "more present." You know, they become more present. To use a very very left-field expression, one of the expressions we use is, it's almost like the children have not incarnated into their bodies. So the bodies are fully there, the system is fully in place, but the wiring, and the operating system, isn't. And so this level of self-awareness, and being present, is something that we would expect to see changed. But we don't, and I wanna stress this, we don't cure anything. We don't cure things. It's a very dodgy word to use.

- Well indeed. And I'm sure we could get sucked down a big rabbit hole of what you're allowed to say according to the Advertising Standards Agency on what you can actually achieve with any sufferer, particularly a child. I've got a lovely question here from someone who remains anonymous, perhaps for good reason. This person says, I recognize many of these characteristics in my children, and we're avoiding formal diagnoses so far but working with coping strategies. What would you recommend as strategies for treatment or management of these individuals? Would there be particular techniques specified with a fidgety child with shyness and developmental delay, communication skills, and separately, enuresis? Where are the centers of excellence for this level of assessment or management?

- That's a big question.

- It is a big question, but actually it's a really nice one.

- It's a very good one.

- And you can think about that while I waffle for a bit. Actually, it's not just seeing a patient like this, it's being able to talk to our patients who themselves may have children where they recognize these problems. And we can pass on that information to them, which is good healthcare, to give them the opportunities to find sources of help for the problem. So now you can answer the question.

- I think first thing, I didn't catch your name, because you're anonymous. Memory is still working properly. Awareness is the main theme here. And if you can take into account what developmental delay is and how it affects your children then you can get away from the fact that they don't like learning, they don't behave, they just don't do things. And you can get away from that into realizing that actually that they won't, or don't, it's that they're not able, they can't. So awareness is the first step here. Second step is, most developmental therapists are found online, really.

- You wouldn't be.

- I wouldn't be, but I have a finite amount of practice space. So there is a bit of a deliberate act here for not having a website. I'm by referral. But you can find me on Mumsnet and so on.

- And you practice in Windsor.

- And I practice in Windsor. And one day a week I'm down in Hampshire as well.

- Whereabouts?

- Near Petersfield.

- Right, so if any of our viewers are in those areas, then they should be looking for you.

- Absolutely. But you know, I practice in a particular way; I use movement, as most developmental therapists do. I'm also a little, I don't wanna use the word unique, but I can't think of another word right now. I teach skin stimulation techniques and we are able to use these on very very young children who aren't able to carry out movements for themselves.

- This is the reason you were excommunicated, I believe, isn't it?

- Yes.

- And I don't bring that up to be controversial, or to be critical in any way, just there's clearly a schism in your particular church.

- Well I think, I'm aware of it, I don't have an issue with it.

- And the issue is, those who use skin stimulation, as a diagnostic tool, and those who don't?

- It goes back to the original guy I trained with, Steven Clark, he had trained with Peter. And in fact, it was one of your brethren, and his name escapes me right now, it'll come to me, who gave a lecture about fetal reflexes. And Steven Clark was present at the lecture and had a ding moment. And the story is, and of course, sadly both Peter and Steven are no longer with us, but the story went that he went back and said to Peter, look you know we've got the movement routines that help to inhibit the reflexes, but maybe we could go further back in time and use skin stimulation, touch is the first sense that develops. And the story was that Peter was not interested in going down this particular

route. So Steven left the Institute and went out on his own. And I met him, and initially trained with him. So I think, I think others may perceive a schism, but I'm just out on my own doing my own thing, really. I'm not at all interested in politics.

- The advice to our questioner, then, she or he has clearly recognized some of the conditions or symptoms or problems that you've mentioned in her own children. You're saying that she should do what? Find someone like yourself to refer to? Monitor, watch and wait?

