

Geriatric Care **With Shane Roche**

- APM: As I've said, we're back in London. We've got a great studio here. We have a great guest. We're going to be talking about geriatric care and Mr. Shane Roche is the man to do the informative discussion that you're so used to. He's been a doctor since 1980, a consultant since 1992. He's a fellow of the Royal College of Physicians. He has a number of clinics both NHS and private in North London and he runs a community rehabilitation centre for the elderly and of course, his specialty is geriatrics. Shane, very warm welcome to you.
- SR: Hi. Pleasure.
- APM: And thanks very much for getting up the time to join us this evening.
- SR: Pleasure.
- APM: On your website, you describe yourself as a general physician and, you know, I've always thought that physician was a slightly American word for doctor but...so what's the difference between a general physician and a general practitioner?
- SR: General practitioners work in primary health care. So they're in the community in their practices. General physicians work in secondary care in hospitals. In the old days, it used to be general physicians with a bit of interest in cardiology and chest medicine but now, all general physicians are really geriatricians. So the specialties have gone their own path, so cardiologists are cardiologists, not...some of them do general medicine but most of general medicine is done by us guys, you know, geriatricians.
- APM: So what's led you into geriatrics?

- SR: I just like looking after older people. I think that you get so much reward from looking after older people. I mean I like medicine in general but, you know, they are so appreciative as in your specialty for what you do for them and they feel that, you know, you try and do everything for them as much as possible. So I think the feedback in looking after older people is very satisfactory.
- APM: So what qualifies somebody to go to a geriatrician?
- SR: Well, you do your usual junior doctor training —
- APM: No, sorry. I mean what qualifies somebody to come to a geriatrician. What age do you have to be —
- SR: Well, I mean I've had 100-year-old lady a couple of weeks ago, said she didn't want to be called geriatric. So I think the age that I would look at would be some 75 plus but as time goes on and as we live longer, it could end up being 85 plus because the average age now for women is 83, 84 and men, a little bit less than that. It used to be 65 but now, that's all changed. So I think geriatric medicine kicks in around the age of 75.
- APM: So somebody's arbitrarily put a number on it rather than saying, "Well, you've got to be in this physical state before we call you geriatric."
- SR: Yeah. I mean it doesn't really matter. They'll get the same treatment but I think you're absolutely right. There are 65-year-olds who are more like 85-year-olds and I see 85-year-olds who are more like 50-year-olds. So I think the age is not really important. It's more biologically what patients are like.
- APM: Yours is a huge range of individual specialties within geriatrics, isn't it? I mean one of the things you do is heart...you specialize in heart failure or have an interest in heart failure. So does that make you a cardiologist —
- SR: No and I will be the first to call a cardiologist when I'm in trouble. We're generalists. So we see the patient from a holistic point of view, not just from their chest infection or their heart problems or their whatever. We look at them from the social point of view, you know, what's the best to do for them to get them home, what's their social care like, you know, what's family support like. So we're sort of...we're holistic physicians, I would say as well as generalists.
- APM: What's the biggest problem these days amongst the geriatric population?
- SR: Getting people out of hospital, lack of social care, particularly with all the cuts in social care. Patients are staying longer in hospital than, you know...we used to call them bed blockers which is a terrible term because they're not bed blockers. They haven't got anywhere to go. They haven't got that increased

social package care that they need. They may have had home help once or twice a day. Now, they need them 4 or 5 times a day. It just isn't there. There isn't any nighttime cover. We depend on families and family support. If we didn't have family support, the whole system would collapse. I had a mother-in-law with dementia who lived with us for eight years. Only we gave her that support, she would've ended up in a nursing home or residential home. So I think we depend a lot on family support and social support but there are big issues with social support at the moment

APM: We tend to associate dementia very closely with the elderly. I mean is that a big problem? Is that an increasing problem?

SR: Increasing problem because we're living longer. It's like any of these neurodegenerative diseases like Parkinson's disease which I have a specialist interest in. We're seeing more of it because patients are living longer whereas before, patients didn't live to that age. So we didn't see as much of it. Medicine's become too good.

APM: What's the earliest you've seen of someone with Parkinson's?

SR: Fifties but it's quite, you know...it's fairly rare at that age. It's much more common as you get older. The prevalence increases as you get into your 80's and beyond.

APM: And presumably, that patient just comes to you via GP who says, "You need to go and see somebody —"

SR: Yeah and I do lots of talks in GP practices and not just on Parkinson's disease but on dementia, sort of telling GPs what to look out for, how to assess, how to, you know...when to refer.

APM: Which is exactly where I was going with this and because of course, they may come to us first for something unrelated and we may be able to recognize those signs. What should we be looking for?

SR: In Parkinson's disease or —

APM: Well, let's start with Parkinson's.

SR: Well, the typical, sort of patients complain of loss of mobility. They may have tremor. Their posture may have become a bit more stooped. They may have had falls. I mean falls is quite common, as you know, in older people. So there's sort of different ways they present. I get lots of referrals via therapists who, you know, prompt the GP to refer ...well, for Parkinson's disease and falls and things like that. So the referrals come from different sources, not just GPs.

- APM: If you've got an elderly person living on their own, of course, there's no one there to notice that they're becoming more stooped, is there? So somewhere you've got to have a baseline on which to judge a lot of this stuff
- SR: You do but quite often, it's sort of families who bring their, you know, loved ones to the GPs and say, "Listen, mom's had a fall," or, "I don't like that mom's memory is not so good," and things like that. It's usually families who prompt the referrals to GPs because GPs are overwhelmed. They only have, you know...they see patients for 10 minutes and, you know, they have to make a call on whether to refer to us or not.
- APM: I'm very fond of pointing out to anyone who cares to listen to me which is a dwindling number these days but —
- SR: I'm sure it's not.
- APM: We, as physical therapists, I mean...and perhaps the public in general, we're often quick to criticize GPs for missing something but the fact that you're trying to do so much in 10 minutes is a real limitation —
- SR: I couldn't do general practice.
- APM: How much time do you spend with your patients typically?
- SR: Half an hour. So I've done a Parkinson's clinic today. I'd say I'd have...new patients, half an hour to 40 minutes, returns 20 minutes.
- APM: And in a Parkinson's clinic, when somebody's been referred to you, perhaps the GP or whoever has noticed some sort of tremor developing in the patient, what then do you do in clinic to refine that?
- SR: Examine them, obviously. Take a history, examine them. As I'm very experienced and I've run clinic for over 20 years, you...sometimes the diagnosis is not so clear. I may refer for different scans and so on to prove that's what they have. Decide then whether patients need treatment or not. With the drugs, sometimes I wait. Sometimes if their ADLs have been affected, I'll suggest to the GP we start some treatment and often refer to physio, community physio, community rehab.
- APM: ADLs?
- SR: Activities of daily living, sorry. So if they have been affected. So if patients are finding that it's more difficult to get in and out of a chair or in and out of bed or...classical Parkinson's symptom is turning in bed at night, they find difficult. So could you imagine if you couldn't turn in bed at night, how uncomfortable that is? So little things like that present early. Gait, posture, refer to community rehabilitation who are excellent. I work mostly in

Westminster and the community rehab team are superb. So they will see the patients and follow them up and do what's necessary.

APM: And the scans that you would use to screen for that —

SR: The main scan we use in Parkinson's disease is called a DaTscan. DaT stands for dopamine transporter. So it's an isotope given to the patient that's taken up in the basal ganglia, that part of the brain where you're looking at loss of function. So if a scan is positive then you'd get an abnormal scan. The normal scan's like an inverted comma sign. Abnormal, you see very little take up, so then it's pretty proven that it is Parkinson's disease but there are different types of...Parkinson-plus syndrome is like progressive supranuclear palsy (PSP) which Dudley Moore had, the comedian and different...dementia with Lewy bodies and that sort of stuff. So there are different types of Parkinsonism but true Parkinson's disease is usually fairly easy to diagnose.

APM: How do you find a patient reacts typically to being told that they have Parkinson's?

SR: It's a bit like with dementia. I find it difficult sometimes to...the families keep saying, "Don't tell mom she's got dementia," but quite often, the patients ask. So I'm truthful with them. I think down the line, you know, you'll find that a patient will say, "Well, you told me I didn't have Parkinson's or dementia," and then you're more of sort of fix. So I'm pretty honest with patients and say, "I think this is Parkinson's. It's not the end of the world. We've got lots of different treatments. We can make you better." In older people, Parkinson's disease is quite a slowly progressive disease. It's quite a benign condition whereas in younger people, it's fairly catastrophic but in older people —

APM: Younger meaning 50's that you're talking of earlier on.

SR: Fifties, yeah. I mean it's fairly catastrophic. They end up in a different treatment pathway because they end up with sort of deep brain stimulation and that sort of different type of treatment other than drugs.

APM: And how does it affect longevity?

SR: Well, it does because, obviously, if you're younger and you get in your 50's, it is a progressive disease, you're at risk maybe after 10 years of, you know, decreased mobility, obviously, chest infection and aspiration, pneumonia so it is...but thankfully, it's not that common in younger people. There are genetic forms of it but it's fairly rare.

APM: And what's the normal course of treatment? You've talked about community or rehabilitation centers for Parkinson. What can we do for them?

