



Rheumatoid Arthritis - Case Discussion - Ref188

with Jack March

14th September 2021

TRANSCRIPT

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Steven Bruce

We're starting off with a case-based discussion which of course, if you're an osteopath means that this counts as your objective activity towards your peer discussion review at the end of the three-year cycle. Whether you're an osteopath or not, we've always found that case-based discussions are a fantastic way of learning, learning from other people's experience in clinic, not just the case presenter, but also all those other people who can feed into that. So to that end, we're starting off with two guests. The first one, the one on my left over there is Claire Short, you might know Claire, she's a fellow osteopath, happens to be my wife, has been practising osteopathy for over 20 years now, and has a particularly interesting case with a long-standing patient. And we'll talk more about it in a moment. On this side of the screen anyway, I'm joined by Jack March. Now, Jack is a physiotherapist. He's been qualified for 10 years or more now. And he specialises in rheumatological problems. He's the rheumatological lead for Choose Health. And he's got a lot of experience in delivering online CPD and delivering courses to do with arthritic conditions, but also in helping people out in the forum that we've got here tonight. So Jack, it's great to have you with us. I gather you actually gave up another engagement in order to be with us tonight. So I'm particularly grateful for that. But let me start off if I may, with Claire. Claire, would you like to tell us about tonight's patient?

Claire Short

Yes. So this is a patient that I've known for many years. But I haven't been able to treat him for a long time. So he's been seeing various other practitioners. He is around 75. And he was formerly very, very active. And very fit, has always had right sided shoulder pain that was put down to biceps tendinitis and ultrasounds never showed anything that was of any use to anybody. But it's always been something that's bothered him slightly. So over the lockdown, the first lockdown, he started being less active. And I think, put this down to just feeling a bit down because he was locked up and wasn't enjoying it. And he then started to start walking much slower on his dog walks and just feeling a bit rough. He was complaining of bilateral shoulder pain.

Steven Bruce

Can I interrupt for a second?

Claire Short

Yes.

Steven Bruce

Can I just explain to people that what you're doing behind your back is petting a dog and your hand seems to be waving in space there.

Claire Short

Oh, I'm really sorry that you know which one it is, but there we go. tell my story first for a little fella. Yeah, so this guy is good at reporting his symptoms, and was just saying my shoulders are really bad. So he started seeing another practitioner and the other practitioner diagnosed bilateral frozen shoulder, or at least something musculoskeletal. And at the time, I chatted to the other practitioner because I know this guy, the patient, and said, will you just double check with your screening and make sure you don't think this is PMR. And he said, no, it's fine. This is all musculoskeletal. So time went on, he didn't get any

better. He saw a few other practitioners. He also saw his GP and everybody said musculoskeletal. And then he started saying, my legs are very weak. So I did a video call with him and watched him. He said, when I'm doing my morning exercises, I can't get off the ground. And I watched him, and he can get off the ground or could get off the ground. I watched him doing squats. And so there's clearly, there was no physical weakness there. But what he reported was his legs felt weak to the extent that he was in tears on the floor. Because he felt he couldn't get up. Even though it was clear he struggled because getting up off the floor he had to push himself up and use his shoulders. So that was painful. But this all started sounding more and more weird to me. And then he told me that the pain at night had him in tears, and he couldn't get a comfortable position, at which point I said, this has to stop. You need to go back to your GP, had blood tests done and there was slightly raised CRP. ESR was normal. And the GP said, no, you're fine. It's just a muscle strain. And I think I saw red then. And this bloke is really, really anti private health care. He believes in the NHS so strongly that he doesn't ever want to go outside of that because he feels that you shouldn't desert it. But we made him go and see a private rheumatologist, the private rheumatologist said, well, this sounds like RA to me, and wrote to the GP and said you will do these blood tests. When the patient got to the surgery, the surgery said that things have changed. And that they can no longer do blood tests requested by a private consultant. Now, I'm not quite sure what he was supposed to do at that point, given the letter that had gone with him was, these blood tests urgent, I think this patient has RA, he's in an acute phase. And he's not sleeping, he's clearly very frightened and you have to do something. And when the patient was told that he couldn't have the blood tests done, he actually lost it at the receptionist. And this is not a, you know, he's not somebody who would normally go ballistic at somebody in public. And he was shown in to see the GP, because he was being so rude to the receptionist, and he just sat there in tears. And he said, please, you have to do something to help me. And I have to say that most of us are probably sitting here thinking, how could you leave a patient in that sort of mess? He was there, actually, he was there to have a Wolfman blood test anyway. And they were refusing to take bloods to check for anything else. They, because he was in such a state, they decided to take the bloods, and both CRP and ESR were raised, rheumatoid factor came back positive. So his second appointment with a private consultant, the consultant said you have RA, I want your GP to put you on steroids, which the GP did, after another letter querying whether the private consultant was sure it was RA. The private consultant also said you need to get this guy on to RA medication as soon as possible. And the first appointment, this was in April, the first appointment to see a rheumatologist in his area was November. And one of the other things that I find just shocking is that the GP left him on 20 milligrammes of steroids a day and didn't think that after getting rid of the symptoms, which disappeared almost within hours, it was really, really fast. So he didn't check on the patient. And it took me saying to the patient, you need to go back and say, please, can we talk about reducing the steroids, they wouldn't see him. And he had to make another appointment with a private consultant, just to get the steroids reduced. So that's where he's up to. And I wanted to kind of throw that out there for everybody to hear the story of how this guy was, I suppose let down by so many people, and hopefully Jack can help us avoid that happening again.

Steven Bruce

Yeah, and Jack, I suppose the question, but certainly the questions that I'm asking are, how typical is this presentation? And what should we have done in clinic to recognise this condition sooner? And maybe, maybe, maybe also, you know, what pressure can we apply to GPs who don't accept referrals from private medicine if there is anything? Anyway, over to you, sir?

Jack March

Yeah, it is a bit of an unusual presentation and I agree with Claire at the first instance, my first guess would have been polymyalgia rheumatica. It's hard because we don't have a, you know, I don't have the patient in front of me to ask but with the bilateral shoulder pain, I think beforehand, unless there was some other indicator. So when it was unilateral shoulder pain, I wouldn't be jumping to rheumatoid arthritis really, that's going to be quite a way down the differential diagnosis list, unless he had a very strong family history of rheumatoid arthritis, or some history of other joints swelling, like he'd had metacarpophalangeal joints swelling for example in the past for some reason. So unless there was that that was indicating there might be rheumatoid arthritic patterns, with unilateral shoulder pain it wouldn't be. As soon as it turned to bilateral without any triggering event. So, you know, if he'd suddenly gone and dug the garden, for example, and then generated bilateral shoulder pain, it wouldn't, then again, I wouldn't be too concerned at this, this progression to bilateral shoulder pain without issue? I think I would be along the same lines as Claire with regards to polymyalgia rheumatica. PMR tends to be an acute onset, doesn't tend to grumble on for time. It's almost exclusively acute. So again, I think in his case, again, even with polymyalgia rheumatica, I still would be questioning what was going on. But as soon as it becomes bilateral, and then as soon as Claire says night pain. You know, I remember when I was at university 12 or 13 years ago or something. And you know, night pain was always the red flag, we always remembered as students that, someone's got night pain that is characteristic of not musculoskeletal. And it's the severity of pain as well that Claire's describing, and I know that frozen shoulder can be very disabling and very painful, but bilaterally and that much pain at night would be unusual. So at which point, you know, would I jump to rheumatoid arthritis even then? Possibly not. But certainly, we'd be wanting to get further investigations. And unfortunately, I was going to ask you, Claire, do you know what the CRP level was? You said it was slightly raised for that first one. Do you know what it was?

Claire Short

Done it. I can't remember the exact number. But it was just very, one notch above the high end. So it was off the scale, but only by a tiny amount.

