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## **Musculoskeletal Syndrome as a Condition of Menopause and What to Do About It**

~ Amy Cushing, ghostwriter

Did you wake up this morning and notice your shoulder throbbing something fierce? Have your achy knees been achier than ever? Are you finding the tightness in your hips moving into “really uncomfortable” territory? Do you also happen to be in or approaching midlife?

Here is the good news: You are not alone in battling these aches and pains...and it’s not all in your head. For years, doctors have noted that it is common for women in perimenopause and menopause to begin experiencing achy joints, sore muscles, and worsening arthritis.

The not-so-good news is that treatments for these symptoms haven’t necessarily kept pace with the considerable need for perimenopausal and menopausal women to find relief. It is estimated that 71% of women in perimenopause will experience some form of musculoskeletal pain, that is, pain in their muscles or joints. For many, these physical ailments can be debilitating—for others, they can lead to disability.

A [recent article published in Climacteric](#) may change how physicians approach perimenopausal and menopausal symptoms. The authors noted the need to assess these ailments as more than simply symptoms of perimenopause and menopause, but rather as valid conditions that occur as a result of the menopausal journey.

During perimenopause and menopause, women's estrogen levels fluctuate. It is important to note that estrogen affects more than just the ovaries—it also affects other areas of the body, such as the brain, heart, muscles, joints, and even bones. As these levels decrease, women may experience symptoms they hadn't experienced previously.

The article notes five symptoms that fall under what they have termed the **musculoskeletal syndrome of menopause**. The authors believe that naming these conditions will help physicians recognize and assess their origin, identify patients who may be at risk, and provide preventative care.

#### 1) Inflammation

Estrogen acts as an anti-inflammatory. And with estrogen receptors found in most of our tissues and organs, a drop in estrogen can cause inflammation to increase throughout our bodies. [A Journal of Neuroinflammation article](#) noted perimenopause and menopause as a “systematic inflammatory phase.”

#### 2) Sarcopenia

Sarcopenia is the loss of muscle mass. Again, because estrogen receptors are located throughout our muscle fibers, a decrease in estrogen can lead to muscle loss and a loss of functionality, as mitochondrial production—the energy that powers our muscles—is disrupted. This can increase the risk of falls due to the loss of balance, strength, and stability.

#### 3) Loss of satellite cells in muscle tissue

To make matters worse, a decline in estrogen can also decrease the production of satellite cells in our muscles. Estradiol, an estrogen hormone, stimulates the production of satellite cells in our muscle fibers, which are crucial to muscle repair and regeneration.

#### 4) Osteoporosis

The rate of bone loss increases during perimenopause and menopause as estrogen production drops. While the correlation is not fully understood, it is thought that a lack of estradiol disrupts natural bone regeneration, increasing the activity of osteoclastic cells to absorb old bone while decreasing the activity of osteoblastic cells to build new bone.

## 5) Arthritis

Once again, fluctuating estrogen levels are the culprit. The cartilage tissue that cushions our joints is made up of cells called chondrocytes, which are regulated by—you guessed it—estrogen. As estrogen drops, so does the cartilage regeneration by chondrocytes, creating less cushioning in our joints.

The authors also highlighted treatments and preventive strategies that can alleviate musculoskeletal syndrome symptoms and prevent additional damage.

- Proper testing: Utilize bone scans and screenings to compile a detailed health history.
- Nutrition: Add protein for muscle mass, eat more anti-inflammatory foods, and limit processed foods that can increase inflammation.
- Exercise: In particular, strength training to help build muscle and slow down muscle loss.
- Vitamins and supplements: Include Vitamin D3 and magnesium to combat bone loss.
- Hormone replacement therapy (HRT), noted in the article as menopausal hormone therapy (MHT): Treatments to help slow estrogen loss and provide patients with a smoother transition.

Don't feel like you have to go through the menopausal journey alone. Join my **XXXXXXXXX** program to find support and community. Start the new year by focusing on yourself and your health!

*Ghostwriting for women's wellness expert*

*Published January 2025*