- Yeah. Well there's one expert per child, and it's called mother. Or two experts per child, parents. And parents really do know, way before anybody else does. And they just have a sense that something is not right. And I get parents coming in saying things like; we think he's quite bright. And of course, the child's got a brain the size of a planet, but doesn't have the neural architecture to be able to access that. So parents know, and my suggestion would be, if you sense that things aren't right, they're not right with their sports and games, they're clumsy; they're always walking into you when you walk down the road. They fall over a lot, they struggle with handwriting. They can read but it's very slow and they jump lines and read the same lines again. If you get a sense that that's what's going on, if you know that your child has wet the bed for 12 years solid, then my suggestion would be, have a look at the developmental route.

- Do you know, I wish I'd known this. Many years ago, a friend of mine was at the end of his and his wife's tether, because of a relatively old child who continued to wet the bed. Which was very embarrassing for the child.

- It's a colossal problem. And I'm not a trumpet-blower, by any means, but I would say that there have been a handful of kids that I've not been able to dry up over the years.

- How long does that generally take?

- We never know. Some will go like this, others we have to wait and wait and wait. But you know, it's a little bit like somebody coming in to and saying, I've got these serious problems with my shoulders, and you're going, well we're not gonna do anything with these shoulders because actually your main problem is coming from your hips. And so what people can see with their children is that, they're changing beds day after day after day. But that's not the base problem. And there will be other issues with that child.

- Yes, yes.

- You know, when you start looking, then there may be issues with learning, there may be issues with behavior, you may be dealing with a shy child. There may be all sorts of layers. So basically an developmental therapist worth their salt will only take you on if they believe they can help. And they should be able to show you exactly what's going on with the child. When I have parents in, I show them all the tests we do. Because I want them to see the changes in the tests, every six weeks as we go through, as well as the changes outside.

- Well you know, in the absence of randomized, controlled studies and other significant research, we tend to fall back on case studies, don't we? And Phil McDowell has sent in a comment, not a question, because he brought his 15-year-old son to you, 18 years ago, tells me, I don't know what the problem was, but he tells me that the effects were very significant. And he apologizes for it taking 18 years to say thank you. I'm sure he said thank you at the time. And going back many many years, I have great praise for the chap who dealt with my daughter because it made a big difference to her behavioral condition at the time. And interestingly, we've had a question in to say, is developmental delay connected to premature birth? And my daughter was a premature baby. Damn, that cuts it down, of the two.

- This is an interesting one. When we have a dialog with osteopaths, and I've always worked with osteopaths, we hear screaming babies come up the pass, the don't hear them go. I mean, you guys just out there, it's just incredible. But what we say is, that perhaps the issues aren't from births, the issues, remember that the child is born with developmental delay, but the child has developmental delay before birth. And if I'm right about the hereditary factor here, then you could say that the kids are conceived with developmental delay. They're not ready for birth. And I would think if you looked at the figures over the last 20 years, 25 years or so, of birth trauma, and birth difficulty, you'd probably find

that they're creeping up. So remember that a number of the primitive reflexes are there to assist in the birth process. The spinal allows us to wriggle down the birth canal. The asymmetrical reflex allows us to be able to birth the shoulder, and then the other one. So if these reflexes are not properly present, if they haven't matured by the time they're needed, then we just don't have the tools. And that goes on and on. We then don't have the tools to hold the pencil. We then don't have the tools to be able to sit still and listen, and concentrate. We just don't have the tools, full stop.

- Okay. We've had a number of questions come in about the tests that you did. And we didn't finish the question earlier on about the test that you were doing. One in particular was walking on the inside and outside of the feet. What did you see, what was unusual? What does it tell us?

- We did see a bit of a show with Lucas. And what we could see with him is that when we got him to walk on the sides of his feet, his hands just joined in. So crudely put, what you're looking at here is an unintegrated body. The upper body and the lower body, unintegrated. So such in the way the Babkin response, Babkin realized the relationship between the hands and the mouth. And so if you palpate a neonate's hands, then you'll produce a sucking response, and vice versa. And what we often see with the kids is that we get them to roll over, the hands follow suit, and then the mouth joins in as well. Because the system isn't integrated, these are not autonomous, separate but communicating, parts of the body, they're all tied up together. So we're seeing what we call a primitive, or a simian type gait?