Steven Bruce

You're muted, Claire. Press the button.

Jack March

Yeah, so probably around 15 or 16 would be my guess. And again, in which case, you know, could you put that much weight on the CRP, possibly not, difficult. ESR again is very difficult, you're not always positive in rheumatoid arthritic patients. So it's still a challenging case. Even then, I think what then pushes you into going, okay, I think this is rheumatological and then probably rheumatoid arthritis most likely was then this, him doing his exercises in the morning and having this real struggle with function first thing in the morning, I think that's when you start really getting into a rheumatological pattern. And we look for cues such as the patient's volunteering the word feeling very stiff with regards to their joint movements, and everybody describes things a little bit differently. So that might have just been the way he was describing the weakness because it wasn't truly weak, was it, as you said he could do the squats? So was his way of describing it as a weakness, whereas actually, it was a joint stiffness preventing him from doing those movements in the morning, I suspect that it was. So I think that's the progression of how things have moved forward. But even so, I think, it's a real challenging case. But this older gentleman,

obviously, with this deteriorating bilateral presentation night pain, then developing this morning, some of these morning symptoms as well. That's your rheumatological pattern going through.

Steven Bruce

Can I just ask a question? I'm sorry to interrupt you, but I'll just forget if I don't. My college training was a long time ago and I slept through an awful lot of it. But one of the things that sticks in my mind is, that the presentation of RA is typically in the small joints and this guy has got nothing in the small joints at this stage. I don't know if he will do. Is that something which you think would reasonably point you in a different direction?

Jack March

Absolutely. Yeah. So you're 100% correct. The most likely place for the rheumatoid arthritis to affect goes pretty much peripheral to proximal, so you are looking at the MCPs, the wrist, the MTPs, the ankle, the knee, the elbow and then into the shoulders. But when you look at the data for rheumatoid arthritis, we still are working off old, relatively old data. So if you consider what epidemiological data cohorts look like, these are people that were diagnosed 10, 15 years ago, and now we're now going okay, you've got rheumatoid arthritis. Let's look back into history, as we've diagnosed patients a lot earlier, certainly in the last 10 years. What we're starting to see is there are other presentations that might lead to be what you might call sort of very early-stage rheumatoid arthritis. So the real classic of that is, as Claire said, bilateral biceps tendinopathy is, in a lot of patients predictive of developing rheumatoid arthritis, the other one is De Quervain. And so, De Quervain's tenosynovitis, either bilaterally or unilaterally, a lot of those patients, relative to the normal population will go on to develop a rheumatoid arthritis. So what we may well see in the next five to 10 years is actually these patients that have bilateral tendinopathy of the shoulders, we can see that 10, 15, 20% or whatever number of those do go on to develop rheumatoid arthritis. So you're probably working off slightly older data, but then so is the rest of us working off slightly older data where we have to wait for all those people to come through, and then run epidemiological studies on them to find out what they look like. And obviously, you can't do that until you've got a certain number of them coming through on these earlier pathways. So it is a real challenge. And these, I suppose, atypical presentations, the other way of describing it is that we're talking about bilateral symptoms today. But obviously, a lot of patients will initially present with unilateral symptoms. And then someone will say, oh, no, it can't be rheumatoid arthritis, because it's unilateral or single joint, for example, but actually, what they're just presenting with is very, very early rheumatoid arthritis. So we still need to be investigating those patients. Because we know that a delay to diagnosis is bad for pretty much every measurable outcome measure that you can name an outcome measure that you can think of, and it's pretty much been shown across the board that if you wait for your diagnosis for rheumatoid arthritis, your outcomes will be worse. So it's about understanding that inflammatory pattern and again, your chap didn't really follow a classical inflammatory pattern, but it was this progression, I think, that we need to look at. And then your question, Stephen, about, how do we get around a sticky GP is a real challenge. And, you know, I think a lot of us will have to find our own ways of structuring that referral letter or that conversation. And what I often say on my CPD courses, because this question comes up every single time I do one, is that, in the end, you do have to be a little bit cynical and protect yourself as a clinician so I'll often right at the bottom of a clinic letter, I believe these symptoms warrant referral to rheumatology. And that's a very definitive statement. So if that patient gets delayed, and then they complain, obviously, or even worse, sue somebody that's not coming back through you, because you've written that specific thing. But I use

that turn of phrase, because you're also not demanding it of the GP. So I bet if I ask Claire, if I said, I'm going to refer Claire a patient, I want her to do this specific treatment in this specific way, she's probably going to do about eight other things before she gets to that one using her own clinical reasoning, because we like to formulate our own plans and our own assessment. So if you demand things of people, it doesn't really work. So try to use a language which is very strongly suggestive, but also cannot come back to you.

Steven Bruce

I'd be interested to know how many practitioners do as I used to do which is to write in my footer, or the last paragraph of my letters, I wonder if you might consider referral, which is of course, nowhere near as strong as what you've just suggested, and gives the GP the out of saying, pah, you're just an osteopath. What do you know about these things?

Jack March

Yeah. And it's really hard, isn't it? Because, you know, most of the GPs that I've ever interacted with, super helpful, super brilliant, do everything you want to, and you go, well, do I really want to risk ruining my relationship with 99% of GPs, because one or two of them are really sticky. But then as Claire's just really nicely demonstrated, you get to a sticky GP, and there can be disastrous outcomes. And we need to remember GPs are under a lot of pressure. And it's pathways often that are a real problem. You know, what Claire's described is, it might not be the GP going, I'm not going to do those blood tests. It might be someone on high going, you are not allowed to order those blood tests.

Steven Bruce

We've actually got an interesting comment in from one of our viewers. Lisa has said that she's got patients at the moment who've told her there's such a shortage of test tubes that most blood tests are being postponed. Now, I don't know if that's true, but that's bizarre.

Jack March

I've been reading that that there aren't enough blood tubes yeah, which is problematic as well. And there are some locations in the UK where you can't get some of these blood results. So rheumatoid arthritic blood tests like anti CCP antibodies. Some GP surgeries are due to funding not allowed to order those when we talk about other types of arthritis like spondyloarthritis due to HLA-B27 genetic tests and they're not available in some primary care locations. So it is a challenge to get a lot of those.

Steven Bruce

The anti CCP antibodies, anti-cyclic citrullinated peptide or something like that, isn't it? Can they not be done as part of any other blood tests when, you know, Claire's patient was going to be checked for warfarin or something like that? Could they not simply have done it as part of that same test? Or do they have to do it at a separate lab, separately with different amounts of blood?

Jack March

As far as I'm aware they can do it off the same samples. But the, like I say, it's often a funding issue. So a lot of locations can't get an MRI through primary care is the same, same funding problem, and there's not a lot you can do to get around that and the GPs can't do anything to get around that. But then why

would they not be referring into rheumatology? Because that's where they will be able to get that? That's a question I can't answer as to why they wouldn't forward that.

Steven Bruce

And we had a question from Pip on this asking whether the GP would have been willing, Claire, to refer your patient to an NHS rheumatologist given his objection to the private referral.

Claire Short

I think that was part of the problem was that the GP at the time, because the CRP was only very slightly raised the GP really thought that it was just a problem that osteopathy, physiotherapy or some kind of manual therapy would be able to help. And so if he had felt that there was a possibility of it being a spondyloarthropathy or a rheumatological problem, I think he would have referred, and it's just despite my letter, he really didn't think that it was PMR. Going back to what Jack was saying about writing to GPs. Stephen, I hope you don't mind me.

Steven Bruce

I'm used to you taking over the conversation.

