Osteoporosis: lifelong prevention

Osteoporosis, which means "porous bones," is a condition characterized by low bone mass and deterioration of bone tissue. This leads to increased bone fragility and risk of fracture, particularly of the hips, spine and wrists.



Osteoporosis is often known as "the silent thief" because bone loss occurs without symptoms and progresses painlessly until a bone breaks. It can result in serious disability and deformity. A hip fracture almost always requires hospitalization and major surgery. Such an injury can impair a person's ability to walk and may cause prolonged or permanent disability or even death. Hip fractures result in death in up to 20 per cent of cases, and disability in 50 per cent of survivors.

Spinal or vertebral fractures also have serious consequences, including loss of height, severe back pain, and deformity. "Compression" fractures are caused when weakened bones in the spine collapse, causing severe back pain. When several of these bones collapse, loss of height or stooped posture, what used to be called a “widow’s hump” may occur.

According to a recent study, one in two women and one in four men over 50 will suffer a vertebral fracture. These numbers are predicted to rise as the population ages.

On the diagnostic front, advances such as bone density scanning now enable detection of osteoporosis before fractures occur. But prevention is best, particularly since preventative measures primarily involve lifestyle changes that also benefit overall health. If osteoporosis is common in your family, you should discuss it with your doctor.

Potential Causes

Many things can either cause or contribute to osteoporosis. Some of these are out of our control. As people age, loss of estrogen contributes to bone density loss, for example, and premature menopause accelerates bone loss.

There are some factors that can be controlled or prevented however. Lack of physical activity, excessive use of alcohol or tobacco and low sunlight exposure may be contributing factors of osteoporosis that are generally easy to remedy.

Calcium and Vitamin D

Inadequate calcium and vitamin D can be a major factor in osteoporosis. Calcium is essential for maintaining bone density and Vitamin D helps your body absorb calcium.

Poor absorption can sometimes be due to other medical conditions. These cases may require medical advice, but generally, calcium and vitamin D can be obtained through diet and supplements. A diet rich in calcium should be followed throughout life. Some calcium-rich foods include:

- Milk
- Cheeses
- Ice cream and dairy desserts
- Fish such as salmon, shrimp or sardines
- Canned or dried beans and tofu
- Some vegetables, such as broccoli and dark greens

Hormone Therapy Replacement (HRT)

HRT at menopause replaces lost estrogen. Given that estrogen loss is a key factor in osteoporosis, HRT can help to prevent the condition. Estrogen can also be used to reduce the number of fractures in people who already suffering from osteoporosis. Consult your doctor for more information on HRT.

Exercise

Muscle mass and bone density increase with exercise. Weight bearing exercise is the most valuable. A regular exercise program that starts at a young age is most helpful but exercise that starts at an older age still provides many benefits.

For more information about preventing or dealing with osteoporosis, contact a medical professional.