SR: Well, I think these patients...I mean I'm just talking about Parkinson's disease but we can go back to the older people in general but I think it's a condition where you will patients are really stiff and very rigid with sort of bent over spines, sometimes really bent over spines. So anything you can do as therapists for them is always useful, you know, try to...the other thing is teaching them how to fall properly. It may sound silly but lots of Parkinson's patients and older people in general fall. So if you can teach them how to fall, you know, correctly so that they're not breaking bones all the time...physios are very good at that. So it's sort of safe falls but it's more about posture. It's more about walking. It's more about later on of the condition where patients freeze, where they get stuck and can't move. Physios are excellent in teaching patients different techniques and what to do just to get over that freezing.

APM: And if we spot somebody in one of our clinics who we think may need further investigation, presumably, we don't want to alarm them by saying, "Well, you need to go see the GP because I want you tested for Parkinson's." Is it best to say, "I need you to go to the GP for a second opinion," and then write a letter that says, "This is the signs that I've seen"?

SR: Yeah because GPs will automatically refer because NICE, the wonderful NICE always recommend that patients who have Parkinson's disease have a secondary referral to guys like, you know...hospitals and like I work in but I do get quite a number of referrals not via the GP but via the community therapists themselves. So we've got an open pathway, essentially. So we work closely with the community. I see patients in nursing homes. Physios will be there. They may say, "Would you mind seeing...so and so I think might have..." And they come to my clinic as well. So it's all a learning process.

APM: And what about private practitioners? Can they simply call up your clinic and say, "Look, I've got someone who I think needs to be seen," and it doesn't have to go via the GP?

SR: Yeah, they can do.

APM: I mean a lot of our viewers will be in London so they could refer to...well, we'll put your clinic details up on the website once we finish this.

SR: I take direct referrals. It's usually good to do it via the GP though because it's...with insurance companies, they like—

APM: Indeed.

SR: --proper pathways which is fine. So they like the GP to refer and then —

APM: Is that the normal routine in other parts of the country? Are you unique in taking referrals —

- SR: No, I think it's becoming more widespread. In Edgware and North London there's an excellent Parkinson's disease service which is very similar. I think in the future, consultants like me will be seeing more patients in their home, in nursing home. I mean last week, I saw five patients in one nursing home. There were patients who couldn't come to the clinic. So they're missing out because they were under treated. I saw them. They couldn't get to the clinic. I had my Parkinson's nurse with me and then we changed the medication and I'll review her again in a couple of weeks time. So I think in the future, more services, not just geriatrics but diabetes, heart failure will happen outside of hospital and that's the way it should be. I mean you can do the...the GP can do the blood test. All that can be done but I think it's good for the specialist to go out into community.
- APM: Would they do blood test for Parkinson?
- SR: No, we haven't got one yet but they're working on that.
- APM: So they're going to refer for a dopamine scan.
- SR: Yeah.
- APM: We've got our first question come in from Claire in London, thanks, Claire, which is, "Why is turning in bed a problem?"
- SR: Because they got lack of movement. There's something called...there's a word called bradykinesia which you must have if you need to make a diagnosis of Parkinson's disease. Bradykinesia means slowness in movement and one of the movements that is affected is turning, not just in bed but sort of getting up of a chair, getting out of bed, getting off from the toilet, you know. It's all about sort of that first movement. So turning can be difficult. So it's a form of bradykinesia, essentially but it seems to be quite an early symptom in Parkinson's disease. Another one is loss of smell. Patients often lose smell. It's just the way the neurodegeneration works up from the sort of base of the brain and affects your sense of smell.
- APM: What's in the pipeline in terms of treating this?
- SR: We've had probably two new drugs in the last number of years and they're just...they're new drugs but they're just a different form of ones we already have. I think things like deep brain stimulation are becoming more common. Younger age group, probably maximum age around 65, 66, no history of dementia or any hint of cognitive problems, tried maximum therapy —
- APM: Deep brain stimulation meaning stimulation by...?

SR: So what they do is they essentially sophisticated MRI scans of the brain and they find different nuclei in the brain that they got to target. So then you have essentially holes in your head and they put the leads into these nuclei in the brain. The lead comes down into the neck, into a box like a cardiac pacemaker and it stimulates. It's stimulating the receptors all the time and it has transformed patients with severe Parkinson's disease. It really is a fantastic technique but it's expensive, about 20,000 for one operation. There's a one year waiting list. It's only done in the NHS but —

APM: It's only done in the NHS?

SR: Yeah, it's not done privately. So for younger patients...and I mean the late 50's, 60's, the younger patient with Parkinson's disease who've tried maximum treatment, a lot of good results.

APM: So we should be advising our patients who get that Parkinson's early then.

SR: Well, not really but it is an invasive procedure but they're, all the time, working on non-invasive procedures. In some areas, there's a condition called benign essential tremor which is not Parkinson's disease but it's a tremor of the hands which...if you see a patient who you think has it, always ask them is it made better by alcohol because it typically is. We don't know why but it is but they're doing a deep ultrasound treatment for patients who have ultrasound therapy which is non-invasive. So I think eventually, for Parkinson's disease and particularly tremor, this treatment will be available.

APM: You mentioned Alzheimer's earlier on. Can we talk a bit about dementia as a whole? Again, recognizing dementia, is that something that we might recognize before a patient or their family would notice it or...?

SR: I think dementia is a huge topic. So if we talk about the early onset stages of dementia, there's a number of different conditions that...so I look at patients who come to me...if they come to me by themselves then it may be the worried well, the sort of subjective memory impairment, "Oh, I can't remember where I put my keys," or...and you do a memory test, it's absolutely normal. So they're the sort of patients I would consider not dementing but then you get the ones who come with their son or their daughter or their other half and a lot of the problem is being noticed by them rather than patients themselves. Patients tend to deny the fact they've got a problem. They say, "Oh, but there's nothing wrong with my memory. Yeah, that was just a bit...I forgot that but that's not a problem." So it's usually a relative or a loved one. So if a patient comes with a relative, I will think, "Well, there's more here than just subjective memory loss." And quite a number of patients have mild memory loss, something called a mild cognitive impairment but 60% of those patients will develop Alzheimer's disease within three years. Depending on whether it's due to...whether it'll be Alzheimer's disease or whether it'll be vascular dementia but these are the patients that

the trialists are desperate to get a hold of because of all the...there's two different proteins, analog protein and tau protein which are involved in Alzheimer's disease. So these patients are going into trials on drugs which, sadly, have yet been successful but they will eventually get there. They will get drugs to breakdown this protein which is abnormally accumulated in the brain and that causes a problem with development of Parkinson's disease. So they're trying to, with all these all these neurodegenerative conditions like Parkinson's disease, Alzheimer's disease, you know. We're desperately trying to get patients early to get them into these trials to see if these drugs will sort of prevent progression or prevent the onset of the disease.

APM: How does vascular dementia present differently to any other form of dementia?

SR: It's similar in a lot respects. Short-term memory loss happens in both. Alzheimer's disease is more of...you lose your executive function. So you get up in the morning, you have a shower, you shave, you get ready, you know what you're going to do. If, you know, you're elderly and you're retired, you might go to the bank or you might do this, you might...patients with Alzheimer's disease gradually lose that function. So they lose their executive function. They lose their ability to plan their day. So they just cannot plan their day because they can't remember to do it whereas vascular dementia tends to be a little bit different. It's more memory loss. You can get depression with vascular dementia which is more common. They are similar in a lot of ways but Alzheimer's disease is a more progressive condition and you do have more of loss of that sort of function that you would expect any normal person to be able to do. So I think you have to be careful when you talk about dementia as how you define it. If somebody comes to me with memory loss and had scores 25 or 24 out of 30, I don't consider them to have dementia.

APM: This is in your memory test.

SR: Yeah.

APM: What sort of questions do you have in your test

SR: There's a number of tests. We use one called MOCA which is Montreal Cognitive Assessment test where you ask them to draw a clock, you ask patients to remember five words, you ask them to name, you know...picture quiz and it tests different parts of your memory. It tests visuospatial. It tests executive function. It tests short-term recall and it's all broken down quite nicely.

APM: Is that that test of counting backwards and intervals of seven from 100 —

SR: Yeah, that's still part of it.