Claire Short

It's true, I can't deny it. One of the things that we learned when we had an NHS contract was that we regularly had to refer patients back to the GPs or to get further investigations write to the GPs and say what we'd found. And we had several complaints from the GPs. The complaints were all the same. Tell us what you want us to do. They weren't, we don't believe what you're saying. But we had given them work, oh, could you possibly or would you mind if I'm fighting to consider five letters. And we learned that the way to present our medical knowledge was the same way that they do and we started writing letters that said, these are the symptoms. My concern is, I would be grateful if you would refer for ... to eliminate. And so it was really clear what we wanted, what we suspected. And I think that really changed the way we communicated with our GPs. And I don't know if that's helpful.

Jack March

There's a couple of other things as well, just while we're talking about that as well that you can do to help you. One of which is to find out what the pathway criteria are for the local rheumatology departments. So how I would do that would be to work out how you ring one of the rheumatology nurses via this hospital switchboard and find out what the referral criteria are. So for example, in most places, it will be swelling and/or stiffness of joints, plus or minus raised inflammatory markers. And it's about, if you can find out those specifics you can write a letter to gear towards those specifics. The other thing that you can do is, there's a couple of scoring charts for rheumatoid arthritis which will give you predictive numbers for the likelihood of someone developing rheumatoid arthritis so you can add those to your clinic letter as well. One's called clinically suspected arthralgia score, which is pretty simple to use. It's basically pain for less than a year, stiffness lasting more than 30 minutes, difficulty making a fist, pain in the MCP joints. And I forget the other two, now that I'm put on the spot without it in front of me, but it's quite a simple score and doesn't require any bloods and it's three or more, gives you a score of clinically suspected arthralgia, the other one is the Leiden clinical suspicion score, which uses blood tests. And that has things like if that people are female being older, more joints involved, and it will give you a score that relates to the

likelihood of someone having rheumatoid arthritis. So if you can write in your letter, this patient has a Leiden score of nine and this is highly predictive of rheumatoid arthritis. That can be another way of adding some weight into that clinic letter without being direct and aggressive. I don't mean aggressive. But you know, what competent.

Steven Bruce

Jack, the British Society for Rheumatology refers to the DAS28 assessment, which does include blood, I know but is that something which you've ever used or had access to?

Jack March

Yeah, I've used it a lot. The trouble with the DAS28 is it's a monitoring score. So basically, what you do is you squeeze people's joints, and you count how many are painful. So if you add up the peripheral joints of 10 out of 10...

Steven Bruce

There's 40, 44 of them, isn't it?

Jack March

There is a lot yeah, you squeeze them and see how many are painful. And the higher the score is, the more active someone's rheumatoid arthritis is, but the problem is they've got to be diagnosed with rheumatoid arthritis. for it to work, really. So the the big issue is if someone had fibromyalgia, for example, they will score very highly on that. So it isn't, it isn't sensitive. But once they've got rheumatoid arthritis, they have got it. I must admit, if you don't do it regularly, it's very difficult to actually score properly. Knowing how to squeeze, squeezing an individual MCP joint, for example, in the right way, it's not it's not the easy, it seems like it would be a simple thing to do. But actually, it's, it's quite a challenge. So it's not something that I suggest most people worry themselves with one thing that you can do, and I'd be very interested, Claire, if your patient had this at the time, I've had a few patients in the past which have been sticky dye differential diagnosis. But if you do what's called a MCP j squeeze test. So basically, you just get their hand and squeeze, their MCP is like this, both sides of the sea and do their mtps as well. If that's positive, again, that's quite predictive of rheumatoid arthritis got a lot of sinovo in the in, in this area. And I remember one chap very vividly who he actually presented with bilateral ankle pain, but then when I get when I did a squeeze test on him, he had an incredibly painful mcps, but actually he wasn't symptomatic in his hands. But squeezing those then was very painful. So it's like, when you have rheumatoid arthritis in the early stages, you're likely to have as many subclinical areas of diseases you are clinical areas of disease, so subclinical would be a sign of itis, but it's not giving you any symptoms at the time. And then that finds those those symptoms, that's a really simple and good test. And you as I'm doing now, you can, if you're doing a virtual call, you can get a patient to do that as well to themselves and I've done a few of those where I've been shocked at how painful they can be. And that's a good way of doing it, I'd be really interested clearer as to whether your patient had that retrospectively or, or whatever I suspect they may have, but it's obviously difficult.

Steven Bruce

Jack, the other thing that occurs to me, I'm probably wrong in this. But I would make the assumption that if I said to a GP, in accordance with the NICE guidelines, I believe this warrants referral. That ought to

be quite a trigger because they could be thought negligent if they didn't apply the NICE guidelines. But the NICE guidelines, I've got them in front of me, say, refer for specialist opinion with suspected persistent sign of itis of undetermined cause, refer urgently even with normal acute phase response, negative ACCP antibodies or rheumatoid factor. If any of the following apply, small joints of the hands or feet are affected, more than one joint is affected, there has been a delay of three months or longer between onset of symptoms and seeking medical advice. I have to say those last two seem kind of weird to me, if it's more than one joint wouldn't make me immediately think RA and just because someone didn't seek medical advice again, unless it's with some sort of other indicator.

Jack March

Yeah, so it is problematic. And that that that's basically a simplified version of what I was mentioning a minute ago that clinically suspected arthralgia score. And the problem is when you look at these things as individuals, they have no real diagnostic value to them. But when you add them more and more together, that's where you get some more specifics, or some more sensitivity, I should say. So what I tend to teach to, I teach a lot of first contact physios, especially as they've been sort of escalating in numbers but also a lot of private practitioners as well, is really what our job is here, is not necessarily to diagnose rheumatoid arthritis or suspect a rheumatoid arthritis, but it's to suspect an inflammatory pattern to the symptoms. So outside of a sprained ankle or I often use the analogy of hitting my thumb with a hammer, then outside of an injury, and then your normal bodily process, which I think is where this three month comes from. That sort of healing process, if you've got an insidious onset of an inflammatory pattern, that's suspicious of something and we need to be dealing with that. So it's all about understanding what does that look like? How does that present and behave? And it's obviously very different in the peripheral joints to the spine, to the tendons, etc. And how do then map on to your musculoskeletal type presentation, your other systems that have been involved, so rheumatoid arthritis is not not a good example for that because it tends to not present with other inflammatory conditions, but the spondyloarthritis like Claire's mentioned, you're looking at things like Crohn's disease, colitis, arthritis, and uveitis and psoriasis, for example. So what you'll see is, when I see second opinion patients, I'll have a patient who's got achilles tendinopathy, for example, and they got it going running, they started a running programme, and they've got it. But they've got a very strong history of psoriasis. And then you ask them a few questions, and they've previously had tennis elbow, they've previously had a lateral hip problem. And you realise suddenly, they've had three or four tendinopathies and psoriasis. And actually, what they've got is psoriatic arthritis, but you have to take that extra leap. But the achilles tendinopathy itself is barn door, classic achilles tendinopathy, reacted to load, etc, etc. But I probably would respond to a graded loading programme, and whatever other treatments you applied to it in the way you would expect, but six months, nine months later, they get plantar fasciitis, because what they're doing is they're just going around their tendons, getting different inflammatory patterns. So, again, in Claire's case, it'd be interesting, you know, what is the previous, he'd had a lot of previous shoulder pains, were they triggered by mechanical issues? Did he have other joint pains, all these other questions that we can go through. And I think that's often where, just that little bit of detail is sometimes lacking, because people just don't, we're not quite aware of all of the associated things that can happen that make people more likely to have these conditions.

Steven Bruce

Mark sent in a question some time ago now and it intrigues me what he asks about your patient, Claire, is whether he had recently been started on statins. And my question to you, Jack, after Claire tells us that one, is whether that could be a confusing, a confounding factor. So Claire.

Claire Short

As far as I know, he wasn't on statins.

