Musculoskeletal Syndrome of Menopause: Why Your Joints and Muscles May Feel Different Transcript

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Introduction to estrogen and joint health

And as I mentioned, estrogen receptors are present in most of the tissues and cell types in the body. So a fair amount of research has now been done looking at the components of our joints and muscles to see what impact estrogen may be having on those tissues.

One of them is the cartilage that surrounds the bones and cushions the joints, and estrogen creates the best conditions for your cartilages. And if you're lacking in estrogen, cartillage breakdown is more likely to occur and repair is slower and less efficient.

Have you made it past menopause, or are you going through it now? I'm Dr. Pat McShane, and on the Women's Health Span Voices podcast, I'll guide you through the health challenges of the menoppausal years and beyond, guiding the way to thriving in this powerful era of your womanhood.

Hello and welcome. I'm Dr. Pat McShane. This is Women's Health Span Voices, and you are most welcome today.

Musculoskeletal syndrome of menopause

Not sure about you, but every time I get together with my senior adult friends and family members, we go through our organ recitals, our various bodily manifestations at that time.

And often things related to our bones and joints will be part of that list. Knee pain, shoulder pain. Certainly back pain and various total body aches and pains and so on.

And that was becoming apparent to a lot of researchers in this field as well. In fact, a few years back a group of them have named what we now call musculoskeletal syndrome of menopause.

And you may say, well, aging, menopause, which is it? Well, based on earlier studies looking at symptoms that women experienced during menopsis, it was determined that it's not just aging but the menoppausal status per se that increases the risk of joint pain, stiffness, muscle loss, conditions such as adhesive capsulitis or frozen shoulder, generalized fatigue, and so on.

pretty large group of symptoms here. So these investigators have renamed it MSM, or musculoskeletal syndrome of menopause, and that's what I thought we would talk about today.

Many of us in our later years continue to have various aches and pains, And I think this part hasn't been as well studied, but I'll go through what we do know about it.

So as I mentioned, joint pain is probably number one, generalized fatigue and achiness, and then some very specific syndromes, hip pain, is quite common, knee pain shoulder pain etc.

So what is the mechanism here? Well, The major event that happens to us during our menopause is loss of estrogen, which drops quite precipitously.

How estrogen affects cartilage, fluid, and muscle

It may take five or ten years for it to fully play out. But once we have gone through a full menoppause transition, our estrogen is a fraction of what it was during the reproductive years.

Our progesterone is also lower, but much less has been studied about this. Progesteron is episodic. It occurs after each ovulation, whereas estrogen kind of flows through the whole cycle.

And, of course, estrogen is very, very high during pregnancy. Pregesteron also high in pregnancy, so. What was not well studied, I think, in the past was that there are estrogen receptors over almost all the tissues and cell types in our body, and our joint structures and muscles are no exception.

We certainly know about the relationship between estrogen and bone, and I'm not going to talk about that much today, but that certainly is part of the MSM syndrome because bone is what the joints and the muscles are attached to, of course.

As I mentioned, this is not related solely to age, but to menopause status. And the incidence in the earlier studies looking at the menoppause transition appears to be somewhere about 50 to 70% of the spectrum of symptoms that I have been mentioning.

So if you find yourself experiencing some of these symptoms, you may be talking this over with your healthcare provider, your doc, or nurse practitioner.

And one of the things that they're likely to do is try to make sure that it's not something besides your menopausal status. They will certainly ask you about more typical, as we define them, symptoms of menopause, which of course is hot flashes, sleep disturbances, some mood changes, and so on.

The list is pretty long. But if it seems like the joint and musculoskeletal issues are related to menoppausal status, that should become apparent when you go through some of your other symptoms as well.

An examination of your joints is certainly in order. Sometimes that would include imaging with an x-ray or an MRI and so on. The main thing that your docs are going to want to rule out is conventional osteoarthritis, which is wear and tear arthritis that most of us have.

I certainly have it. And I have a little lump on my finger here from using my hands for so many years. Other things that are important are inflammatory arthritis, such as rheumatoid arthritis and other inflammatory syndromes, rather.

And I'm going to read off a list here, fibromyalgia, gout, pseudogout polymyalgia rheumaetica or PMR, And then some of the hormone side effects, thyroid issues are not uncommon with joint pain issues and medication side-effects.

Many of us are on statins and some people on status may experience the kinds of joint symptoms that we've been talking about. Well, when we encounter a medical symptom, the first thing that comes to the mind of the clinicians is what's the mechanism here?

Is this a plausible mechanism? And as I mentioned, estrogen receptors are present in most of tissues and cell types in the body. So a fair amount of research has now been done looking at the components of our joints and muscles to see what impact estrogen may be having on those tissues.