- APM: Bloody difficult for anybody who's —
- SR: I know but an easy one is just to do the months of the year backwards is one you can do then. I mean GPs haven't got time to do that so they have a shorter version, a different test, GPCOG test which takes a few minutes and there are visual tests. There's a group called Cambridge Cognition and they have it on an iPad or on a laptop, a touch screen. So different images come up and you've got to remember where they were and it's in about 20 odd different languages which is great particularly working in London. So you can get somebody who doesn't speak English who can follow this test and it gives you an idea of whether they have got, you know, significant memory impairment or not.
- APM: Hopefully, they've got some in Geordie or Scouse as well.
- SR: Probably yeah. Not in Irish though.
- APM: I need to drag you back to Parkinson's I'm afraid because we've had one that talks about stooped postures you mentioned earlier on. Has there been any research into forward head posture in Parkinson's because for a long time, that was thought to be an indicator or a problem causing back pain and other —
- SR: Yeah and I think that's a very good point. There's a couple of points I'll make there. I mean I get referred patients from spinal surgeons with a condition called camptocormia. Camptocormia is a Greek word for bent trunk and these patients are really stooped. I mean a lot of Parkinson's patients —
- APM: Quite different from kyphosis.
- SR: Yeah but spinal surgeons can't understand why they're so kyphotic but yet have normal spines because these patients can lie flat. I went to the...a domiciliary visit a couple of months ago and the patient was lying flat on bed but when he got up to walk, he was...his eyes were looking at the floor. So he had something called camptocormia which is a severe form of bent spine in patients with Parkinson's disease.
- APM: And can that happen anywhere in the spine? I mean I've a couple of patients who have got a very forward —
- SR: head drop, yeah. We think head drop is more due to several muscles pulling the head down. These muscles get a bit dystonic where they get a bit overactive and pull the head down. Patients with progressive supranuclear palsy, it tends to be the opposite. The head tends to be back, the head has been pulled back. Patients with camptocormia and Parkinson's disease, it tends to be the sort of...more the thoracic sort of spine that's really bent

over. Very difficult problem to deal with, doesn't respond to treatment. Patients do sometimes end up in surgery. They do have rods put in their back just to keep them straight but it is a big problem in Parkinson's disease but thankfully enough, not that common but you will see patients who have it.

APM: A question's come in from Sarah who probably is also in London. Thanks, Sarah. This is very much a part of the CPD we're required to do and that's to address the business of communication and consent. So when you get a patient who's suffering from dementia, what's the protocols that you or GPs or any other doctor would have to go through to ensure that you've got informed consent for treatment and what are the problems as well, yeah?

SR: I mean I think in the early stages with patients, they've got capacity. I think it's important that you check capacity and that patients have got capacity because capacity assessment should be part of any sort of mental assessment.

APM: Did you have a formal process for that or is that just —

SR: Yeah, we do. We have a sort of simple four-point sort of test for capacity which is, you know...do they understand whether it's financial or health or do you understand the issues we're talking about? Do they understand the implications? Particularly with wills making. Wills. That's slightly different but with, let's say, whatever...but do they understand it? Can they retain it and can they communicate back to me everything that we've discussed over the previous 10 minutes, is, as it was and if they can do that, that's a fairly straightforward simple test for capacity. So if they got capacity, that's fine but quite a lot of patients present with...obviously don't have capacity and that's where we have problems because you get certain members of the family who don't want the patient to know which is fine but then you get certain members of the family who don't want other members of the family to know. So there's a lot of conflict between families when it comes to patients with Parkinson's disease. I don't know whether it's guilt or whether it's financial or what but I think as doctors, we've got to be honest with patients. If you're not honest with patients, it will come back to haunt you. So I think if patients have capacity, you know...and they often ask. They often ask the question. I get lots of patients who ask me, "Have I got Alzheimer's disease?" or other types of dementia. I mean there are other types of dementia other than Alzheimer's disease but Alzheimer's is the commonest.

APM: And we should be looking for patients who are showing signs of that short-term memory loss primarily in that case.

SR: Yeah.

APM: Now, what are the other types of dementia then?

SR: So, well, the commonest is Alzheimer's disease and next is vascular dementia which patients...from a therapist point of view, vascular dementia may present with sort of gait disorders, gait apraxia, slightly broad-based gait and they walk in a bit...almost like as if they've got Parkinson's disease but their upper body is normal. It's the lower body sort of due to multiple little strokes and vascular insults. So they may have other symptoms or signs to help you towards...to diagnose it but at the end of the day, you scan them. If you see lots of vascular changes in the MRI, it'll be consistent with vascular dementia but with Alzheimer's disease, we're looking at different lobes of the brain, particularly the temporal lobe and the hippocampi which is part of the temporal lobe to see if they're atrophic, if they're smaller than they should be and often, that gives you the diagnosis. So I think the way we have...the use of scans now and MRI gives us the diagnosis even more than the clinic...yeah, we can do the memory test. We see they're impaired but when you do the scan...that's the trick. It gives you the diagnosis but sometimes you can be fooled. I had a patient recently who I'm sure has got Alzheimer's disease. Memory test, 20 out of 30, normal MRI scan. So I sent her for an FDG-PET scan, brain PET and it just lit up, showing all these areas of the brain which were damaged by Alzheimer's disease, particularly temporal and parietal.

APM: And that couldn't happen under any other circumstances.

SR: No.

APM: It has to be Alzheimer's that's caused —

SR: That has to be Alzheimer's disease. Frontotemporal dementia is another condition which is very progressive. Dementia with Lewy bodies is a disease where we see in older people. They typically present with memory impairment, dementia and visual hallucinations. Typically see relatives who may have died. They misinterpret. They might think a door is a window or a fridge is a door but...they get misinterpretation and then later, they develop Parkinsonism. I had one in my clinic today who had dementia with Lewy bodies. Unfortunately, not a condition that we can do very much about because it's quite progressive.

APM: You mentioned thinking a door might be something else. There's a book written by a doctor some years ago, wasn't there? A man who mistook his wife —

SR: for a hat, yeah.

APM: Was that —

SR: Yeah, sort of misinterpretation.

- APM: That's quite an extraordinarily and extreme...extraordinary and extreme version —
- SR: It is but if you...the Parkinson's disease is named after a GP called James Parkinson who was...he was a GP in Shoreditch in London in 1800 and whatever and he described 4 or 5 people walking down the street with classical symptoms of Parkinson's disease. It's the stooped posture, the tremor, the loss of arm swing. Classic and wrote an essay called The Shaking Palsy. And I've read that. It's a fantastic little book. It describes everything about the disease back...this is going back, you know, 100 and whatever years ago.
- APM: So have we not progressed very far?
- SR: We have because in those days, they didn't have any treatment. I mean the levodopa only came in in the '50s I think. So we haven't had the treatment for that long but you know.
- APM: It says here, "Does..." I can't even read the question. It says, "Does manual therapy help with the camplethingamy?" I'm not quite sure what that means, camptithingamy. Tell us —
- SR: Camptocormia.
- APM: Camptocormia, right, thank you. Does physical therapy help?
- SR: I think realistically, probably not. These patients are so bent over and so rigid and stiff —
- APM: Is there a loss of muscle tone in the back? I mean are the muscles just not firing —
- SR: It's more increased muscle tone. It's more rigidity. I mean I've read articles in this condition and nobody's come to a conclusion as to one absolute thing that causes it so —
- APM: But tight muscles, you'd think, would not allow people to lie flat and yet you said they can lie flat —
- SR: Yeah but I think that...yeah, when they lie flat, they're relaxed but when they're up walking...there's a lot of anxiety in Parkinson's disease. Anxiety typically makes tremor worse. So a good way of bringing out...I had a lady who came to me today and I didn't notice any tremor but as she got a bit more anxious, as I was asking her about different aspects of her social life, she got anxious and the tremor came out. So we get patients to close their eyes and count from 20 backwards and then the tremor starts appearing. So

anxiety is a big thing with Parkinson's disease and I think when they get up, they're so stooped and when they're lying flat just cause a lot less anxiety.

APM: That's typically an intention tremor, is it not?

SR: No, resting.

APM: Resting tremor.

SR: Yeah, side to side. The classical...they call it pill rolling, like rolling a pill between your index and thumb finger. I've got a video of Hitler who probably had Parkinson's disease as well as God knows what else —

APM: Couldn't wish it on a nicer man.

SR: I know. There we are. He used to hide his left hand behind his back and he had tremor, got a video of that but yeah, the tremor's usually fairly easy to diagnose, typically starts on one side and then involves the other, can involve the legs but yeah, the camptocormia is an unusual posture in Parkinson's disease and we don't really know what causes it and the fact that you can lie flat as well is a bit unusual as well but it just shows you it's not a skeletal problem. It's not a bone problem. It's not kyphosis. The spines are straight.

APM: What drug therapy is being applied to all these patients then? I mean you've mentioned some for—

SR: Alzheimers

APM: Sorry, for Parkinson's but I mean across the spectrum here. I mean it seems to me when the elderly patient comes to us these days, they are there on a bucket full of pills —

SR: They are and they bring them all as well.

APM: Or they bring a list of what they should be taking.

SR: They're bringing their drugs in a bag usually and you're wading through these bags and all these drugs. Yeah, polypharmacy is a big problem in older people. Polypharmacy quite often leads to falls. So if I get somebody —

APM: We spoke to Malcolm Kendrick. You might know Malcolm Kendrick The falls are caused by when they opened the cupboard, it's all the pills that's not been taken fall on top of them because they don't take them —

SR: That's brilliant. I love it. No but I mean there are a lot of number of drugs which cause postural hypotension which is a drop of blood pressure when you stand up. So one of the first things I...if somebody comes to be in a

general geriatric clinic with a history of falls, obviously, you do all the usual stuff. You look for Parkinson's disease, you look for bad arthritis, you look for all the stuff we do and then we do the test in the heart and all the rest of it but always look at the drugs because...and then check the blood pressure when they're lying. So you put them in the room, leave them for five minutes and stand them up and measure it to when they're standing at 1, 3 and maybe 5 minutes and then you'll see the drop in blood pressure. And then look at the drugs because there'll be 1 or 2 in there that are causing that. So if you can stop the drug that's causing the drop in blood pressure, you can often stop the falls but it doesn't always work like that. They may have something else as they're getting older. Their autonomic system doesn't work properly but drugs are...yeah, they're a necessity but quite often, they're just prescribed, prescribed, prescribed.