- Can we just show your video of Simian gait? I know we've seen that reflex in Lucas to some degree. Can we just run the video?

- I think this is a good example.

- Okay. So he's walking on the outside of his feet.

- He's walking on the outsides of his feet.

- Hands are turned outwards completely.

- And so primitive reflexes, primitive simian, and down he goes. We don't get him to walk on the insides of his feet here, this is enough. But when he turns, you can see that his mouth is hard at work, tongue thrust. And then I say thank you very much, and gone.

- And one of the reasons I asked you to show that is because Claire, my wife and fellow osteopath, had a patient only recently who's mother had the same response as the lady in that film. She watched her child do this, and she said it was very funny. And in some ways you can understand, because if a parent doesn't realize that that's not quite what a kid should be doing, then maybe they do think it's funny.

- I think you'd have to look beyond the response. So I've got another clip of a simian walk here. And the parents were in hysterics, thought it was really funny. The last time I ever saw him, and signed him off, he was walking perfectly normal. And she just burst into tears.

- Really? Because at that stage she'd realized that this wasn't a normal funny thing that her child or kids do.

- But I wonder, people laugh or cry under stress. And a lot of the kids that we have coming in, getting into trouble at school for laughing at teachers when they're being told off. They just don't know where to go. And don't know what to do with their emotions. So it is, you could say, largely it's an inappropriate response.

- Not surprisingly, we're not expecting you to divulge 23 or 24 years worth of your experience and wisdom in the remaining time we've got here, but briefly, how do you address these conditions, these problems in children? What do you do physically to try to remedy the problem?

- We reconstruct development.

- That sounds a bit complicated.

- No, it's that simple, it's that simple. Okay, no, it's hugely complex, but it is that simple in concept. So if development's got stuck, well then how about rerunning it? And going all the way to the 60s and 70s. Doman and Delecato were working with brain-damaged children, and the question was, will brain plasticity, will natural brain plasticity, bring us more function? So what we do is, at five weeks, between five and seven weeks, we have developed the sense of touch, the sense of feel, and we begin to explore ourselves, we self-stimulate. By three months, then we're beginning to develop movement reflexes. So we use skin stimulation, and we use movement. And we use movement based on either the shapes of the reflexes, or patterns of baby development. Or, one of the large areas in development that is problematic is an underdeveloped vestibular system. And so we might choose to do some movement work with the children, maybe put them on a chair and rotate the chair. NASA noticed that the longer people were in space for, the more dyslexic they were when they got back. They'd be writing backwards.

- And you said earlier on, I think, that you might have a child on a chair that rotates, a blindfold, the mother doing it. And is the child doing something while you're rotating the chair?

- As little as possible. I need to be very careful here, because the last thing we want is that people are gonna go, okay well let's put the kids on a chair and start rotating them.

- It does sound like Guantanamo Bay, doesn't it?

- It does, but you can also, just by working with the vestibular system has an impact on vision, has an impact on balance, coordination, spatial awareness, posture, proprioception. But the vestibular and Moro are, not hard-wired by they're very very linked together. The Moro reflex is in part a vestibular reflex. So if

you start working in appropriately, you can set off a chain reaction of behavior. And one of the things we'll say when people come in is, in the short term, and especially if he didn't got through the terrible twos, he's going to. So basically, we reproduce the way we are supposed to develop. We don't ourselves, technically we're not therapists, we don't carry out therapy. We give the parents programs to do at home.

- I'm just looking for, there's quite a few questions coming in now, they always come in towards the end of the program, as I'm fond of pointing out. We've got one here, which says, how does this interact with, for example, adult martial artists who develop involuntary but desirable reflexes by means of the muscle memory of constant repetitions? Is that something, which rings a bell with you? He then says TMI Steven; I think he's referring to my stories with me with my trousers off. Okay, I'll take the hint for that.