Jack March

Yeah. It could be it could be a confusing factor. And in women, I would say, also on top of that would be things like HRT can cause similar types of issues. Other things, you know, underactive thyroid, lots of other things can mimic this type of presentation. And we do have to be careful that those aren't causing it. But equally when we're sat in a physio clinic, osteopath clinic, you know, if a lady is to started a HRT, or if someone has been put on a statin, and then they present as Claire's patient did, I don't think I would be confident with this in my skill set to say, oh, don't worry about it. It's the statin. We'll see if we take that off and I'd still be going back to the GP saying, you know, what's the relationship here. And, interestingly, I've had a patient in the last week, very similar in that she's been on Lido thyroxine for a long time, and has just stopped in coincidence with her symptoms starting. So I think she's got psoriatic arthritis, but actually, it coincides so strongly with the Lido thyroxine stopping, that I can't rule out that that's got something to do with it. So I've actually sent her off. She's very sporty, I have sent her to sports exercise medicine. So they can pull that particular conundrum apart, rather than straight to rheumatology. So there's lots of lots of confounding factors. Age and having osteoarthritis is another one, we know that lots of different things, smoking, being overweight, especially having abdominal fat can lead you to having multiple joint pains, all these different things compound the difficulty of picking these things up.

Steven Bruce

Is that a causative factor, being obese or overweight? Or is that just an associated factor?

Jack March

So people who are overweight are more likely to develop rheumatoid arthritis. They're also more likely to develop osteoarthritis due to the, especially abdominal fat, you can't see where my hands are because my abdomen's covered. Abdominal fat releases inflammatory cytokines into the system. So it actually upregulates your inflammatory system. So it makes you more likely to get osteoarthritis, rheumatoid arthritis, all the other types of arthritis as well.

Steven Bruce

There was an interesting bit of research, which obviously caught my eye because it was unusual, but it was only in the last few months, which said that actually, somebody has discovered that being overweight is better for osteoarthritis, because it loads the joints and promotes. Now it seems really unlikely to me and it flies in the face of everything we've been taught. Did you see that paper, I don't know if it was a newspaper report or published paper.

Jack March

I haven't, but it's probably one of those things, you know, we see this all the time with red wine or coffee, don't we, where it's coffee will kill you, then it will save your life and then chocolate will offset whatever it is, goes round and round. The problem with osteoarthritis is there's likely a ton of subsets of osteoarthritis. So we're going to get different types of them, in all likelihood, a subset of osteoarthritis, which is more related to muscle weakness than it is to degradation of the joint say, and so the likelihood is there is going to be some patients where a bit overweight means that when they go up the stairs, they're overloading the joint more than someone who's not overweight. Or either that or they've got confused that being overweight protects you from osteoporosis, which I have found that before once or twice in newspaper articles where they've confused the two so.

Steven Bruce

Sorry, I sent you down a rabbit hole there. Let's come back to rheumatoid arthritis. I had a couple of questions in from Christina. Her mother apparently had RA and Christina says it started with a fever. So question number one is, is that common as a symptom? And the second one is about the reaction or the response of Claire's patients to the steroids. Christina says that that sudden, that very rapid response is more likely a PMR indicator.

Jack March

Okay, let's go. First question first. So there's a few things with the fever. So again, we're looking at these, this would be an early onset early indicator of rheumatoid arthritis. And there's two things that that can be related to some rheumatoid arthritis patients do develop a fever, it is an inflammatory disease. And when you become ill, you create an inflammatory reaction to whatever's made you ill. So some patients will, will develop a fever first. And again, if someone presents it, they're not going to present to an osteopath or a physio with a fever, that's, maybe they will, I've never seen a patient who's come purely because they've got a fever, but it's fever, then then going on to develop joint pains. The second component to that is, you do get reactive type arthritis is so you would be less take COVID-19 I'm sure everybody's aware that that's a virus. And it's been pretty prevalent. So you're unwell with the with the virus with COVID-19 that elevates your inflammatory system to fight the disease. And that's what triggers off your rheumatoid arthritis. So they may have a foot a fever due to that, and they're different, and then their symptoms start. So it's both components of that really the strong response to prednisolone? The Yes, it would be an indicator of polymyalgia rheumatica. But then also rheumatoid arthritis patients spondyloarthritis patients will respond very well to prednisolone as well. So I wouldn't say that it's an indicator away from rheumatoid arthritis. It's more a positive indicator, if you're suspecting polymyalgia rheumatica and its response solidly to pred that you would go okay, that's another indicator that it might be that. So I often go the other way around really with that reasoning process. So if you've got some bilateral shoulder pain, and it doesn't respond to prednisolone, it's absolutely not polymyalgia rheumatica. But it wouldn't mean that it's it wouldn't be a differentiator between PMR and rheumatoid, for example.

Steven Bruce

Right. Okay. Sam's asked if you could clarify what you meant about HRT causing RA symptoms. Did you mean HRT, or did you mean menopause?

Jack March

Yeah, I didn't mean rheumatoid symptoms, but multiple joint pains or joint aching. So menopause can cause that but also, there is some association with HRT causing joint aching as well.

Steven Bruce

Okay. And Carrie has asked whether the MCP squeeze test is a reliable test for distinguishing RA from other presentations.

Jack March

It would be quite good distinguishing from things like something like a repetitive strain type issue, where you might expect only one joint to be involved. But if you had osteoarthritis of those joints, then in all likelihood, you're going to get a positive test. So again, it's probably one of those that's sensitive, not specific. And I often use it, if someone presents with hand pain, if you squeeze their hand, it hurts. Whereas if someone's presenting with foot pain, you wouldn't expect their hand to be painful when you squeeze it, and vice versa. So rather than using it in someone who's presenting with wrist pain, or less than a present with right wrist pain, I would do their left hand and their feet, I wouldn't necessarily put too much stock in the right hand, for example. So you're looking for that sort of surprise element, basically.

Steven Bruce

Yeah, thank you. Claire, did you want to add anything more about your patient? Because I knew that you were keen to get off and look after our questions this evening as well as present your case?

Claire Short

Thank you. I feel like I've deserted Ana a little bit today. There's a couple of things that I thought I should add. One of which is that this guy's a farmer, his hands are enormous. And the joints are always injured, swollen, and what have you. So I think it'd be fascinating to do the squeeze test on him. Also, one of the things I didn't mention was that he was complaining of stiffness, and stiffness, when you ask him, where is it stiff? And where is it painful? He would always answer, well, just kind of everywhere. So yeah, I missed that one. And the other thing, Jack, I was going to ask you is that he is starting to reduce the steroids now. If it turns out that this is PMR, and not rheumatoid arthritis, what would we expect to see happen next?

Jack March

Theoretically, if it's PMR, either he'll flare up again or he won't. And actually, you probably won't see much of a difference between rheumatoid arthritis and PMR. Sometimes people flare once the steroids come down with both conditions. Theoretically, what we're looking for with the PMR is, once the symptoms have settled and you've stayed on the steroids, they don't then flare back up again. But that's with the best will in the world, that does happen to a good proportion of patients and exactly the same with rheumatoid. We would see the symptoms come down, then he may well flare back up again. We see lots of different patterns with rheumatoid arthritis. So if he happened to have a relapsing remitting pattern, and the steroids taper off, in a point where he's remitting and his symptoms are low anyway, then he may not gain symptoms for a long period of time afterwards. And how long is a piece of string, might be a month, might be six months, might be 10 years, with polymyalgia rheumatica would be more likely immediate, but then rheumatoid arthritis could be immediate as well. So it's a very difficult one to answer

that. Unfortunately, obviously, if the rheumatologist is suspecting rheumatoid arthritis specifically, there must be a reason for that. I suspect like I say he doesn't, to me, he doesn't quite tick the boxes on polymyalgia rheumatica because it wasn't acute bilateral onset. So I suspect that's why he's then gone to, or she, I don't know if it's he or she, has gone to rheumatoid arthritis. So in all likelihood, with that being a chronic sinovic problem, the likelihood is that the symptoms will return with dropping off the steroids and you need long term management of that using, as you mentioned, disease modifying medications.