APM: That's what I think I heard possibly on the radio some weeks ago that there's too much repeat prescription and nobody monitors whether the patients are still in need of those drugs and so they end up on this huge cocktail of drugs which...many of which will have some sort of adverse side effect, possibly.

SR: Yeah and this classic...but they're getting better at it, GPs. The classic one was the antiosteoporotic treatment for osteoporosis, the once a week or the once a day biphosphonate medication, strengthen your bones and, you know, after five years, you're supposed to stop it and have a holiday and then you have a repeat bone scan and see where you are.

APM: That's interesting because they're in the news today, aren't they? Because the latest study of a massive total of 16 patients has shown that they're causing micro fractures on the bone.

SR: Yeah but that's a tiny percent. Tiny percentage. So patients —

APM: Well, it was a tiny population in the study, wasn't it? Sixteen —

SR: It was, yeah but I wonder where they selected them from but I mean yeah, it is a side effect of the drug. So if patients have been on antiosteoporotic biphosphonate treatment for five years, they are theoretically at risk of getting these micro fractures and these are —

APM: What are the brand names of the biphosphonates?

SR: Alendronic acid is the one...commonest one that's taken every week. Risendronate is one that's taken weekly or daily but more commonly, patients are given either six monthly or yearly injections of zolendronic acid and patients prefer that because with alendronic acid, you got to remember the day that you take it, you got to sit up for half an hour and not eat, you can have some water, otherwise, you get this inflammation of the esophagus and patients, you know...the compliance. We know the compliance is poor

but, you know, these drugs do work and patients who've had osteoporotic fractures, it's very important that they've got some protection but, you know, there are newer treatments coming on the line. There are different treatments other than biphosphonates, the denosumab which is subcutaneous injection, 12 months which works in a different way but you're right, these biphosphonates are proven to cause microfractures and these are non-traumatic fractures. So patients can suddenly fracture a hip with no trauma, just walking along the street.

APM: But you said it was a very low percentage.

SR: It's tiny, yeah. I can't remember the figures but it's very small.

APM: But the news today is going to worry a lot of people —

SR: I haven't seen that one but I'm interested in what cohort of patients they picked.

APM: I think it was...when I looked it up, it was 16. I mean I had —

SR: It's not a lot though.

APM: It's not, no and I was astonished that it actually made the news for such a small cohort. I may have missed something in the report that I read but it was —

SR: I'll have a look. It wasn't the Daily Mail, was it?

APM: No, it wasn't. Actually, it was on the BBC website because it was on the Today programme this morning —

SR: Because if it was Daily Mail, it must be true.

APM: Indeed, yeah. Well, it must be believed anyway. Yeah. Let's talk about osteoporosis then. I mean we always think of osteoporosis as post-menopausal female problem. So that's predominant —

SR: and in men. Yeah, it's often missed in men but more common in women, obviously, yeah because you lose your estrogen post-menopause. So estrogen's important in bone turnover. There are lots of patients who are put on HRT which was protective and then it was a risk of developing breast cancer with HRT but then you get studies which say the risks are small and you should continue with HRT to protect your bones. So the fact that when you get to whatever age at menopause, your estrogen levels drop and that's when your bones become susceptible to osteoporosis.

APM: But we're all losing bone density as we get older —

- SR: We are. Age is the predominant...yeah.
- APM: So the biphosphonates are trying to prevent that age-related loss of bone density.
- SR: Yeah. They're laying down new bone and preventing sort of turnover but these drugs work in different ways. There's osteoblastic which means you lay down new bone, osteoclastic where you prevent bone resorption. So there are bone resorption preventive drugs whereas other ones work a little bit different.
- APM: I take it you don't see many on HRT. I presume they'd be on —
- SR: No, I don't. I mean I'm open-minded about HRT, actually. I don't honestly know the figures but that's all we had before the biphosphonates in the old days. You know, I'm not that old but going back 15, 20 years, we didn't have the drugs we have now for osteoporosis.
- APM: What's the drug of choice now then? I mean if you're post-menopausal, are they automatically advised to take —
- SR: No, they're not, no. You want to make sure your vitamin D and calcium levels are normal which is important because all these drugs work better with vitamin D and calcium. That's proven.
- APM: Vitamin D, I mean there's a chronic shortage of that in the population.
- SR: There is, yeah. We don't get any sunlight, do we? Or people don't like sunlight and the aging population has a big problem with low vitamin D levels and that leads not just problems with osteoporosis, I quite often see aging patients coming to me with muscle aches and you may see in your practice muscle aches and pains. So if you see anybody who you think is a bit unusual, always check the vitamin D level because that leads to myalgia and muscle aches and pains, particularly thigh muscles and it's amazing how that responds to just giving them some vitamin D.
- APM: Well, one of the things that a lot of us will be very concerned about is just a screening test for osteoporosis because a lot of our manipulation is contraindicated if there is any suggestion they have osteoporosis. And in the past, we might've been looking at things like age of menarche or menopause and intake of caffeine, nicotine and so on. Have you got any other sort of guidance for us there? Obviously, we're talking vitamin D but it's hard for us to measure vitamin D —

- SR: No, I know that. I think it depends on the history. It depends on whether they've got known osteoporosis. I mean we do bone density scans if we think somebody possibly has osteoporosis.
- APM: There's a lot of bone density scanning about, isn't there? I get the sense that some machines are better than others. Now, I've seen a lot of machines in clinic which scan the density of the heel. There are others which scan at the hip. I mean are —
- SR: I think hip and spine are the two that should be done and proper sort of bone density scans are usually done in —
- APM: But the smaller machines that are doing...I think there's one that does the elbow, one that does the ankle a bit skeptical —
- SR: I don't know how accurate they are. Yeah, I don't know but they probably say they are but I think we do bone density scans looking at spine, lumbar spine and hip and, you know, neck of hip. So they give us the best results. I mean a lot come back as osteopenia which is not osteoporosis. So you can happily do what you need to do with these patients but if they're osteoporotic, you just...they have got soft bones.
- APM: There's a question about that very condition. Do you routinely assess for vitamin D and vitamin K levels in osteopenic patients and if not, do you think it's unimportant?
- SR: I wouldn't say it's unimportant because we know that osteopenia can become osteoporosis. So I think I've got somebody who's osteopenic, I will definitely make sure their calcium and vitamin D levels are normal. That's basic. So they're routinely done, cheap tests, particularly in different populations in this country where, you know, vitamin D deficiency is very common. So they are much more likely to develop osteoporosis. So it's important to make sure that these patients are given proper vitamin D and calcium levels.
- APM: Do you send someone to the GP and say, "Look, I really want to test this person's vitamin D"? Are we likely to get a good response, do you think?
- SR: Yeah. No, they're fine. They're good at that. I think that GPs do a lot of routine stuff with elderly...well, mostly elderly people anyway. So vitamin D is not an issue.
- APM: Well, geriatrics must be a good business to be in because it's a booming population —
- SR: There is plenty of them.

- APM: We're all looking forward to your services at some point. One of our questioners wants to know about age of onset for osteoporosis and you talked about the aging population being more prevalent there than otherwise. Does that mean it's also a younger population getting osteoporosis? Can you get it young?
- SR: Yeah, you can. Yeah. I mean you can get young onset menopause. It doesn't have to be late 40's, 50's.
- APM: But does the two have to be linked? I mean can you get osteoporosis long before the menopause?
- SR: You can do, yeah because the primary cause of osteoporosis is age related. That's number one. Post-menopausal, you know, that's a cause but then there's lots of other causes like thyroid disease, immobility, you know. There are secondary causes, so lack of steroid production, so on, so on, so on. There are lots of different secondary causes but they're rarer. So the commonest causes will be as you get older, essentially and that's why men get osteoporosis. So if you get somebody with back pain who's a male who may be 70's, always think, "Possibly, could that be an osteoporotic fracture?" So I think it's important not to forget. It's a bit like breast cancer. Men get breast cancer. Women, obviously, it's much more common but men do get breast cancer.
- APM: I've been asked if you can give some examples of the drugs which cause falls due to hypertension.
- SR: So the commonest ones would be —
- APM: Other than the biphosphonates.
- SR: The commonest ones would be blood pressure pills. So I think one of the problems with older people and doctors in general, not just consultants, GPs, I think we over treat blood pressure in older people sometimes because we're looking at targets and government targets and so on.
- APM: Am I right in thinking...again, Malcolm Kendrick to blame for this but I mean the parameters keep changing though.
- SR: They do but they're much of a muchness. They haven't changed a huge amount like, you know...it depends. If you're diabetic, we'll try to get...the high blood pressure is the systolic one, the top one. They say it should be down to 120. Forget it. It's never going to happen because diabetics and hypertension are really difficult to control but in general, we use drugs which lower blood pressure but can also lower blood pressure when you stand up. So you'll have to look at blood pressure drugs and there are different ones, the beta blockers, there's ACE inhibitors, there's diuretics. So I always get a

bit twitchy with older people on diuretics for blood pressure because that definitely lowers blood pressure, you know, as you stand up. So I think blood pressure pills but even antidepressants like the newer antidepressants we use, the SSRIs, sertraline, all these drugs, they would probably be the main ones. So antihypertensives, anti-blood pressure drugs, some antidepressants and you look through the list and you see if you can find the culprit and quite often, if patients have a drop in blood pressure, you can see the culprit if it's due to that. Then you just stop the drug, maybe use something slightly different.

