🩺 Menopause Musculoskeletal Syndrome (MMS): Doctor Discussion Guide

Published Research Abstract:

Fifty-one percent of humans are born with ovaries. As the ovarian production of estrogen diminishes in midlife and ultimately stops, it is estimated that more than 47 million women worldwide enter the menopause transition annually. More than 70% will experience musculoskeletal symptoms, and 25% will be disabled by them through the transition from perimenopause to postmenopause. This often-unrecognized collective of musculoskeletal symptoms, largely influenced by estrogen flux, includes arthralgia, loss of muscle mass, loss of bone density, and progression of osteoarthritis, among others. In isolation, it can be difficult for clinicians and patients to adequately appreciate the substantial role of decreasing estrogen, anticipate the onset of related symptoms, and actively treat to mitigate future detrimental processes. Thus, in this review, we introduce a new term, the musculoskeletal syndrome of menopause, to describe the collective musculoskeletal signs and symptoms associated with the loss of estrogen. Given the significant effects of these processes on quality of life and the associated personal and financial costs, it is important for clinicians and the women they care for to be aware of this terminology and the constellation of musculoskeletal processes for which proper risk assessment and prophylactic management are of consequence.

Citation:

Wright VJ, Schwartzman JD, Itinoche R, Wittstein J. The musculoskeletal syndrome of menopause. **Climacteric. 2024** Oct;27(5):466-472. doi: 10.1080/13697137.2024.2380363. Epub 2024 Jul 30.
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Why This Matters:

The introduction of the term 'Menopause Musculoskeletal Syndrome' (MMS) highlights the significant impact estrogen loss has on musculoskeletal health during menopause. Recognizing MMS is crucial for timely intervention to prevent long-term disability and improve quality of life.

Conversation Starter with Your Doctor:

"I've been reading about Menopause Musculoskeletal Syndrome and its impact on women's health during menopause. I'd like to discuss my risk factors and explore appropriate screenings and interventions to maintain my musculoskeletal health."

Symptoms to Discuss:

☐ Joint pain or stiffness
☐ Muscle weakness or loss
☐ Decreased balance or coordination
☐ History of fractures or concerns about bone density

Recommended Tests to Request:

☐ DEXA scan – Measures bone density and body composition (muscle vs fat)
☐ Vitamin D levels – Essential for calcium absorption and bone health
☐ A1C and fasting insulin – Assess blood sugar and insulin sensitivity
☐ High-sensitivity CRP or ESR – Markers of systemic inflammation
☐ Basic Metabolic Panel (BMP) – Checks kidney function, electrolytes, and more
☐ Cystatin C – A more accurate kidney function marker (less influenced by muscle mass or creatine use)
☐ Urine microalbumin-to-creatinine ratio – Detects early signs of kidney stress, especially in insulin resistance or high blood pressure

Why This Testing Matters:

Menopause-related changes can intersect with **metabolic syndrome**, a cluster of risk factors that raise your risk for: cardiovascular disease, type 2 diabetes, and accelerated bone and muscle loss decline (including bone and muscle loss)

Key Risk factors:

☐ High fasting glucose (≥100 mg/dL)
☐ Waist circumference >35 inches
☐ High blood pressure (≥130/85 mmHg)
☐ Low HDL cholesterol (<50 mg/dL)
☐ High triglycerides (≥150 mg/dL)

If you have **three or more**, it meets the clinical definition of **metabolic syndrome**. But even one or two markers are early signs that your body may be under metabolic stress—and that's worth addressing early.