



What People With Lupus Need to Know About Osteoporosis

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What Is Lupus?

Lupus is an autoimmune disease, a disorder in which the body attacks its own healthy cells and tissues. As a result, various parts of the body – such as the joints, skin, kidneys, heart, and lungs – can become inflamed and damaged. There are many different kinds of lupus. Systemic lupus erythematosus (SLE) is the form of the disease that is commonly referred to as lupus.

People with lupus can have a wide range of symptoms. Some of the most commonly reported symptoms are fatigue, painful or swollen joints, fever, skin rashes, and kidney problems. Typically, these symptoms come and go. When symptoms are present in a person with the disease, it is known as a flare. When symptoms are not present, the disease is said to be in remission.

According to the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) at the National Institutes of Health, 90 percent of those diagnosed with lupus are women. The disease is three times more common in black women than white women. Women of Hispanic, Asian, and Native American descent are also at increased risk. Lupus typically appears in people between the ages of 15 and 45. Unfortunately, there is no cure for the disease.

What Is Osteoporosis?

Osteoporosis is a condition in which the bones become less dense and more likely to fracture. Fractures from osteoporosis can result in significant pain and disability. Osteoporosis is a major health threat for an estimated 44 million Americans, 68 percent of whom are women.

Risk factors for developing osteoporosis include:

- being thin or having a small frame
- having a family history of the disease
- for women, being postmenopausal, having an early menopause, or not having menstrual periods (amenorrhea)
- using certain medications, such as glucocorticoids
- not getting enough calcium
- not getting enough physical activity
- smoking
- drinking too much alcohol.

Osteoporosis is a silent disease that can often be prevented. However, if undetected, it can progress for many years without symptoms until a fracture occurs.

The Lupus – Osteoporosis Link

Studies have found an increase in bone loss and fracture in individuals with SLE. In fact, women with lupus may be nearly five times more likely to experience a fracture from osteoporosis.

Individuals with lupus are at increased risk for osteoporosis for many reasons. To begin with, the glucocorticoid medications often prescribed to treat SLE can trigger significant bone loss. In addition, pain and fatigue caused by the disease can result in inactivity, further increasing osteoporosis risk. Studies also show that bone loss in lupus may occur as a direct result of the disease. Of concern is the fact that 90 percent of the individuals affected with lupus are women, a group already at increased osteoporosis risk.

Osteoporosis Management Strategies

Strategies for the prevention and treatment of osteoporosis in people with lupus are not significantly different from the strategies for those who do not have the disease.

Nutrition: A diet rich in calcium and vitamin D is important for healthy bones. Good sources of calcium include low-fat dairy products; dark green, leafy vegetables; and calcium-fortified foods and beverages. Also, supplements can help ensure that the calcium requirement is met each day.

Vitamin D plays an important role in calcium absorption and bone health. It is synthesized in the skin through exposure to sunlight. While many people are able to obtain enough vitamin D naturally, excessive sun exposure can trigger flares in some people with lupus. These individuals may require vitamin D supplements in order to ensure an adequate daily intake.

Exercise: Like muscle, bone is living tissue that responds to exercise by becoming stronger. The best exercise for your bones is weight-bearing exercise that forces you to work against gravity. Some examples include walking, climbing stairs, weight lifting, and dancing.

Exercising can be challenging for people with lupus who are affected by joint pain and inflammation, muscle pain, and fatigue. However, regular exercises such as walking can help prevent bone loss and provide many other health benefits.

Healthy lifestyle: Smoking is bad for bones as well as the heart and lungs. Women who smoke tend to go through menopause earlier, triggering earlier bone loss. In addition, smokers may absorb less calcium from their diets. Alcohol can also negatively affect bone health. Those who drink heavily are more prone to bone loss and fracture, both because of poor nutrition and an increased risk of falling.

Bone density test: Specialized tests known as bone mineral density (BMD) tests measure bone density at various sites of the body. These tests can detect osteoporosis before a fracture occurs and predict one's chances of fracturing in the future. Lupus patients, particularly those receiving glucocorticoid therapy for 2 months or more, should talk to their doctors about whether they might be candidates for a bone density test.

Medication: Like lupus, osteoporosis is a disease with no cure. However, there are medications available to prevent and treat osteoporosis. Several medications (alendronate, risedronate, ibandronate, raloxifene, calcitonin, teriparatide, and estrogen/hormone therapy) are approved by the Food and Drug Administration (FDA) for the prevention and/or treatment of osteoporosis in postmenopausal women. Alendronate and risedronate are also approved for use in men. For people with lupus who develop or may develop glucocorticoid-induced osteoporosis, alendronate has been approved to treat this condition and risedronate has been approved to treat and prevent it.

Resources

For additional information on osteoporosis, visit the National Resource Center Web site at www.niams.nih.gov/bone or call 1-800-624-2663.

For additional information on lupus, visit the National Institute of Arthritis and Musculoskeletal and Skin Diseases Web site at www.niams.nih.gov or call 1-877-22-NIAMS (a toll-free call).

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For Your Information

This publication contains information about medications used to treat the health condition discussed here. When this fact sheet was printed, we included the most up-to-date (accurate) information available. Occasionally, new information on medication is released.

For updates and for any questions about any medications you are taking, please contact the U.S. Food and Drug Administration at 1-888-INFO-FDA (1-888-463-6332, a toll-free call) or visit their Web site at www.fda.gov.

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