- I think you can train almost any reflex. You can, if you took somebody with an extreme Moro reflex, I guess, I've never tried it, and just continually frightened to death on a regular basis, then they would build up an immunity to that response. And I think in martial art there is a similar thing going on. You're taught to be able to step over a boundary, to be able to circumvent problems, to be able to control the system. To be able to control breathing, to be able to control blood pressure, and all sorts of things. So I'm not really sure how I can answer the question fully.

- Okay. Tavistock Center in London, do they work in a similar way?

- Um ... Everybody has a different way of working. Anybody who's working developmentally is either going to be working directly with development, i.e. through the major primitive reflexes, or to bridge the issues with the lack of development.

- Tavistock Center I gather is more involved in psychotherapy, isn't it? So does that mean they would be aware of, they'd certainly be aware of the reflexes, I'm sure. But are they aware of the opportunities to deal with those delayed responses?

- I've not had a dialog with them. So I wouldn't be able to answer the question. But if you took the question the other way round, or if you took the position the other way, then any of the kids that are coming in with levels of behavior that are problematic or unacceptable, if you then test them developmentally, you'd find that they would test positively. So the answer is I don't know.

- There's a question come in which takes me back to my time as a student, where one of our lecturers was fond of saying that vaginal delivery of a baby was really important, to go through the compression and release that that applies to the body. So how does C-section affect developmental delay?

- Hugely.

- Really?

- Hugely, yeah.

- Is somebody keeping the statistics of how many C-section children you deal with? No, you're not.

- Well, we have records going back for many many years. So we have the data. But we're busy hands-on, really. And that's it. Hopefully at some point I can be freed up to look into this kind of research.

- That would probably be a great shame for all your patients, wouldn't it?

- Well I have some great people working with me.

- Here we go. I haven't read these questions. Please forgive the cynical sound of this question, it's not meant that way, do any of these problems resolve through regression to the mean, or self-limiting, or will they persist without intervention? Isn't that almost impossible to ask without some form of longitudinal study.

- Read the question again, Steven.

- Do any of the problems resolve through regression to the mean, are they self-limiting, I guess, or self-resolving, or will they persist if there is no intervention by someone like yourself? The bedwetting, for example.

- Okay. So the answer to the question is, most of the adult who come in won't have a spinal reflex, they won't have very much in the way of an asymmetrical tonic neck reflex, but they will have a retained Moro. And they often have a retained TLR reflex, a tonic labyrinthine reflex, is that which enables us gravity-wise.

- Most of us seem to cope with gravity, though, don't we?

- We do. We either learn to deal with it, quite rightly, or we avoid it. So we avoid situations where we are gonna be bothered by it. So we don't get on small boats, we don't get on fairgrounds. We don't get anywhere off the floor. We don't get up stepladders. So we can do a lot in those terms, and I've never met an adult bed-wetter. The reflex that really gets to people is the Moro. It's a very very difficult thing to self-discover, or self-heal, to give it a word. I mean I get a lot of traders in. Guys on trading floors. And they're trading because they have massively strong external Moros. And so they will seek danger, they will seek adrenaline, they will seek being on the edge because it's where they feel most comfortable.

- So they don't want that fixed, then, do they?

- Well it's very interesting; because it changes the way they trade.

- Right, okay.

- It's almost as if they start to trade from their adult. The other thing is that, I'm being very crude with a lot of these expressions, but if you've got what you might call an internalized Moro, then you may be an avoider. So you may not, you're not big in company, you quite like being on your own, you don't like conflict, you don't like getting into confrontation. So there are two very obvious ways of dealing with both ends of an inappropriate startle response. So we do see people emotionally responding to a reflex, but you can't get away from it. You can get used to and master gravity, to a degree, especially if you have physical intelligence. But a Moro, oh boy.

- I just saw a very lovely question come in by someone who hasn't identified themselves but referred to you as paintbrush Bob. And I asked whether you can recommend any good books on learning about primitive reflexes.

- I think, well you know I'd always refer to Sally Goddard, Sally Goddard Blythe. She was the first, really, to write about the reflexes in any clear way.