APM: And just to run through, you know, the screen that you mentioned earlier on, you're going to test their blood pressure supine, on the treatment table —

SR: Just let them relax, lie down for five minutes and then stand them up, wait a minute, check the blood pressure and usually it'll drop and then wait three minutes, it may even drop more because you're waiting for that delayed drop and then repeat it and to see if it sort of corrected itself because —

APM: So we've got 1 minute, 3 minutes and —

SR: That's what I do.

APM: And another three minutes or...?

SR: No, I would just go 1, 3 and 5 and usually after five minutes, the posture will correct itself, the blood pressure will correct itself.

APM: or return.

SR: You know, it's...

APM: I'm surprised it can take three minutes for the blood pressure to drop. I would've expected it would be almost instantaneous.

SR: It can do, it usually is but sometimes it's delayed response depending on whatever vasopressor control they have but, you know, I always wait three minutes.

APM: And you're using an electronic sphyg or are you doing this manually?

SR: Manual. Electronics are fine but I'm old fashioned. If I think somebody's got a genuine hypertension, high blood pressure, I'll use manual because some of the machines are not calibrated properly. So they may give you false reading. You know, I had a patient recently that...250 systolic. Now, that can't be right. So you do it manually and it was normal. So I think it's important if you've got a patient you think has got high blood pressure to do it manually and I often then would refer them for 24-hour blood pressure monitoring. So they have

it done every hour and then you get an average of the day because you get a lot of white coat effect. So a patient comes see a doctor, blood pressure goes through the roof and if you do it over 24 hours, you'll find that the average is normal and there lies a problem because patients who go to their GP or go to whoever, blood pressure 180, put on a drug and then that leads to the problems with drop on blood pressure and falls.

APM: This is an interesting one. I don't know who sent this question in but they've read that there's an emerging school of thought that sugar consumption is related to Alzheimer's and in the future, Alzheimer's will be known as type three diabetes. Is that something you have an opinion on?

SR: Yeah, it's a good point. Yeah, that's a good point. There was a study in a drug called exenatide which is an antidiabetic drug. So one of the theories is that there's an effect on glucose metabolism in the brain that is sort of an anti-insulin like effect and there's been...there is a study gone on for exenatide, which is an antidiabetic drug which lowers blood sugar, and they found in those patients who had Parkinson's disease and diabetes who were put on exenatide that they...physical function improved but they also found that, you know, in Alzheimer's disease...there's a drug in America which is a coconut oil based drug which works on...a different form of glucose metabolism, that these patients who were given this drug, their memory improved but it...I don't think there's any...it's in research and, you know, we are aware of it but there hasn't been any huge dedicated trials that I'm aware of but I know exenatide in Alzheimer's disease is ongoing at the Hammersmith where a colleague of mine is involved —

APM: So it's something to keep an eye on.

SR: It is. It's a good point because, you know, we're looking at everything but that is one of them like glucose metabolism.

APM: I'll just mention this one. One of our viewers has asked whether you test for vitamin D yourself or refer to a GP.

SR: We do in the clinic.

APM: And we did talk about that but —

SR: We do it in the clinic.

APM: And for us, we presume we just refer to the GP. Is there a simple test we could do and refer to —

SR: No, they just take...it's a blood test.

APM: So if we've got nurses in our clinic, you can do that sort of stuff —

SR: You'd be amazed how vitamin D is...like rickets, there's still rickets in this country in this day and age, you know. In kids, ridiculous low vitamin D levels.

APM: What dose do you recommend that people take then of vitamin D?

SR: Well, it depends on the level, depends on what you have, what level you have. You can either take it daily like two...you get combination tablets of vitamin D and calcium you can take daily or you can take a weekly dose which is probably easier to take —

APM: Do you not think this is just a damn good advice for anybody regardless of whether you've measured their levels?

SR: I think I'd measure it because you can go the other way. You can get too high calcium. So if you're piling in with your milk and your vitamin D, you could end up getting all sorts of problems with high calcium which affects bones as well and other things. So you don't want...you should get it measured, really. I mean most is normal but I think if it's low, you know what dose to give.

APM: There's a patient of this particular viewer, aged 70, diagnosed with early Parkinson's. As we gain a lot of control and confidence through coordination, balance and strengthening exercise programs, she found on the internet...for example, by an American physio Patrick LoSasso and this viewer has given them to...have given the same exercises to other elderly patients to great effect. Is this something you've come across —

SR: Yeah, fine, absolutely, yeah. Well, I mean therapy is so important in patients with Parkinson's disease. This is absolutely —

APM: But we can't overcome the problem behind it. So —

SR: No, we can't but you can go back to trying to teach patients how, you know...about gait disorder and how, you know...with the disability, how to get around it in different ways and, you know, as I go back to the condition about freezing, so that doesn't mean you're cold. It means you get stuck and you can't move and the patients can —

APM: Just because that initiation of movement —

SR: Initiation of movement, freezing getting out of a chair, that sort of thing. So physios are fantastic with these patients because they...patients get more anxious and then it gets worse and anxiety is a big problem in Parkinson's. They get more anxious, the whole thing becomes worse. I've got a patient

who freezes, his walking stick, he turns it upside down and he walks through the hoop and that gets him over the, you know, fact that he's frozen. That just gets him going. I've got a patient...a colleague of mine has a patient who bounces a squash ball.

APM: So this is a distraction —

SR: Distraction, yeah. You get patients to march up and down on the spot and then off they go. You can buy a walking stick where you shine a light and the idea is to step over the light but most research has proven that if the object you're stepping over is raised, you have a better chance of breaking the freezing episode.

APM: And that somebody has actually asked us again why can't they turn over, what's the reason and presumably, it's that initiation of movement —

SR: Yeah, it's initiation of movement, yeah.

APM: So again, we should be trying to give them some other distraction activities to stop them thinking about turning over which is a bit hard in the middle of the night.

SR: It is hard but that usually responds very well to medication, that particular symptom.

APM: On vitamin D, a question is, "Are the supplements themselves good enough generally?"

SR: If you're deficient in vitamin D, the answer is no because there won't be enough. There won't be enough in the supplements that you buy over the counter because it's not medicinal.

APM: So yours is going to be—

SR: High doses.

APM: --intravenous once a month —

SR: No, it's by mouth. Yeah, take it by mouth, 20,000 international units a week is usually enough. You may take calcium with it, you may not. If your calcium is normal, you don't need to. So most patients I have with vitamin D deficiency prefer to take it once a week.

APM: I need to come back to this question so that people don't think I'm ignoring them. You mentioned a drug earlier on which you had to sit up for half an hour before you could take it.

SR: Alendronic acid.

APM: Alendronic acid. The question is why have you got to sit up for half an hour?

SR: Because it causes inflammation of the esophagus.

APM: So you're just trying to make sure it all disappears.

SR: You want to make sure it all goes down because if you lie or if you walk around, the chances are that it's going to cause esophagitis which is inflammation of the esophagus and lots of patients don't take the drug because of that. Well, not a lot but a number.

APM: You can understand that can't you. This person wants to know about nicotine plaques on the brain. They've got a patient, they've been told, doesn't have dementia but they have nicotine plaques. Is that a separate condition and does that progress the same way as dementia?

SR: I don't know what he means by nicotine...I mean the plaques you get in Alzheimer's disease are due to either one of two proteins, beta amyloid which is a protein which we all have and tau protein but these two proteins in Alzheimer's disease, for whatever reason whether it's environmental, whatever, don't work properly and it leads to sort of abnormal accumulation of these proteins and then you get plaque formation and that causes damage and loss of transmission and that's why...the pathology in Alzheimer's disease is due to that. You can get small plaques which are not related to Alzheimer's disease due to vascular damage but the main issue in Parkinson's disease in lots of research...and you can check for the...you can measure the spinal fluid and measure the levels of amyloid and tau proteins where amyloid goes down and tau goes up. There's a lot of research on tau protein. Everybody was concentrating on amyloid. Now they're looking at tau. Is that the main culprit in Parkinson's disease? But whatever, they're abnormal, there's abnormal transmission, you get accumulation and that's when you get plaque and they're typically temporal lobe, parietal lobe, that part of the brain.

APM: Do you come across a lot of polymyalgia rheumatica?

