

OSTEOPOROSIS



BASIC INFORMATION

DESCRIPTION

Osteoporosis (porous bones) is a progressive disease where the loss of normal bone density, bone mass and bone strength, leads to increased thinning and vulnerability to fracture. This silent disease (no symptoms) starts early in life, but its effects are seen later in life. It most often affects women after menopause. This condition has been defined as bone density measurement that is -2.5SD (standard deviation) from a normal 30 year old female. Osteopenia (low bone mass) is defined as between -1 and -2.5.

FREQUENT SIGNS AND SYMPTOMS

- No symptoms (often).
- Backache.
- Sudden back pain with a cracking sound indicating fracture.
- Fractures occurring with minor injury, especially of the hip or arm.
- Deformed spinal column with humps.
- Loss of height.

CAUSES

Loss of bony structure and strength. Factors include:

- Prolonged lack of adequate calcium and protein in the diet.
- Low estrogen levels after menopause.
- Decreased activity with increased age.
- Smoking (possibly).
- Use of steroid (cortisone) drugs and some anticonvulsants.
- Prolonged disease, including alcoholism.
- Vitamin deficiency (especially of vitamin C).
- Hyperthyroidism.
- Cancer.
- Genetic predisposition.

RISK INCREASES WITH

- Surgery to remove the ovaries.
- Radiation treatment for ovarian cancer.
- Poor nutrition, especially inadequate calcium and protein.
- Body type. Small framed, thin women are more susceptible.
- Family history of osteoporosis.
- Stroke.
- Smoking.
- Heavy drinking of alcohol.
- Long-term use of cortisone drugs.
- Use of thyroid medications.

PREVENTIVE MEASURES

- Ensure an adequate calcium intake up to 1500 mg a day with milk and milk products or calcium supplements.
- Regular exercise, such as brisk walking (which is weight-bearing), which is better for preventing osteoporosis than swimming (nonweight-bearing).
- Seek medical advice about the risks and benefits of medications used to treat osteoporosis.
- Avoid risk factors where possible.

EXPECTED OUTCOME

- There is no cure for osteoporosis. Diet changes, calcium supplements, vitamin D, exercise, estrogen and other medications can halt and may reverse some bone deterioration.
- Fractures will heal with standard treatment.

POSSIBLE COMPLICATIONS

- Falls that cause bone fractures, especially of the hip or spine. Sometimes a bone will break or collapse without injury or fall.
- Severe, disabling pain.



TREATMENT

GENERAL MEASURES

- Medical tests include bone x-rays and bone density studies.
- Treatment goals are directed to stopping further bone loss, preventing any fractures, relieving pain and rebuilding bone.
- If estrogen is prescribed, get regular medical pelvic exams and Pap smears. Examine your breasts for lumps once a month. Report any vaginal bleeding or discharge.
- Avoid all circumstances which may lead to injury. Stay off icy streets and wet or waxed floors. Hold banisters when using stairs, and make sure banisters are sturdy.
- Use heat or ice in any form to ease pain.
- Sleep on a firm mattress.
- Use a back brace, if prescribed.
- Use correct posture when lifting.
- Avoid mind altering medication, such as sedatives or tranquilizers, which may cause falls and fractures.
- Additional information available from the National Osteoporosis Foundation, 1150 17th St., Suite 500 NW, Washington, DC 20036, (800) 223-9994; web site www.nof.org.

MEDICATION

- For minor pain, you may use nonprescription drugs such as acetaminophen.
- Take calcium and vitamin D supplements if recommended.
- There are a variety of prescription medications available to prevent and treat bone loss, including hormone replacement therapy (HRT). The options will be discussed with you.

ACTIVITY

Stay active, but avoid the risk of falls. Exercise is important to strength your muscles and improve your balance. Try weight-bearing exercise, such as brisk walking.

DIET

Eat a well-balanced diet high in protein, calcium and vitamin D or a reducing diet if you are overweight.



NOTIFY OUR OFFICE IF

- You or a family member has symptoms of osteoporosis.
- Pain develops, especially after injury.
- New, unexplained symptoms develop, such as vaginal bleeding. Drugs used in treatment may produce side effects.