- And is related to Peter Blythe.

- Yes indeed. And she's written extensively on child development and reflexes.

- I'm gonna try and run through a lot of these questions fairly quickly, but one thing I would like to do, is I wonder if it's worth us looking at that drawing test that you talked about, just to see what you meant by someone with developmental delay addressing that problem. Should we do that first?

- By all means.

- So this person's been asked to copy the images on the piece of paper.

- Yeah, and this is a standard test. Very simply, same size, same shape, same position in the empty block, and see what the result is. And okay, so we got a left-hander here, so far, pretty decent pencil grip. And he's being asked to copy a circle with a square joined to it.

- So good at joining them up.

- Oh yeah. Oh yeah he's very good at what he does, this guy. And I don't know about you Steven, but in my day, you'd get a whack round the back of the head and be told you're a stupid boy for not copying it properly. And what we're seeing here is that's how he perceives the square.

- And yet the spatial relationship has been good on all the others. Where they're touching, they're touching.

- Yes. But in another child, in the next drawing set, it might be all spatial.

- Right.

- But they manage to see the square.

- And in this instance, the first one copying a diamond clearly went particularly wrong. But here putting circles in a circle, that seems to be going pretty well.

- Yup. But the sequence is out. So we would look at a sequence like that and go, okay one, two, three, four, five, six, seven, eight, because we can see diagonals, uprights, and horizontals.

- Yeah, there's our disrupted diamond there.

- Yeah. And so, this is an issue with visual processing that is down to, it's not just down to, but largely down to an immature vestibular. Which goes back to not having related, or been able, to have the software, to be able to start relating to gravity. And to be able to work out upright.

- Okay. Two people have asked me why 90 to 95% of children have these retained reflexes?

- Well, I mean I said earlier on, my belief, which is completely unfounded, I have to say this is my own personal opinion, is that it's because it is now in the family. I don't have a child that comes in whose parents don't have this.

- I suppose actually, perhaps the inference there on the part of our questioners, certainly on my part, was that the incidence has increased. But maybe it hasn't, maybe it's always been 95%, we just haven't looked at it.

- It could be, we can't go back in time and find out.

- No.

- But the evidence, the general evidence in terms of how well children are coping, how well children are learning, they are really running into a lot of difficulty here. So the bigger picture looks as though we have more children experiencing more problems with learning and behavior. Why might that be? And what I'm hypothetically saying here is well perhaps it is developmental delay that's causing this quite steep curve that we've got going on here. So it would make

sense that it's happening, because it's not just the kids have this, I call it the family tsunami, it's come down the generations. And I'll have mum saying, oh my god, my mother; you ought to see my mother, my mother's anxiety and controlling behavior. Or my uncle, or they will refer back to a grandparent. And so certainly experientially there is evidence that, it's not that we're beginning to notice it more, that it is more.

- Given, you've had some connection with osteopathy through the British School of Osteopathy, and the Osteopathic Center for Children, and apologies to the chiropractors watching, but of course we tend to attract speakers who have a connection with osteopathy, and we're looking for those with a connection chiropractic in order to broaden our scope to some extent. But do you think that there is a place for cranial osteopathy, which you referred to a little bit earlier, and your practice to work in parallel, to get together?

- Hmm. I mean, we are shortly due to set up a new practice, and there will be room for an osteopath in there. And we have an osteopath coming along with us.

- Specifically a cranial osteopath?

- Cranial osteopath, yes. Absolutely. Other kinds of osteopath are available, we should point out.

- Totally, totally. But you know, cranial because of the ... I mean I don't know how this stuff works, but the ability of cranial osteopaths to put hands on and shift colic and vertical strains and all the rest of it. They can actually feel, also, they can detect developmental delay through their hands. It's astonishing. And they can also sense the change in the child as we go through the process. So we've got feedback from the parents, we've got feedback from school, we've got feedback from our own tests, but also the osteopaths will give us feedback too. And they can also help to straighten the system. So they really make our work much easier. Much easier to implement.