SR: Not really because I leave that to rheumatologists but we do see it. We get patients who present with sort of shoulder and, you know, hip girdle sort of pain or non-specific symptoms. We might do a blood test called ESR which is erythrocyte sedimentation rate and that's usually quite high, you know, typically 80, 100 or, you know, response to steroids and then of course you've got the problems with steroids that if you are on long term steroids with osteoporosis because you can get steroid-induced osteoporosis but patients with polymyalgia do feel miserable and they really do get quite a lot of musculoskeletal type symptoms, can last 3, 4, 5 years, sometimes patients come off medication. You keep an eye on ESR and if it goes up and they have

symptoms, you put them back and then there's a condition associated with it called giant-cell arteritis where you get sort of...inflammation of the artery, typically the temporal artery. You got to be careful with those patients because they present with headache and if you don't treat them urgently, they can lose their vision.

APM: You deal with what you call complex problems according to your website. Now, it occurs to me that an awful lot of things with the elderly are complex because you come in with pain and it could be due to all sorts of things. It could be due to PMR, it could be due to a fracture. It could be due to—

SR: Arthritis.

APM: --arthritis or any number of other things. I mean how difficult does that make your job? How do you screen for all those different things?

SR: Sometimes you say, "what am I going to do next?" because these are older people who are so genuine with this pain. So I'm not a pain specialist but I try and work on what the pain is due to. The commonest cause is arthritis. So is it knee? Is it shoulder? Is it hip? Have they got an impingement problem with their shoulder? Quite a lot of older people get, you know, frozen shoulder which is good with physio but, you know, they respond to steroid injections, things like that or is it osteoporosis or is it osteomalacia or is it, you know, low vitamin D or is it referred pain? I had lots of patients with spinal back pain, radiculopathy, pain referred, you know, into their legs. And so then you investigate. Is there something there that we can do about that? Is it a disc problem? Is it just spinal stenosis? Is it chronic degenerative crunching of the spine? Would they respond to maybe some epidural? Whatever. So you've got to try and work out what's causing the pain.

APM: So in your rehab clinics, what's the process there? I mean so let's assume that you don't need surgery for your patients. What are they doing to help prevent falls or improve confidence in patients who are subject to falls?

SR: The one word you've used that's really important is confidence because once an older person has a fall, their confidence is shattered and, you know, they're fearful of going out. They're even fearful within their own environment, although mostly they're OK because they furniture walk and they get themselves around. They know what...but when they go outside, the fear of falling is huge once they've had a fall. So —

APM: And presumably, you don't want to get them dependent on walking frames if you don't have to—

SR: No but sometimes that is —

APM: because that in itself can bring problems.

- SR: Sometimes it is...you have to persuade patients to use, you know, walking sticks and frames and tripods and...I mean I've got lots of patients who've got trolleys, you know, when they walk around. They're like the service trolley around their flat. That's what they use. So when they fall, I say, "You're off your trolley." No but they do. They use anything that they can...that they feel safe with. So I think physios are really, really good with patients with falls. They're really good at working out why they fall. They're probably better than we are. I mean we'll do the signs. We look at the blood pressure, we look at the drugs. We see if they've got a neurodegenerative disease like Parkinson's disease or MS or whatever but they...then they have got to deal with the problem. Whatever the cause is, they've got to deal with the problem and they're superb particularly the neuro physios. I work with a lot of good neuro physios.
- APM: So there's a reasonable amount of specific training into dealing with elderly patients. It's not something you just do off the cuff.
- SR: One word these patients need is time. It's not a five-minute fix and physios do spend a lot of time with these patients.
- APM: Which actually, you know...most of our members here will be private practitioners and of course, what our patients will need is treatment on the NHS because it is...as you say, it's going to be a long-term treatment, isn't it?
- SR: But there lies a problem and unfortunately...it's like in my clinic today. I've referred 3 or 4 patients for community physio and community rehab, OT, occupational therapy physio, one for speech therapy. Well, they'll wait a number of weeks and they really need it now but that's the way the system works. In the private sector, they'll have it tomorrow. I work with some very good therapists, excellent therapists both in the NHS and the private sector but the beauty, of course, in the private sector is that you get it immediately which is, you know...it's a shame because there's lots and lots of patients who would benefit from therapy now, not 3 or 4 weeks' time, but they're overwhelmed
- APM: well maybe that is the avenue that we can...where we can make a difference that we can offer something straight away and there are plenty of places where people can learn those skills in dealing with, you know, patients with various neurological diseases and so on. Yeah, so —
- SR: No, I mean I think therapies like your therapy is very, very important. I have lots of patients who...going back to pain. Most on the private sector because we've got a cranial-spinal osteopath at St. John's and St. Elizabeth that's part of the spinal unit and I've referred patients to them and they...excellent, really good.

APM: So when you say cranial, doing cranial osteopathy or just they're looking at the craniocervical area —

SR: Well, these are patients with headaches and cervical arthritis and, you know —

APM: That's going to cheer a lot of people up because we have so much skepticism about cranial osteopathy. I'm delighted to that. I wasn't aware of that.

SR: Well, they do. I mean I've had a couple of patients that have done really well. One man who's got quite a significant dementia who has terrible headaches, fully investigated, had, you know, serum rhubarbs done by neurologists and all it was is...just got a bit problem with his neck. So even the fact that he was dementing, he could follow instructions and he's done really well.

APM: Well, actually, that leads us on to a question which has been sitting on my list for quite some time. How do you feel about cervical manipulation in the elderly given that possible problems with osteoporosis —

SR: Yeah, I don't...I mean it is a bit unusual to get cervical osteoporotic fractures because it's more lumbar thoracic because it's more weight bearing or sacrum, sacral insufficiency fractures. Neck is...I haven't seen that many osteoporotic neck fractures, to be honest.

APM: Do you see osteoporotic changes in the neck though?

SR: Well, yeah, loss of height and being a bit bent over and stuff like that. I mean —

APM: So it is weakening the bone.

SR: Yeah but they don't actually get too many fractures per se themselves. It's more the bones, the bigger ones where...carrying the weight that fracture.

APM: That might be misleading though, mightn't it? Because normally, you won't be getting high velocity manipulations of the neck.

SR: Correct, yeah.

APM: And you don't fall on your neck generally. You fall on the other bones

SR: Exactly, yeah.

APM: So we shouldn't get any false reassurance from that —

SR: No but I...per se, I don't have any problems with neck manipulation. But I'm not a spinal surgeon.

- APM: If we're worried about social care of an elderly patient, for example, with signs of dementia and living alone, what's the best course of action for an osteopath to take? Says Katrina in Devon.
- SR: So you've got somebody who's at home. Obviously, the GP's going to be the first-line of call, social services, family —
- APM: I think she's saying if we're worried about the social care for that patient —
- SR: What, not adequate?
- APM: I think that's the implication —
- SR: Report it.
- APM: To the GP or...?
- SR: Or social services but a lot of these things have to go via the GP. So if I want to refer somebody to the district nurses, I often have to go via the GP if I want to...social services, we can refer directly from the hospital. That's fine. We've got people in hospital to do that. I think if you've got concerns about it you should report it or make the family aware of it if there are family.
- APM: I must admit that I was in...I attended somebody in the community recently, not as an osteopath but in a different capacity and I was astonished that the care that were supposed to be in place for a patient with motor neuron disease who was certainly...wasn't bed bound but wasn't able to move herself, they weren't there and I just...how can you leave somebody on their own when they can't care for themselves? And there are cases I think where the care which is commissioned by the NHS is...perhaps fall short of what we would expect.
- SR: It's a post code lottery I think, it really is. It depends on...I mean I live in Cotswolds. I think social care is fantastic. I think the NHS, general medical care where I live is fantastic and I saw that when my mother-in-law lived with us and the care she got and the social care, yes, we put a lot into it ourselves but when there was a problem, the GP was there immediately, you know he was excellent and I think it depends on where you live, you know, sadly, particularly with social care but it is a big problem now and it is causing patients to stay longer in hospital.
- APM: One of our viewers is astonished that the level of vitamin D you said that you would prescribe, 20,000 —
- SR: That's only if you're deficient though.
- APM: So she just wanted to confirm that you did say that right —

- SR: Not if it's normal.
- APM: And she said it's really helpful to know. I say she. It might be a he, I don't know.
- SR: There's a way of working it out. The dieticians are usually very good at working out...or a pharmacist, what you should have but 20,000 international units in somebody who's vitamin D deficient, depending on which level it is, is fine.
- APM: Another question here. What level of vitamin D do you think is adequate? This viewer says that the doctor says 40 is fine but the endocrinologist treating osteoporosis says it should be at least 80.
- SR: I agree with that, yeah. It should be higher. Forty's not fine in osteoporosis.
- APM: Isn't there a standard figure in a clinical handbook that a GP would refer to —
- SR: It depends on where you get the...where the tests are done but, you know, GPs look and say, "Fifty, yeah, that's fine," but if you've got a history of osteoporosis or fractures or osteopenia, you know, then it needs to be higher. I think 80 is correct, upwards towards 80, 90.
- APM: And the questions are really coming in on this one. Usually, they wait until the last five minutes then send them all in but I'm struggling to keep up with them at the moment and keep them in a sequence that you're talking. How common are the sacral insufficiency fractures that you mentioned and what about vertebral insufficiency?
- SR: Sacral, not that common, typically traumatic. So patients have a fall but they're similar to vertebral fractures. Vertebral fractures are more common than sacral fractures. The problem with sacral fractures, you can't really do anything about them but if you have a vertebral fracture and patients are in a lot of pain, you can do something called a kyphoplasty or vertebroplasty which is a procedure where you inject cement into the fracture to stabilize it and it is literally like turning off a light switch. The pain, if it works, just goes like that but it's a general anesthetic. The NHS, you can get it done but it's a bit slower. I've had patients who've had it done after 2 to 3 weeks. In the private sector, you can get it done, you know, whenever.
- APM: Of course.
- SR: But it is a technique which is quite commonly used.
- APM: What's the success rate? You said if it works —

SR: It's very successful. It's high percentages. There are —

APM: You said a kyphoplasty which makes me think we must be looking at a wedged vertebra which we're trying to restore to —

SR: Yeah or essentially, we're not so much...you're not going to restore the height of it but you're stabilizing the fracture. So you put cement in, stabilizes the fracture because you can imagine a fracture, every you move, it's like, you know...so it's a bit like putting a plaster of Paris on your wrist which just stabilizes it. There are problems sometimes with it. There's a risk of infection. It's very low, 1%. I have seen patients get an infection in there and the other problem in older people is that once you have a fracture and you stabilize it then that vertebra is strong but the ones above and below are weak and then you can get a concertina effect, fracture, fracture, fracture and they can end up with 4 or 5 kyphoplasties but mostly, you don't get that.

