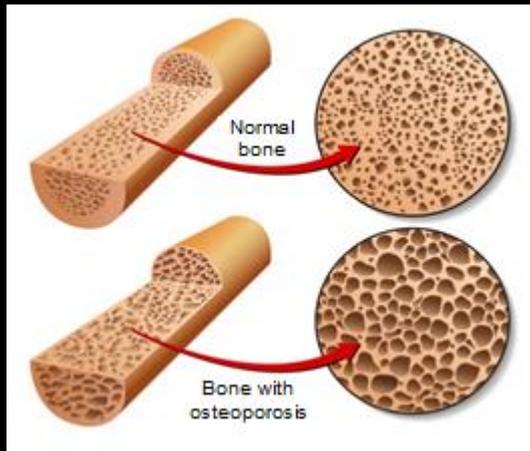


Osteoporosis (OP)



Osteoporosis (OS-tee-oh-puh-RO-sis) is a progressive disorder of the bones, characterized by low bone mass (density), deterioration of bone tissue and disruption of bone architecture resulting in weak bone with increased risk of fracture.



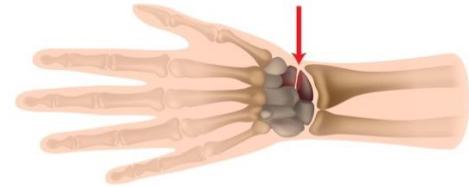
CAUSES/TRIGGERS:

- **Primary OP:** Accounts for 80-95% of cases and often related to menopausal state and aging
- **Secondary OP:** Only accounts for 5% of cases, and is often related to chronic diseases, and some drugs (e.g., long-term use of corticosteroid, anticonvulsants)

Symptoms:

In the early stages of the disease there are no symptoms. Later on fragility fractures of the wrist, hip, and spine are seen frequently with little or no trauma such as falls from sitting or standing positions. Chronic pain is a common feature during fracture healing.

Wrist Fracture



Individuals requiring medication treatment

| Treatment | Early detection and treatment decrease the risk of future fractures |
|--------------------|--|
| Non-medical | <p>Improved diet: Balanced diet to maintain normal body weight</p> <p>Exercise: Benefits those with or at risk of osteoporosis</p> <p>Fall prevention: Evaluate risk and advise</p> |
| Medications | <p>Bone modifying agents: Reduce bone resorption and increase bone density.</p> <ul style="list-style-type: none"> • Bisphosphonates (Bis-fos-fo-nates), such as; pamidronate, alendronate, risedronate are few among others • RANK ligand inhibitors, such as; denosumab <p>Hormones:</p> <ul style="list-style-type: none"> • Selective estrogen receptor modulators, such as raloxifene helps in reducing bone turn over • Calcitonin, a hormone from the thyroid gland which regulates the calcium levels and slows the rate of bone thinning • Parathyroid hormone analog, such as teriparatide- helps in bone formation • Conjugated estrogens and medroxyprogesterone for prevention of osteoporosis and may be for treatment as second line therapy |

To reduce the risks adopt life style changes including:

- Smoking cessation
- Reduce alcohol consumption
- Regular exercise (caution in case of already weakened bones)
- Consume balanced diet containing necessary vitamins and minerals

For more information on osteoporosis and other diseases: visit at www.educateyourhealth.com