

Osteoporosis Overview - Bombay Spine Clinic

- Osteoporosis

What Is It?

- Osteoporosis is a condition in which bones become weak, fragile and more prone to fractures. It develops when bone density and bone quality gradually decrease over time, making the skeleton less able to withstand normal stresses.
- Osteoporosis is often called the “Silent Disease” because there are usually no symptoms until a fracture occurs. The spine is one of the most commonly affected areas, and osteoporosis-related spinal fractures can lead to severe back pain, height loss and spinal deformity.
- The condition is particularly common in postmenopausal women and older adults but can also affect men.
- Common Symptoms
 - In the early stages, osteoporosis may not cause any symptoms.
 - As the condition progresses, patients may experience:
 - Early Symptoms
 - No symptoms in many cases
 - Gradual loss of height
 - Poor posture
 - Spine-Related Symptoms
 - Sudden onset back pain
 - Persistent back pain
 - Multiple episodes of back pain
 - Stooped posture
 - Rounded back (Kyphosis)
 - Difficulty standing upright
 - Fracture-Related Symptoms
 - Vertebral compression fractures
 - Hip fractures
 - Wrist fractures
 - Fragility fractures following minor falls or injuries
 - Many patients are diagnosed only after a fracture occurs.

Causes & Risk Factors

- Ageing
- Bone density naturally decreases with age.
- Menopause
- Reduced estrogen levels after menopause accelerate bone loss.
- Nutritional Deficiencies
- Calcium deficiency
- Vitamin D deficiency
- Poor protein intake
- Lifestyle Factors
- Physical inactivity
- Smoking
- Excessive alcohol consumption
- Medical Conditions
- Rheumatoid arthritis
- Chronic kidney disease
- Thyroid disorders
- Malabsorption disorders
- Medications
- Long-term use of:
 - Steroids
 - Certain anti-epileptic medications
 - Some cancer treatments
- Risk factors include:
 - Female gender
 - Increasing age
 - Family history of osteoporosis
 - Low body weight
 - Previous fragility fractures
- When Should You Seek Medical Advice?
 - Medical evaluation is recommended if:
 - You are above 50 years of age with risk factors
 - You have experienced a low-impact fracture
 - Height loss is noticed
 - A rounded back develops
 - Persistent back pain occurs
 - Osteoporosis runs in your family
 - You are postmenopausal

- You have been taking steroids for a prolonged period
- Seek Immediate Medical Attention If:
- Sudden severe back pain develops
- A fracture is suspected after a fall
- Walking becomes difficult following injury
- How Is It Diagnosed?
- Clinical Examination
- Your doctor will assess:
- Risk factors
- Previous fractures
- Height loss
- Postural changes
- Spinal deformity
- X-Ray
- May reveal:
- Vertebral compression fractures
- Height loss of vertebrae
- Kyphotic deformity
- DEXA Scan (Bone Density Test)
- The gold standard investigation for diagnosing osteoporosis.
- It measures bone mineral density and helps determine fracture risk.
- MRI
- May be useful in:
- Evaluating spinal fractures
- Distinguishing old and new fractures
- Assessing nerve compression
- CT Scan
- Occasionally required for detailed fracture assessment.
- Blood Tests
- May help identify:
- Vitamin D deficiency
- Calcium abnormalities
- Hormonal disorders
- Secondary causes of osteoporosis

Treatment Options

- Non-Surgical Treatment

Treatment aims to strengthen bones and prevent fractures.

- Management may include:
- Calcium supplementation
- Vitamin D supplementation
- Osteoporosis medications
- Weight-bearing exercises
- Strength training
- Fall prevention strategies
- Lifestyle modifications
- Smoking cessation
- Regular monitoring and long-term treatment are often necessary.
- Surgical Treatment
- Surgery is not required for osteoporosis itself.
- However, surgery may be needed when osteoporosis causes complications such as:
- Vertebral Compression Fractures

Treatment options may include:

- Vertebroplasty
- Kyphoplasty
- Spinal stabilization surgery
- Hip Fractures
- May require surgical fixation or replacement procedures.
- The choice of treatment depends on the fracture type and overall patient health.

Frequently Asked Questions

- 1. What is Osteoporosis?
- Osteoporosis is a condition in which bones become weak and prone to fractures.
- 2. Why is Osteoporosis called a Silent Disease?
- Because many patients have no symptoms until a fracture occurs.
- 3. Who is at highest risk?
- Postmenopausal women, older adults and individuals with certain medical conditions or risk factors.
- 4. What is a DEXA Scan?
- A DEXA scan is a specialized test used to measure bone density and diagnose osteoporosis.
- 5. Can Osteoporosis cause back pain?
- Yes. Vertebral compression fractures are a common cause of back pain in osteoporosis.
- 6. Can men develop Osteoporosis?
- Yes. Although less common than in women, osteoporosis can also affect men.

- 7. Can exercise help?
- Yes. Weight-bearing and strengthening exercises help improve bone health and reduce fracture risk.
- 8. Can Osteoporosis be cured?
- While osteoporosis cannot be completely reversed in most cases, appropriate treatment can significantly reduce fracture risk.
- 9. Is Vitamin D important?
- Yes. Vitamin D plays a crucial role in calcium absorption and bone health.
- 10. When should I get screened?
- Individuals above 50 years of age, especially postmenopausal women and those with risk factors, should discuss screening with their doctor.
- Related Conditions
- Spinal Fracture
- Kyphosis
- Scoliosis
- Ankylosing Spondylitis
- Mechanical Low Back Pain (Lumbago)
- Lumbar Canal Stenosis
- When Should You Consult a Spine Specialist?
- If you experience sudden back pain, height loss, a stooped posture, vertebral fractures or concerns regarding osteoporosis-related spinal problems, consultation with a spine specialist can help assess spinal health and guide appropriate treatment.
- Early diagnosis and treatment are essential to prevent fractures, maintain mobility and preserve quality of life.
- Need Expert Advice?
- Book a consultation with Dr. Siddharth Katkade or upload your DEXA scan, X-rays or MRI for review through our Patient Resource Centre.

Need Clinical Evaluation or Second Opinion?

This educational document was prepared by **Dr. Siddharth Katkade**. For appointments or to share MRI scan reports for clinical review, call **+91 88507 73095** or consult at Byculla (E) / Khar (W) clinics.