APM: We've got a comment here from Mike Bourne. Mike, I haven't heard from you for quite a long time. Thanks for sending this in. He says, this might be useful for the people watching, that there is a Parkinson's UK website where you can download a free exercise program either in booklet or DVD form. He says it's a great resource for patients and therapists. I've imagined you've come across that.

SR: Yeah, I know that and —

APM: Thanks for that, Mike.

SR: PD society are excellent. There's been a recent launch of a European Parkinson's sort of awareness. Parkinson's disease society are excellent. Very, very good, very supportive. When I started off 12 odd years ago, running my Parkinson's service, I didn't have a Parkinson's nurse. They were not really heard of. PD society sponsored a nurse for two years and from there, that nurse was then funded by the NHS. So they are very good.

APM: This viewer has just clarified the question about cervical manipulation. They were thinking more about problems of vertebral artery insufficiency —

SR: Oh, I see what they mean, yeah.

APM: And have you got an opinion on that —

SR: Yeah, I know what they're saying. I mean if there's any, you'd have to have, obviously, asked about a history of dizzy spells, TIA. We haven't come on to stroke yet. We can talk about stroke.

APM: We will.

SR: So I think in that case yes, I know what you're saying because there are certain conditions by manipulation and the carotid artery...you get hypersensitive carotid artery...carotid sinus syndrome, the patients will black out. So yes but it's fairly rare but I can see his point, yeah.

APM: You mentioned earlier on about myalgia and low vitamin D. do you know the chemical reason for that, the physiological process?

SR: No, we don't really know that but it's more...that's incorrect. It's more bone pain that they get rather than...so it's not muscular pain. It's more pain that they get in the bones —

APM: But they probably feel as though it's a muscular —

SR: Yeah, they do. They come and say, "I've got pain in my thighs, in muscles," but when you get the history, it's more pain coming from bone. So it's low vitamin D.

APM: We're going back to dementia and sugar is there a link between sweetness and dementia —

SR: Not that I know of but there's all sorts of...I mean I do a talk on dementia and I've got four slides on different publications. The Express, The Mail exercise is bad for you, exercise is good for you, glucose metabolism, you name it. Something comes up every single week with dementia. It'll either be, you know...but I know —

APM: It won't make the news unless it's controversial, will it? So they've got to pooh pooh something to make a headline —

SR: There just isn't any evidence based to it. This is the problem —

APM: But what about the evidence for exercise? Because we talk about weight bearing exercise is good for osteoporosis, on bone density. I mean have we got good, strong evidence that that is the case and if so, what —

SR: With dementia?

APM: No, I'm talking about...for bone density here.

SR: Exercise is good but come back to dementia, it is proven that physical exercise and mental exercise for Alzheimer's disease in particular is really good.

APM: So we should keep doing our Sudoku.

SR: I encourage patients to do that. Do your crosswords. Play your Bridge, you know, do all these sort of stuff.

APM: And you said that's effective. I mean to what extent? I mean —

SR: It just seems to improve sort of their mood and, you know...because —

APM: So it's improving the quality of life. Is it extending their —

SR: And it's not going to change their mental test scores. It's not going to suddenly reverse their dementia but it just seems to improve their quality of life rather than sitting indoors and...

APM: You talked about advising people how to fall earlier on. When we spoke on the phone a couple of days ago, I suggested we send people off for judo training so they could practice their breakfalls.

APM: What is this advice that you give people —

SR: Well, I don't know. The physios do it. So patients who are frequent fallers have a risk of fracturing. They usually have a typical sequence of fall where if it's a trip, you go down, you know...it's hard to prevent but sometimes patients feel a bit unsteady and they fall. The physios teach them how to fall properly. I mean you can wear hip protectors which whether they're any good or not, I'm not sure. The research is not great, so that if you fall on your hip, you got the protector to prevent fracture. They just teach them how to fall properly. I mean lots of patients, you know, can't do it but there are certain cohort who are protected by good physios who teach them how to fall properly. They've got this sort of...they don't black out. If they blacked out, you can't do anything about that but there are patients who fall and it's a predictable sort of fall that they have.

APM: So I imagine the advice is going to be you've got to avoid going down on rigid arm.

SR: Exactly. If you're like that —

APM: You've got to roll into the fall because you don't want to put that stress through your bones and so on.

SR: So you've got to get on to your side rather than putting your hands out and fracturing your —

APM: I would imagine that if we looked around, there would be a website somewhere which says, "This is how you should try to fall if you are, you know, a frequent faller," as you've said because there can't be much that

would make you more anxious about movement than fracturing your scaphoid or —

SR: It's just...yeah, particularly an icy road and classical one is patients fall and they...outstretched hand and they get a Colles' fracture, you know, of the wrist

APM: Do you want to talk to us a bit about strokes?

SR: Can do, yeah. I think the management of stroke now has completely changed than when I first started medicine. Stroke is catastrophic, obviously, for patients who have it. I think —

APM: TIAs can be relatively benign, can't they? People —

SR: TIA is never benign.

APM: Well, I know they can lead to strokes but I mean the consequences can be benign and maybe even short-term—

SR: Can be.

APM: --but I mean people might think of those as being relatively —

SR: Yeah but TIA is a stroke warning. So, you know, research shows if you have a TIA that you're more likely to have a stroke over the following week. That's why patients who have a TIA go to TIA clinics.

APM: Absolutely, yeah.

SR: Have their scan, have their carotids looked at, have a heart monitor, all the usual stuff and they're put on aspirin or whatever. So TIAs are precursors of stroke and sadly, not always taken seriously but they should be because, you know, we have TIA clinics now which are great but the whole management of stroke has changed. We've got hyperacute stroke units. There was a problem about St. Mary's where I work in London. It was a fantastic programme over six weeks, well worth watching on the iPlayer, fantastic and they had...you could argue. They had a 98-year-old man who had an aortic valve replacement via groin and he had a stroke during the procedure and it was just —

APM: Was this ischemic or hemorrhagic —

SR: Embolic. So when they put the catheter in, the problem is as they go over the aortic arch, it can flick off a clot and he had a stroke because when he came around after the procedure which went well, he wasn't speaking and he was a bit confused and they transferred him immediately to Charing Cross

hyperacute stroke unit. He had a CT scan the minute he arrived and they went in and did a thrombectomy which is...they actually went in and chased the clot. It's fantastic stuff but you could say, "Why would a..." Anyway, it is what it is but the advancement in stroke treatment is now incredible.

APM: Trouble is that's in Charing Cross and I've —

SR: No. They're done in all these hyperacute stroke units. You will see more and more thrombectomies where patients, they actually go in with a catheter in tiny little blood vessels and pull the clot out. You could see him chasing after the clot and pull one out.

APM: Why in those cases would they choose to that? Why aren't anticoagulants clot bursters? Why aren't they efficient in doing —

SR: Well, because in this case, they knew it was an embolic stroke. So they just went to...he was there. He was, you know...they had time. So they just went to get it. You're right. So if a patient has a stroke...so all the public awareness of face, you know...the face, arm and so on.

APM: The FAST test, yeah.

SR: FAST. So if you're within 4 hours, you have your scan and then you have your clot busting drugs. I mean you —

APM: What is the current guidance on how soon you need to be seen once you've been diagnosed of being at risk of having had or having a stroke?

SR: Well, I mean usually, it has happened, you know. Patients have a stroke like that. It's a four-hour window, maybe a little bit longer but Americans think a bit longer. So it's that window where you need to get the patient...999, hyperacute stroke, you know. There's plenty of them that are on the country, certainly in the cities. Scan and then if appropriate, they sort of, you know...the clot busting drugs but, you know, I had a patient recently who came to me...I think she came...wherever she came from outside London, only in her 60's, had a stroke, had a scan which wasn't read by a radiologist or a senior doctor and was given a clot busting drug and bled. So the risk is bleeding.

APM: Well, I was going to ask what they do for hemorrhagic strokes.

SR: Nothing.

