Understanding Senile Osteoporosis

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Symptoms, Causes and Treatments of Senile Osteoporosis

Senile osteoporosis, also referred to as degenerative osteoporosis, occurs as a result of aging and wear and tear on the bones.

The mineral composition of bone changes with advancing age. Bone matrix, the framework of the skeletal cells, becomes weaker and thinner. The inside of the bones take on a lacey appearance, weakening and becoming subject to fracture. Senile osteoporosis is classified as a systemic condition.

Senile osteoporosis is twice as common among women than men, and beginning after menopause in women. Clinically significant changes usually become apparent in women between 70 and 75 of age. Men are usually diagnosed after the age of 75.

The rate of bone loss is greatest in the spine. Fractures of the vertebrae and hip may cause permanent debility. The condition is diagnosed with the aid of imaging, blood, and urine tests.

Signs of Senile Osteoporosis

Low back pain is common, and may radiate from the back outwardly. Back pain is worse when standing, especially for prolonged periods, and is usually relieved by lying down. Fractures in the mid-back may occur spontaneously. Pain may suddenly appear and be sharp; or it may be chronic and nagging.

A person may lose height. A hump, called a dowager's hump, may appear on the back and the ribcage may become deformed. With structural changes and discomfort, breathing may be restricted. A person who has senile osteoporosis is also more likely to develop lung diseases, related to poor ventilation and immobility. Fractures of the hip or spine may occur with minor trauma or no provocation.

What Causes Senile Osteoporosis?

New bone formation slows with increasing age, and the rate by which old bone cells are reabsorbed increases. This is affected by a decrease in hormone levels.

Additionally, the use of medications and the presence of health problems increases as people grow older, and these things may interfere with how the body uses nutrients needed for bone health. Some medications and health conditions prevent absorption of minerals. Collagen formation may become impaired.

Many older people have poor diets, taking in inadequate amounts of calcium, vitamin D, protein, phosphorus, and other nutrients and therefore not providing the body with the tools that it needs to produce healthy bones.

Next page: risk factors that contribute to bone loss.

Risk Factors in Developing Senile Osteoporosis

Genetics play the most important role in the development of the condition. Some experts consider that genetics is responsible for up to 80% of the risk of developing osteoporosis. Asian and Caucasian people are most likely to develop senile osteoporosis, while people of African descent have a lower likelihood. Small-boned females have the highest risk of senile osteoporosis.

Some studies indicate that diets containing high amounts of red meat may lead to high risks of bone weakness and fracture. Meats produce acid and that acid may leach minerals from boney tissues. Diets high in plant-based protein do not promote demineralization of the bones.

Additional foods to avoid include high sodium diets interfere with mineral and electrolyte balance within the body. A lifetime of excess salt consumption may be a risk factor for the development of senile osteoporosis. Caffeine is acidic and promotes the loss of bone. Diets high in phosphates, such as those contained in processed meats, interfere with bone health.

Smoking, particularly, among women, is another risk factor for the development of senile osteoporosis. Women smokers are also more likely to suffer from fractures. However the reasons why smoking promotes osteoporosis is unknown. Some experts believe that it may be related to an interaction between smoking and hormone balance.

People who are immobilized lose bone mass very rapidly. This is of particular concern for the aged as many older adults suffer from serious, chronic illnesses that require hospitalization. Being paralyzed, using a wheelchair or being immobile due to illness or choice raises the chances of bone loss and fracture.

Illnesses That Contribute to Bone Loss

Many illnesses precipitate bone loss. Here is a list of some of the most common illnesses which are risk factors for senile osteoporosis:

- Kidney disease including kidney stones
- Rheumatoid arthritis
- Multiple myeloma

- Chronic obstructive pulmonE disease (COPD)
- Skeletal deformities
- Eating disorders like bulimia and anorexia nervosa

Next page: treating senile osteoporosis.

Illnesses That Contribute to Bone Loss

- Endocrine disorders like diabetes mellitus, Cushing’s disease, hyperthyroidism and hyperparathyroidism, or removal of the thyroid gland
- Vitamin D deficiency
- Poor nutrition
- Hepatic illnesses, gallbladder diseases, cirrhosis, alcoholism
- Gastrointestinal disorders, malabsorption problems, inadequate levels of hydrochloric acid in the stomach, removal of part of the intestines, bypass surgery for weight loss
- Chronic back pain

Treatment of Senile Osteoporosis

Prevention of senile osteoporosis begins in childhood. A lifetime of healthy eating, engaging in weight bearing exercises, avoiding tobacco, and limiting alcohol consumption are keys to prevention. Unfortunately most people do not incorporate preventative actions until late in life.

There are several facets to treatment for people who have senile osteoporosis. Goals include maintaining bone mass, keeping bones strong – not frail and subject to breakage – and avoiding debility, pain and suffering due to fractures.

Options include:

- Taking calcium, magnesium, zinc, and vitamin D supplements, which provide the body with the compounds needed for bone growth.
- Taking synthetic or natural hormone replacement medications, which are beneficial for at-risk women.
- Taking fluoride, another element that supports bone growth.
- Taking medications classified as bisphosphonates, which prevent bone tissues from being reabsorbed. They help to reduce the risk of fracture significantly.

Senile osteoporosis is a serious condition. It results in a loss of quality of life, pain and very often the need for surgery. People who suffer from back and hip fractures may need to spend extensive periods in rehabilitation facilities. Individuals who have senile osteoporosis often suffer fractures and contract serious health problems as a result of immobility.

Hip fractures that occur as a result of senile osteoporosis contribute to loss of independence and even death. The monetary health care costs of debility caused by senile osteoporosis is immeasurable, and human suffering due to a loss of independence, stress of patients and family members and pain is enormous.

Prevention throughout life and early treatment of senile osteoporosis can reduce the impact that this condition has on the lives of so many.