Steven Bruce

There you are, Claire. Perhaps I can leave you with a comment from Robin or you can leave us with a comment from Robin, who says well done for chasing all that time with that patient albeit from such a long distance and actually getting him the treatment that he needed. Robin, ever the cynic, I hope you don't mind me saying that, Robin, has said it's almost as if they're trying to run down the NHS until we all get desperate enough to go private and he sees this sort of thing all the time in his own clinic.

Claire Short

Thank you, Robin, that's lovely of you. Okay, I will leave the two of you to carry on chatting and I'm going to give Ana some back up. Thanks so much, Jack. I really appreciate it.

Jack March

No worries, it was very nice to speak to you.

Steven Bruce

Thank you, Claire. I've got another mini case for you, here actually, Jack from Victoria. Victoria says she has a 32-year-old female patient with bilateral wrist and elbow pain. The grandmother had RA and the patient asked her last night, does she have RA herself. She explains that she is stiff and can sometimes swell. Driving makes it worse. And the GP says this is fibromyalgia and has not offered blood tests as apparently there's a shortage of vials, as we've already heard from someone else. Victoria has to say she doesn't know how to help her.

Jack March

So in short, yes, I think that does sound like it could well be rheumatoid arthritis. As you mentioned, it's bilateral, it's a bit more peripheral than the case we were talking about. So bilateral wrist, and obviously elbow as well with swelling. She's young, 32. So peak onset is 30 to 60. More likely in females, family history being the grandmother of rheumatoid arthritis and stiffness being mentioned as well. I think with that information, I would want rheumatoid arthritis ruling out by a rheumatologist, obviously difficult with that level of information as to why they've decided fibromyalgia instead. I can't think of a reason that would make me go, yeah, actually, that is fibromyalgia, given what you've just condensed that down to. But so yeah.

Steven Bruce

Maybe Victoria can come back in and give us a bit of an answer. I wonder, Jack, sorry, I'm interrupting. I do beg your pardon. I do wonder that when I left college, I didn't think particularly that RA was terribly severe. I've learned since then that it can be enormously severe. I think the statistics show that a third of

patients have to give up work after a couple of years, a third of sufferers. I know a patient who, he's a relatively young, middle-aged chap, and he's crying in pain with this, as we heard with Claire's patient as well. So it clearly is a very debilitating, very distressing condition. Again, I'm not trying to pick holes in GPs here, far from it. But I mean, do you think GPs would normally recognise the severity of, or the impact of this on a person's life?

Jack March

I think they do. So I think with GPs, they understand that rheumatoid arthritis is very problematic. I think the issue is that they're looking for these more severe cases to refer in. And actually, what they're not recognising is that quite often the severity of the disease is later down the line. And certainly, the multi systemic effects are later down the line. So rheumatoid arthritis will affect your cardiovascular system, your eyes, your lungs, as well, later down the line, because of the systemic inflammatory nature. So I think what, there's this trade off, isn't there anyway. If the GPs are going, I've got these nine month long waiting lists for rheumatology, where if you go to Ireland, at the moment, some acute rheumatology appointments are five years, they're going, I don't want to add patients to that list if I don't have to. So what they're, you know, consciously or subconsciously, they're going to only send the most severe patients. The problem is that clinically it's not really representative of the severity of their disease. So what we see in some patients is they have this period of time where they have subclinical disease, and they can present acutely already with bone erosion. So they haven't even had, so you wouldn't go to your GP going, I think I have rheumatoid arthritis when you've had no symptoms. But then you get symptoms. On day one, you turn up, get scanned, and you've already got erosions. So there's that problem, we also have the same problem with this relapsing remitting type pattern. So the GP might go oh, let's just see how it goes for six months, come back, if it's still a problem, we'll send you on rheumatology, the patient's symptoms get better, so they don't do anything about it. GP doesn't refer, their symptoms come back again later. And they have rheumatoid arthritis with erosions. But all of that period of time they the inflammatory process has been happening, but they haven't been getting symptoms. So you can't tell with that patient in front of you. Is this damaging their joints or not? And we see some people who have absolutely appalling pain, but they never develop erosions in their joints. And that's not to say that we should leave those people in pain or or not treat them, but you can't tell from the presenting symptoms, how bad that disease is. So really, we've got to refer them all to rheumatology. The rheumatologists want these patients because the earlier they hit them hard with medications, the more likely these people are to get much better responses to the medications, get back to work, as you said, to hobbies, not get the erosions in their joints, not develop chronic pain, so on and so forth. So I think it's about, there's this tradeoff between pathways and how long they take, I think, GPs are very good at recognising barndoor obvious cases, much like the rest of us are not so good at recognising what I term fringe cases. So single joints or low-grade early disease, you might have quite widespread pain, but it's not very, very severe or there's not lots and lots of swelling, there's just a little bit and it's easy to go, oh, I think it's just a bit of osteoarthritis, because it's not that severe. Whereas actually, there's still this process going on within the joints, which is problematic. So I am very much an advocate at the moment of actually over referring to rheumatology, because if you think about all the other specialisms, that we've tend to refer to you will get some negatives coming back, I often use the analogy of stress fractures. You know, if I think about how many stress fracture suspicions I've had over the years, and referred for X-rays, and many more come back negative than they do come back positive, because I'm referring thinking it's worth an Xray on this in case it is a stress fracture, and if not, brilliant. How many negative referrals do we get back from

rheumatology? Nowhere near so many when I canvass the people that come on my courses. So it's if you're not getting negatives back, I think that we're missing them. So, and that flies in the face of the problems we're obviously having with long waiting lists, unfortunately.

Steven Bruce

You mentioned earlier on that viruses, COVID in particular, being inflammatory can cause exacerbations of problems like this. Darrin has asked whether the same occurs for people after vaccination, has that exacerbated their problems?

Jack March

Yeah, so take what I say with a pinch of salt, so the data is not very good at the moment as to what's happening. For a number of reasons, there's a difference between these diseases, so COVID-19 has been shown to trigger some of these inflammatory conditions to start. But also, it is in all likelihood that COVID-19 if you have rheumatoid arthritis will make you feel a hell of a lot worse with regards to your arthritis. For one because you will have to stop your immune modifying medications while you're unwell. Otherwise, you're going to struggle to get better. So that's definitely true. The vaccinations, some people have definitely reported flares in their disease. The trouble is, you need a huge number of those to work out whether it truly was the vaccination, or was it just coincidence, they happen to flare within that 2, 4, 6 week period after the vaccination. As far as I'm aware, it's not a big problem. But some people it certainly has done. My camera's gone very pixelated. I'm hoping I'm still coming through.

Steven Bruce

You're coming through fine on my screen. So that's good. Yeah, we mentioned the V word there. And I probably ought to emphasise that that's likely to provoke a whole flurry of comments from people on the chat lines. We're not here to talk about vaccinations, it was just whether there might be a response that Jack had seen on that. Can we talk about, before we move on to the physical therapists' response to the disease, but can we also talk about some of the other drugs, the disease modifying antirheumatic drugs DMARDs I think they're called, conventional and synthetic, in particular methotrexate, which is widely known by everybody, what other things could we see happening as a result of people who are taking those?