APM: They just —

SR: Well, sometimes if it's causing a lot of pressure on the brain, they will do craniotomy and even take out part of the brain that's affected but that

particular patient, when they went back to look at the original scan, there was blood on it. So she had a stroke but had some hemorrhagic transformation. So she was given a drug that's just, you know... So we have to be very careful that if you have a scan, that the right person reads it.

APM: So if you go in with a stroke which is caused by a bleed, they won't do anything unless they can see evident pressure, intracranial pressure.

SR: Yeah, you know. I mean sometimes they do evacuate them, particularly posterior...like cerebellar bleeds and that sort of stuff, they do go in and evacuate them but usually straightforward lobar hemorrhage, they won't.

APM: Mike Bourne's on the case how to fall safely is at www.smartcellsusa.com, senior falls, how to fall safely and we'll put that on the website.

SR: It is good, yeah. I mean I've seen physios—

APM: Thanks again, Mike.

SR: working with patients who...teaching them how to fall properly.

APM: We're dotting around what you've already covered but are there cases where kyphoplasty wouldn't be suitable? For example, very severe cases of those with a risk of concertina effect is high. Can you tell?

SR: Yeah but sometimes you can't tell. You've got to be fit for general anesthetic, number one. So, you know, a number of patients won't be fit for general anesthetic if they've got heart problems and lung disease. Yes, it's a good point and sometimes patients who have a fracture and have a kyphoplasty, if there's any hint of an old fracture, they'll also do...even if it's not an acute one, they might kyphoplasty that fracture above or below but I have seen a patient with myeloma who's...which is a bone cancer essentially, who had a fracture, who had kyphoplasty and it was just like collapsed spine, above and below. It's horrible to watch but, you know, these patients are in a lot of pain. So you're doing it for sort of...you're doing it for pain relief. You're doing it for some protection of posture as well.

APM: Someone sent in the observation that they've heard that vitamin D insufficiently causes the proprioceptors to shrivel which can also contribute to falls. Is that something you're aware of —

SR: I wouldn't have a clue but —

APM: We like honesty

SR: But I've learned something, if that's the case. But there has been —

APM: Always worth looking at. We'll chase the evidence on that one, yeah.

SR: There has been controversy with vitamin D and cardiac complications and calcium replacement and stuff like that but —

APM: Meaning what?

SR: Like it increases the risk of coronary artery disease.

APM: Loss of vitamin D does.

SR: No, by replacement. But then if you look at the studies then it sort of negates itself and it's not really...but there was a lot of hullabaloo a number of years ago about vitamin D replacement and the risk of coronary artery disease which has probably been disproven.

APM: I have to ask you this since there are musculoskeletal implications. Where do you stand on the prescription of statins to patients? Because the NICE guidelines at the moment virtually mean if you're over 50, you should be taking them.

SR: I mean it depends on which paper you pick up. I mean statins, I think in general, are good but I think the doses are probably too high.

APM: Well, the thing that struck me is that the benchmark for cholesterol seems to be coming down and down and down. It's almost at zero cholesterol before anyone says it safe.

SR: Yeah but then if you have —

APM: But you've got to have cholesterol.

SR: You've got to have cholesterol and the LDL which is the lousy one, I call the lousy cholesterol, if that's high, you try and bring that down but then you've got to have the ratio right if you've got the wrong weight...but I think in general, statins are very controversial but, you know, the research is there. It does prevent heart disease. It does prevent stroke. We know it does. The research papers are there. I think probably what's happened is that the doses are being too high, like 80 milligrams. We probably could give 40, maybe, you know, sometimes 20 because if you use high doses, patients will get symptoms, horrible myalgia and will stop it and they're not interested in reducing it. They just want to get off it but they are good drugs in lowering cholesterol but we use statins in stroke patients with normal cholesterol.

APM: Which is interesting because...I mean I certainly don't want to contradict you here but in my similar interview with Malcolm Kendrick, he said there is no

evidence that statins have any effect in stroke which is a cardiovascular disease at all which is odd.

SR: Well, that's not what research shows and everybody who's had a stroke's put on a statin because the theory is that they're also anti-inflammatory. So that inflammation you get following a stroke in the blood vessels and all the rest of it, patients are automatically given statin to reduce the amount of inflammation —

APM: So if you were to put yourself in the position of chiropractor, osteopath, physio in clinic, someone comes to you with muscle pain, they're on statins, at what stage would you say, "Well, maybe we ought to look at lowering the dose"? Or asking the GP. Obviously, we can't do that.

SR: Certainly lower the dose. I sometimes say...and I've had patients who've got statin "Well, why did you stop it for a week? It's not going to do anything. It's not going to do any harm. See what happens."

APM: Is a week long enough to get an effect?

SR: Probably should be, yeah, a week, two weeks, you know. Let's say two weeks, whatever and if they come back and say, "Oh, it's gone," well, then say, "Well..." see what dose they were on and then maybe try them on a smaller dose. So introduce maybe 10 milligrams of simvastatin or whatever. They're all much of a muchness the statins. I think rosuvastatin was the one that came out maybe not so good but they're much of a muchness but I think in general, if I had heart disease or history of whatever, stroke, I think I'd rather be on one as it does give protection. It has a protective effect.

APM: We'll probably move on. There's a couple of things I wanted to cover before we finished. One of them is incontinence which —

SR: I'm not great in incontinence but I'll try.

APM: Ok it's one of the things mentioned on your website about, you know, a concern with the elderly population and I just wondered whether you had formed an opinion or seen any evidence for the influence of physical therapy in addressing incontinence whether it's pelvic floor exercises or whether it's electrotherapy because muscle stimulation of the pelvic muscles—

SR: I think certainly pelvic floor exercises do help. I can't honestly comment on electric stimulation. I don't know a lot but urologist who I work with say it does work. I mean incontinence, as you get older, is common for various reasons, whether it's female with pelvic floor problems or whether it's men with prostate problems and the other common problem is hypersensitivity of the bladder neck muscle which is a valve. So if you lose control on that valve,

incontinence is an issue but certainly, yeah, physio for pelvic floor, absolutely.

APM: And we've talked about anxiety in patients, particularly over falling. You talked briefly or you mentioned briefly depression earlier on. How big a problem is depression towards the elderly?

SR: Huge. Depression, loneliness, huge and you will read about depression and particularly loneliness in older people and it's often subtle. It's often patients who come in with somatic symptoms like aches and pains and then when you get into the history, the background is there is a depressive element to it.

APM: Which presumably have an influence on all those other problems as well.

SR: Absolutely.

APM: We talked a lot about central sensitization and how, you know, inability to cope with pain may be affected by stress —

SR: Absolutely. Pain's a big one, coming with pain. A lot of background depression with pain and it becomes a vicious circle.

APM: And what do you do for that?

SR: I just treat them. I say, "Listen..." If there's a huge...and there is often a big anxiety element to depression in older people, panic attacks, you know, don't go out, stay inside, sort of lonely, isolated...isolation is huge. If they've got family support, fine but quite often, they don't and then they've got lack of social care and so on. So become very isolated...I just treat it because, you know, the drugs are there, treat for —

APM: SSRIs by choice or —

SR: I use SSRIs mostly but I'm not...I say to my patient, "It doesn't mean you're going to be on them forever." I mean typically...let's see how you get on the next six months or a year but you find with older people that once you stop the drug, They have a lot of rebound depression and I have a number of patients who have...quite significantly depressed who did really well with medication and then we withdraw it and stop it and they come back to me a few months later, saying, "My symptoms have all come back," whereas in younger people, you are desperately trying to get them off the drug after sort of nine months usually.

APM: We've got about 45 seconds left?

SR: Is it?

APM: Yeah and this may be outside your area of expertise. Someone's asked whether you feel there'll be an increasing number of cervical fractures due to the amount of time that modern population spends looking down, possibly at their iPads, to read questions and things like that but, you know—

APM: --we spend a lot of time looking at phones and iPads and devices and computers.

SR: I don't know. Thinking from a sort of anatomical point of view, I think it's the weight bearing bones are the ones that would fracture, aren't they? You know, the vertebra, sacrum, hip, the ones that really are bearing because it's not much depends what size your brain is I suppose.

APM: Possibly, yeah.

SR: Some more than other —

APM: And I'm going to...very quickly. We got 10 seconds to answer this. Recent research shows that HRT may reduce dementia incidence. Is it perhaps a good idea in terms of bone density, stroke risk and mental function as we age and that comes from Anna in Portsmouth.

SR: Good point, I've seen that. It's all about sort of estrogen levels and...the problem is I just need to be convinced that HRT does not definitely increase the risk of breast cancer because —

APM: And the evidence is not quite clear on —

SR: Well, you see recent stuff coming out saying it doesn't and it's safe but I've seen patients on HRT who've got breast cancer. So I'm always a bit...anecdotally a bit aware of it.

APM: Fantastic. Shane, that's been—

SR: Pleasure.

APM: --fantastic. Thank you very much and there's an awful lot of stuff to cover there and I'm sorry if we didn't go into as much detail as some of our viewers would've liked but an unusual subject for us to cover and a lot of information

SR: There's a lot more.

APM: I'm sure there is. We'll get you back again. Thank you very much indeed.