**Osteoporosis**

**CONDITION DESCRIPTION**

Osteoporosis is a common condition that is the result of lost bone mass and changes in bone structure. Osteoporosis raises the risk of a painful bone fracture. Osteoporosis is more common in women after menopause. About 4.5 million women and 0.8 men over age 50 have osteoporosis. Risk factors for osteoporosis include: advancing age, menopause, non-Hispanic white or Asian background, small bone structure, parents who broke their hips, and having a prior fracture from a low-level injury, particularly after 50.

Osteoporosis is a side effect of some medications, such as glucocorticoids, heparin and cancer treatments that deplete sex hormones. Smoking, alcohol abuse, eating disorders like anorexia, sedentary lifestyle, and low levels of vitamin D or calcium are other risk factors.

**SIGNS/SYMPTOMS**

Osteoporosis does not have noticeable symptoms. A person may notice height lost when clothes no longer fit. Most people discover they have osteoporosis after a bone breaks, even from a minor injury like a fall.

Osteoporosis fractures are most common in the spine, hip and wrist. They may lead to chronic pain, disability or even death in some cases.

A rheumatologist can diagnose osteoporosis with a quick, painless test called bone mineral density (BMD) test, most frequently performed by a DEXA scan, which measure your bone health. A T-score of -2.5 or lower indicates osteoporosis. Pregnant women should not have DEXA as it could harm the fetus. In rare instances, patient with history of low impact fracture may have decreased bone strength and may be considered to have osteoporosis, regardless of their BMD.

People with T-scores between -1.0 and -2.5 have low bone mass or osteopenia. They are at risk to develop osteoporosis later on and may need treatment to prevent it.

**COMMON TREATMENTS**

People with osteoporosis should get enough calcium and vitamin D in their diet or supplements to support healthy bone mass. They should get regular physical activity, including weight-bearing exercises like walking.

Most people with osteoporosis also need medications to slow bone mass loss or prevent fractures. Bisphosphonates are the most common treatments for osteoporosis. These anti-resorptive drugs include alendronate (Fosamax), risendronate (Actonel), ibandronate (Boniva) and zoledronic acid (Reclast).

Possible side effects of bisphosphonates include osteonecrosis of the jaw and atypical femoral fractures. Most women who take bisphosphonates are postmenopausal.

Other osteoporosis treatments include calcitonin (Calcimar, Miacalcin), estrogen or hormone-replacement therapy, selective estrogen receptor modulators, teriparatide (Forteo), abaloparatide (Tymlos), strontium ranelate and denosumab (Prolia). Patients should discuss possible side effects of these treatments with their rheumatologist.

**CARE/MANAGEMENT TIPS**

People with osteoporosis should take action to prevent slips or falls that could cause a bone fracture. Use walking aids like a cane or walker. Remove throw rugs and secure loose cables, as these could be tripping hazards. Plug in nightlights leading to the bathroom. Install bathroom grab bars and use nonskid bath mats.

Ask for help with lifting or carrying heavy items. Wear sturdy shoes with soles that grip to help prevent tripping and falling. Exercises like yoga and tai chi help improve balance to prevent slips and falls. Osteoporosis may be preventable. Get enough calcium and vitamin D, and avoid smoking and excessive alcohol use. Stay physically active, including weight-bearing exercises like walking, to help prevent bone loss.