Hormone therapy and lifestyle support

And it's quite profound, the impact of estrogen on the tissues, one of them is the cartilage that surrounds the bones and cushions the joints and estrogen creates the best conditions for your cartilages.

If you're lacking in estrogen, cartillage breakdown is more likely to occur and repair is slower and less efficient. And there are subcellular and cellular mechanisms for all of this that have been defined pretty well at this point.

The other thing is the fluid that's within the joint capsule connecting the bone and the join capsule, the synovial fluid it's called. Estrogen is important in the production of synovial fluid.

Bone, as we mentioned, is strongly impacted by estrogen, and bone resorption and re-formation is strong impacted estrogen as well. The other hormone that, I mentioned occurs episodically or periodically in female reproductive years, assuming that you're not on a hormonal type of birth control, progesterone.

And the data on progesterone isn't nearly as clear cut as it is for estrogen. Some of the impact of pro testosterone is positive, some is counter to the effect of estrogen, but it seems like that piece hasn't been worked out as fully.

And that becomes important when we start to talk about treatment. Another piece of this is the muscle per se. And I think that's been a little slower to come into our consciousness here, but it turns out that estrogen is important in muscle growth, muscle repair, and strength of muscle contraction.

So it may not be your imagination that you don't feel as strong or you can't maybe run as fast or cycle as your menopausal transition. So let's talk for a sec about treatment.

And certainly people who are in the menoppausial transition, and this sometimes can go on for five or 10 years, as I mentioned, the replacement of estrogen hormone can make a big difference in these symptoms that people experience.

So the first thing that I would say is if you're having these symptoms and they get better if take estrogen, then that's probably the explanation for your symptoms.

And that is wonderful and keep going forward with that. apparently many, many reasons to take hormone replacement therapy. If you have a uterus, which most of us do unless you've had a hysterectomy, then the progesterone needs to be balancing off the estrogen so you don't develop overgrowth of the lining of uterus which can ultimately lead to cancer.

So again, the caveats here are make sure that you're on bioidentical estrogen, not synthetic or the older forms of estrogen that have more potential risks and side effects.

And take progesterone to balance it out at least every three months, if not every month. So that, you can work out with your practitioner. And if that's the end of the story, wonderful.

Of course, anybody like me who's looking at total lifestyle approach to our lifespan and our health span is going to say the following things, which is healthy nutrition.

An antioxidant diet, which is not difficult to sort out these days, can make a big difference in symptoms as well. Obviously, exercise, and that includes aerobic and resistance.

And I would throw in their balance from a standpoint of prevention of falls and certainly of hip fractures and other oftentimes serious fracturs. Weight optimization is important as well, and there's pretty good data that people who are overweight or obese are more likely to have joint and musculoskeletal issues, which kind of makes sense given the stress on joints that have to be carrying around extra weight.

So that's always a very, very difficult topic and a difficult thing to pull off. But if possible, if you're on the fence about, let's see, weight loss plans such as the medications or even the surgery, the musculoskeletal piece may push you in the direction of going forward with that.

And finally, sleep optimization. And I've got a podcast with a marvelous sleep expert for you to refer to, but most of us can do quite well with our sleep if we do basic sleep hygiene mechanisms like donate right before you try to go to sleep, don't drink coffee or tea in the late afternoon.

and exposure to light first thing in the morning, but not in evening and so on. So there's a number of things that can be done to optimize sleep. That's just a short list that I'm giving you there.

The data about what to do if you're in your 70s or even 60s, and you haven't started hormone replacement therapy

is not nearly as good. So going back to these other things that I mentioned, exercise, diet, sleep, weight management, etc., are probably your best friend at this point.

I know there's practitioners out there who are starting, we older ladies, on hormone replacement at a more advanced age. And I, again, will mention that vaginal estrogen for vaginol and genitourinary symptoms is critical and can be started at any age, but as far as the total overall risk of starting hormones in later years, I think the jury is still out on that one and we will be getting more data over subsequent years because we're starting to recognize that estrogen replacement is useful, especially if done early on in the menopause transition or early menopus is very helpful for things like dementia and heart disease.

So we are getting a whole different view of hormone replacement therapy than we had 25 years ago, actually more than that now, almost 35 years, ago when some of the data took so many people off of their hormone replacement therapy.

So I hope this is useful and it's great to have you with me and if this good information for you, please like and share it with your friends and I'll see you again soon.

Thank you. Thanks for listening to the Women's Health Span Voices podcast. If today's episode spoke to you, follow the show and share it with a friend ready to take charge of her health.

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