Jack March

So methotrexate, the main side effect of methotrexate is nausea. So almost all the side effects of methotrexate that stop people from taking it is nausea. So it's always co given with folic acid to try and reduce that, it can also be given as an injection which reduces the nausea quite significantly, but also increases the bioavailability of the methotrexate. So, if you were to take 25 milligrams of methotrexate, orally, you only need about 15 milligrams through an injection to get the same bioavailability. So, it's a better route in a lot, but comes with it, injection, site reactions, and people not liking needles. So that's the main one, a few people on methotrexate, it will affect their liver and they have to stop. But we're down way below 10% of those people. And usually, when you dig into it, it's because they've not dropped their alcohol consumption. So you really, ideally with methotrexate, you drink no alcohol, but they will allow you to drink four units per week, which is not a lot of alcohol. And most of the time you find out that they have not dropped their alcohol and it affects their liver. But some people obviously, people react to all sorts of medications, and it'll do that. So they're the main things that happen with methotrexate. It's widely

known, because they didn't use it so much as a chemotherapy drug now, but previously was quite widely used as chemotherapy drug, but the doses we're talking about are way, way less. So we're talking about maximum 25 milligrams is allowed to be prescribed for rheumatoid arthritis. A chemo dose is over in the hundreds of milligrams. So technically, you can get alopecia. Those kind of side effects for methotrexate. I've only seen it once. And it was from a lady who didn't understand the dosing requirements. So she was told to go up by two tablets, and went up by about 20 tablets, so her hair all fell out. But most people, it's the nausea, almost all of them they stop because of nausea, really, but it is otherwise pretty well tolerated. Most people will take it at night and sleep through the nausea, and that does quite well. The other drugs that fit into that category that are most common, sulfasalazine and hydroxychloroquine. So most, unless someone's got a preexisting lung condition or liver condition, most rheumatologists would start someone on methotrexate. And then depending on the severity of their disease, however they decide to measure that, might add sulfasalazine and or hydroxychloroquine on top of that, or if they're prevented from taking methotrexate for any reason, they'll start them on soft sulfasalazine usually.

Steven Bruce

I tell you what surprised me, you were talking a moment ago about taking drugs to cope with the side effects of methotrexate. As I understand it, there's relatively little evidence and this is from the NICE guidelines to support the use of nonsteroidals. But they are still recommended. But the consequences that they are instructed if you give nonsteroidals to also give protein pump inhibitors. Now, I can't count the number of people I've had on show who have said PPIs are responsible for an enormous number of side effects and ill health consequences. Is that something you've seen?

Jack March

Yeah, exactly.

Steven Bruce

Maybe it's worth putting up with it because it gets you through some of your symptoms, but not if there isn't any evidence for that.

Jack March

It's a big problem, isn't it? Like, you know, with Claire's patient, was obviously started on steroids, symptoms down to zero, happy as Larry, if you take 20 milligrams of steroids for any period of time, you can actually...

Steven Bruce

Actually, funny you should say that because Claire sent in a comment just after she left, she sent it by the chat line, she forgot to mention the steroid high that the patient had when he was put on these things as well. She said he was so cheery and full of beans; it was almost scary.

Jack March

And, you know, 50 years or so ago, steroids were the cure for everything, and then everybody's bone density went to nothing, and they all got the munchies and became very overweight. So there's a positive in it and a negative to everything, unfortunately, and the trouble with rheumatoid arthritis in particular, is that we know it is an aggressive disease and you have to treat it aggressively, especially early. That

really there are occasions where patients can do it without medications, but they are rare as hen's teeth. If I see someone for a consultation, they say, you know, what's the best thing I can do for rheumatoid arthritis. And it is take the medications that are prescribed in the, you know, you talk about evidence and things, the methotrexate as the gold standard for the first, it's not that it's just the best it is, miles the best comparative to, you know, anything else, diet, all those sorts of things. Not even physiotherapy, osteopathy, manual therapies, whatever else, that small percentages of effectiveness compared to methotrexate in comparison, so then it's the side effects versus benefits, that balance changes significantly because of the amount of benefit really.

Steven Bruce

Well, a couple of people have preempted my other question on drugs here, Pip has asked whether they're now using anti-tumor necrosis factor more than disease modifying drugs. And David has asked whether you have any experience of jak inhibitors for RA.

Jack March

Yeah, so really good questions, really. You'll have to forgive me not knowing the exact guidelines being that I don't prescribe them but as far as I understand it you have to, in inverted commas, failed the disease modifying drugs before you go on to the biologics, the injectable biologics, which would include the two you've just mentioned, so anti TNF and the jak inhibitors. And that's a lot to do with funding. They're extremely expensive compared to, so methotrexate's about 400 quid for a year and anti TNFs are about 10 grand. So there's a big price difference, but also you up the ante with regards to the possible side effects, so they're much stronger and with regards to reducing your immune response to illness, there is a possibility of reactivating tuberculosis if you've had that previously, there is also an association with some types of cancers being activated by those, although extremely rare, you know, that's a far bigger risk, then some nausea. So you pass through those, and then those people that either do not respond appropriately or just cannot tolerate the side effects of methotrexate etc., will go on to the biologics. They are extremely effective. So, you know, I often use, about 50% of patients will manage perfectly fine on something like methotrexate, they'll never escalate to anything else, they'll never need that. About 25% of patients will manage, of the ones left, will manage extremely well on the first biologic that they have. And they will never go on to need anything else. And then you get into smaller percentages, where a good chunk will then respond quite nicely to the second type, like bringing in something like a jak inhibitor, it's a different mechanism. And then finally, you'll have some patients that are just refractory to everything. We either have not discovered it or they just have such a bizarre disease that actually there's a problem or they've been mis diagnosed, which does happen occasionally. The jak inhibitors are relatively new, they're just a slightly different part of the inflammatory pathway. Don't ask me about the biochemistry, my brain starts to come out of my ears as to when you get into that complexity. But if you think about an anti TNF inhibits tumor necrosis factor directly, there are some of the biologics are T cell depleted. So they will literally reduce your amount of T cells, and jak inhibitors inhibit whatever the jak thing is, it's J, A, Q, it doesn't inhibit me fortunately. But they're looking for different targets along these inflammatory pathways, incredibly complex. And but when you get it right for the right person, incredibly effective. So the main problems with those, you know, most patients stop those because of injection site reactions. Because you have to inject yourself repeatedly, most of them, some of them are weekly, some fortnightly, some monthly.

Steven Bruce

Thanks. You remember the patient we talked about a little while ago, Victoria's patient two, was diagnosed with fibromyalgia. Victoria has come back to say that the fibromyalgia was diagnosed because she had muscle stiffness, tiredness, and depression. But Victoria says it probably wasn't depression, it was more frustration than depression. Unfortunately, she has private health care.

Jack March

Yeah, just while we're on fibromyalgia. So, I think it was 2016, they changed the criteria for fibromyalgia. So it can coexist with other conditions. So a lot of patients with rheumatoid arthritis etc., will go on to be diagnosed with fibromyalgia as well. The other thing that my good friend Andrew Cuff who when he does his red flags course, he says that fibromyalgia is not a shield. So just because you have fibromyalgia doesn't prevent you from developing other key relevant diseases. And there is, probably not in rheumatoid arthritis, although in this case, it is, but more in the spondyloarthritis cohort of women there is, and in the literature anywhere between 16 and 20% of patients with fibromyalgia actually have undiagnosed spondyloarthritis. And you do need to really be questioning, as I forget the lady's name which brought the case study.

Steven Bruce

Victoria.

Jack March

Victoria has clearly done is ask appropriate in-depth questions. And yeah, that lady needs to go to rheumatology really.

Steven Bruce

Somebody has just sent in a question asking if you could explain what a JAK inhibitor actually is, only use it as a biologic, but we can look that up for you. Sophie says, do you think the type one Diabetes is a risk factor for RA?

Jack March

That's a really good question. And one I've never been able to find a definitive answer to. So we know that type two diabetes definitely is. And because it's often related, as we talked about to poor diet, being overweight, but also this excess of inflammation in the system. Theoretically, type one Diabetes would be related. But as far as I'm aware, within the data, we've never seen an escalated number of patients with rheumatoid arthritis who had type one diabetes. So it's not something I've been able to find a definitive answer to. So at the moment, it's not something I would add weight to the likelihood of having rheumatoid arthritis.