- Do you see more retained reflexes in lefties, left-handed people? Such as our artist

- Yes. I mean it would have to be yes, because the human system, the human body, is set up to be right-sided. And we'll often have parents coming in with young kids, and they're saying, we don't know which hand he's gonna use yet. But we should become right-sided. Right hand, right ear, right eye, right foot dominant. It's the left hemisphere that controls function. So it is likely, unless you've got a child who is completely left-sided, that they will show signs of developmental delay. It's just one of those signals that go up.

- Another question here from a person whose son was treated by Steven Clark when he was a child. It was a great help, apparently, but he still finds difficulty in expressing himself. And I don't know how old that child now is, but I'm guessing quite a lot older. I don't know, how long ago was Steven Clark, you said he was dead now?

- Yes, he died 12 years ago.

- Right, so we've got a significantly older individual here at least, can he still benefit from your sort of work?

- Yeah, definitely. You mentioned a schism earlier on. I don't see, what I see myself doing, or ourselves doing, is filling a gap. Because the Institute are involved with movement. Steven Clark left movement behind, and left it standing. And got involved in skin stimulation, and he was convinced that's all you needed.

- But equally, the Institute is convinced that skin stimulation isn't.

- You'd have to ask them, I've not had a conversation with them.

- I see, wanted to put the other side of the story. You told me that one of the speakers from the Institute had been very critical of skin stimulation.

- Absolutely.

- But clearly, from your clinical practice, you know that it's working.

- But the difference is, that I've developed programs that merge both. So we don't stop with skin stimulus.

- So you're not neglecting one side or the other.

- Yeah.

- Okay, we have a minute left I think, something like that. So some of these questions are too difficult to answer in that time. Can being born breech cause retained reflexes?

- It might be that being born breech means that, you're not in the right position --

- So one should look for them?

- Yes.

- Okay. And then let me just ask one, and I'm afraid you'll have to be very brief on this, and it sums up some of the other questions that I haven't had time to deal with individually. If you were giving advice to an osteopath out there, who isn't experienced in what you do, what should they be doing to recognize conditions, situations, that might benefit from a form of treatment such as yours? What should they, whether it's talking to parents, testing children?

- Yeah. I mean what we started doing is teaching osteopaths how to screen. And we would like to go forward --

- How long does that take to learn?

- It's a weekend, and so we go through all the reflexes, and we then end up teaching a screening on the second day. Basically, tests similar to the ones we've been doing.

- Yeah, brilliant. Bob, we are at the end of our time. It's flashed by, as these things always do. I've had a number of people write in saying that this has been, in one's words, bloody amazing. Most people saying this is really stimulating, very fascinating. Several people asking about how they learn more about screening, as you put it there. And all I can say to the audience is that, as always, we will put the questions up on the forum below this recording, when it goes out later this week, and you'll be able to see the answers there. If there are any questions that you specifically have that I haven't had time to ask, but email them into us or send them in via the chat line and we will get them to Bob. And hopefully we can twist his arm into sending answers back whenever he gets the time from his busy practice. The forum below our recording stays live indefinitely; so you can keep the questions coming in, keep the dialog going with your fellow practitioners. We're trying to make this as interactive a vehicle as possible for your CPD. Really hope you've enjoyed this evening's broadcast. I think it's been very enlightening. It's been interesting to see how perhaps some of the things we've addressed structurally have another component to them. I'm not suggesting that we're all tunnel-visioned, narrow-minded, or blinkered. But again, this is somewhere which a lot of us might not have looked otherwise, Bob, so I'm really grateful to you. Coming up here all the way from Windsor.

- You're very welcome.

- And I hope at some stage we get the chance to talk again about this. Because I'd love to see how the research goes, I'd love to hear more of the success stories. And maybe even promote some of your screening training weekends.

- It would be a pleasure. And this has just been, just the smallest thing, very difficult to try and cram in. But it's been fantastic. Thank you very much for inviting me.

- Thank you for talking to us.