Steven Bruce

We've got a couple of questions about the prevalence of symptoms here, ones from Pip ones from Jeff, I'll read Jeff's out because it's sort of a similar theme. How common or otherwise, do you find the non-articular symptoms of RA or inflammatory arthritis to be either coexisting with joint issues or the first presenting issue?

Jack March

Yeah, so well over 80% of your patients are going to present with an arthropathy with rheumatoid arthritis, specifically. Most of them are going to present with an arthropathy. A few, as we mentioned, will present with a fever or a fatigue, general feelings of malaise. But yeah, it's usually joints. The other one would be as well, as I mentioned, there's this emerging evidence of De Quervain's tenosynovitis. But we don't know what the prevalence of that is because going back retrospectively is much more difficult. Because, you know, if you asked, we got a load of rheumatoid arthritic females and said, when you had your baby, did you have some thumb pain, they're, almost all of them would say yes, but we can't retrospectively go back and diagnose De Quervain's. So it's a bit of a difficult one. There are, as far as I understand it, prospective studies ongoing, but we'll have to wait for those. So I can't give you specific numbers, unfortunately, but it's about being vigilant and bilateral patterns, or, you know, the girl I was talking about, who I saw last week, has bilateral De Quervain's but has not got, she's not given birth, she's got no predisposing factor that I can think of that would give her that bilateral presentation, nothing's changed. She's just developed it. And that, to me is very, very unusual to happen. So it's those things outside of what you would normally see is quite predictive as well.

Steven Bruce

Jan, you asked why type one diabetes would be a risk factor? And the answer to the question was that we don't know that it is a risk factor. So that clears that up for you. Jack, Christina has sent in a really important observation here, saying that no one has mentioned contraindication to treating the Atlas because of transverse ligament laxity. And she reckons that we might be teaching grandma to suck eggs with this, but it's probably well worth mentioning. I presume that's one of the things that you'd be concerned with physical therapy, which will lead us nicely into what you would do in terms of physical therapy for...

Jack March

Yeah, so I have to admit, I've never been one particularly for the manual therapies in my practice, mostly because I went into the NHS on rotations, didn't do musculoskeletal therapies very much until I did my rotations, did that for like eight months, then went into rheumatology. So it's never been a skill I've particularly developed or never followed. But I have a real concern of doing any types of those physical therapies with anybody with an inflammatory disorder, there's a very high prevalence of osteoporosis in these patients. There's also a very, as you mentioned, these are very difficult axial instability. In my experience, those patients with that lower axial instability get diagnosed when they have very erosive disease in the fingers. So I've previously given advice that if people don't have obviously eroded peripheral joints, they're unlikely to have the instability at the Atlas and C1, C2. However, there has been some recent research that shows that probably it's happening earlier than that, it's a synovial joint, just like subclinical in the peripheral joints, it could happen in the neck as well. So I can't even give that advice anymore. So in all honesty, if you've got a patient with rheumatoid arthritis, I wouldn't be doing any manual therapies to their neck, it's a risk not really worth taking, in my opinion. Obviously, if they've had imaging of their neck and it's shown there is no instability, that's a different kettle of fish and I would go for that. With regards to what I would do for these patients, I have a sort of a hierarchy of things that I try to tick off with people and obviously you can get through some of them if they don't do it immediately. So the first one is smoking, no smoking, smoking makes rheumatoid arthritis 25% worse and the drugs 25% less effective. So actually, if we could encourage someone to reduce their smoking that's immensely effective.

Steven Bruce

How much compliance do you get with that?

Jack March

Variable compliance, variable. And we have to remember that smoking is a complex phenomenon and it says if you do this, you will die on the packet. So me then saying you know, that is pretty bad for your rheumatoid, it's a difficult one. So I talk about it to people I don't try and bully them into it or anything like that. I give them the facts, and I allow them to make their own decisions really. So yes, smoking first, I then talk to people about their activity levels second, so the data shows that people with rheumatoid arthritis, their activity levels dip off horrendously. You mentioned about within two years, a third of them will have lost their jobs or not be working anymore. It's around 70% of them will be less active within two years than they were previously, they're hugely inactive, they lose their muscle bulk. The stiffness prevents them from doing things, the joint stiffness, the swelling, the pain. So I talk to them about their general activity levels and make sure that they're getting that general activity. So even making sure they get to that 150 minutes of activity a week is sometimes enough, spend some time to get to. And then we go on to what I would call an addition to that where I would add in a generalised exercise program that would include some loading, some resistance exercise, some cardiovascular exercise, and some mobility work.

Steven Bruce

I missed this because I was looking at some questions coming in. You did say that there was evidence that showed that exercise levels drop with RA, is there equally evidence to show that RA symptoms are lessened by exercise?

Jack March

Yes, there is. Yeah. So getting up to normal activity is associated with a lower disease activity than being inactive. But more than that, really, what it does is it staves off the secondary effects of the inflammation. So the loss of the muscle bulk, the loss of bone density, the cardiovascular disease affects the loss of function. So it addresses those more than it does the disease activity. But there is still some association with reduced disease activity. There is also no association of problems with even high intensity exercise, weightlifting, sprinting, you name it, you can do what you like, and it won't make your joints or your disease worse, it might make them painful, but it won't make the disease worse. So even within flare times or not on drugs as well, so they can go for it, if they wish, and I have had patients really go for it and they'll be fine. Then I would get down into what I would, you know, manual therapies or anything else that you think is going to affect the patient's state. So comfort levels, and that's really what you're going to do those other treatments for. So I would put all the other treatments that, you're probably going to, anybody's going to ask about into the next category, which, you know, massage or specific mobilisations or acupuncture, taping, anything you can think of would be into that category where you're using it for comfort, so none of those things are going to positively affect the disease process. But it will affect their comfort, as we pretty much know, some people will react really nicely to those kinds of treatments, I think what you need to do with those kinds of treatments is assess again the, I'll say costs and I'll come back to what I mean by costs versus the rewards of those treatments. So if the reward of the treatment is four weeks' worth of improved symptoms, then you can have quite a lot of costs and within cost, literal monetary cost if you're working privately, opportunity costs, so time coming to the clinic, those kinds of

things. But if the patient's getting one, two days of risk response to coming into those things, then I think you've got to look very carefully at what then the costs they're incurring and there will be some patients who have the means and are quite happy to come two, three times a week for that 24 or 48 hours' worth of relief and there'll be very happy with that, but it's, you know, I had one patient once who was, I forget what type of practitioner they were going to see, what flavour of practitioner, but she said to me she'd paid for a massage and that meant she couldn't eat three meals a day for a few days afterwards, that's inappropriate use of her resources, for how much benefit she gets. So it is individual and where you go with that. We've talked about the manual therapies, you've got to be a bit cautious, especially around the spine. But other therapies like acupuncture, again, you've got to be a little bit cautious with, these patients are immunocompromised and you're obviously breaking the skin. So, you know, I tend to put acupuncture a bit further down the list. But I've had patients, I don't do acupuncture, I never trained in it, but I've had patients who it's been wonderfully effective for. So it's, again, another option, there is no evidence to say that it is harmful in any way. So it's about I think picking your treatment hierarchy and applying the ones most likely to be beneficial, followed by some, I'd say acupuncture, you might be taking a bit of a punt with acupuncture, unless the person comes in, saying, oh, I've had acupuncture before and it's amazing. I think you're going through about six or seven different treatment options before you're getting to acupuncture if I'm honest.

Steven Bruce

What about TENS, the NICE guidelines recommend TENS and wax baths as well, for your hands or whatever. Have you found TENS to be useful?

Jack March

Same sort of response really, individual basis. I've used it for spinal pain in the past and had a varied response. And the same with the wax bath. I mean, if anybody's had a wax bath, they're absolutely amazing. It's like being in a spa, it's incredible stuff. So again, it's the same, it's assessing the response and whether you've got access to a wax machine as well, because they're expensive as hell. So again, same sort of response, I would put them in that same category, they're options if you've got access to them, and they help, then brilliant.

Steven Bruce

One of the other things in the NICE guidelines is the possibility of using functional foot orthosis. How effective, is that another one of these, it's a variable response things?

Jack March

Yeah, it is. I was very lucky when I worked in rheumatology that we had a podiatrist down the corridor who was quite happy to see our patients with foot pain, was very good at managing those. I found, in my experience, custom orthosis are rather better than off the shelf. And as soon as you get into any drifting of the MTPs, the custom stuff's just going to be no good. What I would say is I focus...

Steven Bruce

The custom stuff will be no good?

Jack March

No, no, sorry, the off the shelf stuff will be no good. What I have found is, you'll find a lot of improvement from getting people to wear trainers rather than shoes, especially I'm afraid to say the ladies will come in in their most beautiful shoes you've ever seen. But they are no comfort whatsoever. And you get them to wear trainers and there's suddenly an improvement. So I will usually go there first I say go to go to the running shop or the trainer shop and find whichever pair feels the most comfortable. And then try them for a few weeks and you'll find quite a lot of improvement.

Steven Bruce

Okay, Vladimir has, you mentioned this earlier on, Vladimir has asked about any evidence for modification of diet. I think it does get a mention in the NICE guidelines, but only in passing.

Jack March

Yeah, so one of the problems we've got, the key player bringing problems here. So there is no evidence that there is an anti-inflammatory diet that we can find within studies both prospective and retrospective, etc. that, I can't say hand on heart, if rheumatoid arthritis patients cut out oranges, tomatoes, it seems to be acidic foods that they will improve. However, I've had a number of patients who have cut those kinds of foods out and they had a huge improvement. So it's sometimes worth testing. If someone says, I keep eating bolognese and I feel terrible afterwards, it's worth a trial. The same with the general diets. They advise a Mediterranean diet because it, again, it offsets those things we talked about earlier, cardiovascular disease risk tends to be improved. Alongside that it's about calorific intake as well. So if you've got someone who is overweight, BMI usually gets cut off about 27, a BMI of over 27 will have particularly abdominal fat, then restricting the calorie intake to an appropriate level for them can be helpful in reducing that production of inflammatory cytokines. So unfortunately, it's more of an optimising diet for health than it is using diet as a tool to improve the rheumatoid arthritis if that makes sense as a distinction, but some individuals will report really good improvements from cutting some foods out. And it can be worth a try in those people.

Steven Bruce

Vladimir, if you were to look at the broadcasts I did with Dr. Sarah Myhill, she has a particular opinion about how the Paleo diet can affect inflammatory conditions. And in her opinion, and she's a plausible sounding witness, in her opinion, the Paleo diet can do an awful lot for pretty much every medical problem that people suffer. But again, I'll leave you to decide on the merits of that. A couple of questions about osteoporosis for you, Jack. Pip says, why is there a high prevalence of osteoporosis in RA patients? And Jen says, if you've got someone who has osteoporosis, does that mean we need to look more closely at their symptoms in case they've got undiagnosed RA?

Jack March

I'll address the second question. No. I would consider if they've got rheumatoid arthritis, they've got symptoms suggestive of rheumatoid arthritis. Osteoporosis doesn't predict rheumatoid at all. The first part of the question is twofold answer. The systemic inflammation will affect bone turnover directly. So you'll get a reduction in bone turnover, or net bone turnover, and therefore a net reduction. It's very common in rheumatoid arthritis to get osteoporosis. And the second part is to do with the reduced activity levels, they get reduced loading pattern. So they're just not loading their spine and their hips and their

wrists. And they develop osteoporosis. So it's the combined of those two. Very easily modified by adding a loading program is usually sufficient.

Steven Bruce

Okay. Can I ask one about communication? Because there's a lot, I found a British Society For Rheumatology handbook or the Clinic Visit Framework here, which I didn't find very helpful at all in any regard. But it does, apart from communication, because it talks about providing information about test information about the disease to patients. How do you find they respond? Because we've heard how distressing this disease is, Danille has sent in a comment saying how horrible it was for his own mother. If you give people this information, is there a chance that we're actually driving them into a worse position by making them feel more depressed about the condition itself?

Jack March

Yeah, for sure, you've got to be careful with how you frame the conversation. Certainly when, all the patients that I see, for example, are undiagnosed. And I'm going, you know, I think it might be this rheumatoid arthritis. And I'll always follow that up with, you know, we're referring you to rheumatology to confirm or deny that suspicion. I'm not saying you've got rheumatoid arthritis right now, I'm just a bit suspicious. And the great thing about rheumatoid arthritis is all these new medications that were so effective, we talked about jak inhibitors, they come out with new ones all the time, it is far, far rarer to see people struggle. And instead of, as you mentioned, this lot of people not going back to work, we have, these days, similar numbers going into complete remission, so you're looking at about a third of patients diagnosed with rheumatoid arthritis in the last two years, will have gone into remission, complete remission, so no symptoms whatsoever. Their rheumatoid arthritis are completely back to normal, albeit maybe with some ongoing medications. So the outlook is far better and the listener's father, who would have, or mother, sorry, would have struggled with it, you know, you're looking at very much older styles of medicine and treating this, we don't see those outcomes anymore. It's far, far more positive. So I always follow up with those sort of reassuring tones as best I can. The other thing to do is to send them to NRAS, National Rheumatoid Arthritis Society, which is UK based. And they've got a whole host of information, much better than that BSR booklet that you just talked about, same things, but far better. Far better written.

Steven Bruce

I think this came from; this was something I found on the NRAS website. As you say, far from being their best publication.

Jack March

Exactly. And they have a far more positive mindset about it as well, which is really good. So it's a really useful site to go to and NRAS.org.uk I think they are.

Steven Bruce

Right, so one observation from Anne. Anne says progesterone has a natural anti-inflammatory effect with some postmenopausal patients who are given bioidentical hormones, they found that their painful joints have improved, one question with a one word answer from you, Jack, because we're now running out of time. Fiona says, does celiac disease predispose to RA?

Jack March

Not as far as I'm aware, it does not, no. Colitis and Crohn's are the two you're really looking for.

Steven Bruce

Thank you. So, as I said, we are very much short of time at the moment. You've just given us a mass of information, but you run courses on this thing, so what have you not covered that we want to learn about on your courses?

Jack March

So we've covered a lot about rheumatoid but I cover spondyloarthritis, axial, peripheral, we talked about polymyalgia rheumatica. Talk about that in detail. Gout, osteoarthritis. Those are the main ones. Also if anybody does come on a whole day course I do do that. If anybody can put up with me for a whole day, we talk about lupus, Sjogren's syndrome, we talk about the connective tissue disorders as well. So yeah, I go into loads of detail, almost all about recognition rather than...

Steven Bruce

Do you do it online?

Jack March

A variety, we can go back to face to face now. So I have face to face courses and online courses. Yep. All of the above. I always have a recorded course as well, which I developed which goes through all of these different things. So if you can't make it live, there is a recorded version as well.

Steven Bruce

Jack, thank you very much. It's been a real treat listening, it's always a pleasure listening to experts in any subject. But I'm always impressed and frankly quite amazed when all these questions come in and you don't bat an eyelid you just answer them all and have all that information in your fingertips. So thank you for that and thank you for giving up whatever it was you did this evening in order to be with us. It's been a real treat.

Jack March

No, it's been fascinating, really good case study and brilliant questions as well. So delighted to be here.

Steven Bruce

Thank you.