

Kyphosis Overview - Bombay Spine Clinic

- Kyphosis

What Is It?

- Kyphosis refers to an excessive forward curvature of the upper spine, resulting in a rounded or hunched appearance of the back. While a mild degree of thoracic curvature is normal, excessive curvature may lead to noticeable postural changes, pain and, in severe cases, functional limitations.
- Kyphosis can occur in children, adolescents and adults. It may result from poor posture, developmental disorders, spinal fractures, osteoporosis, infections or other spinal conditions.
- The condition is commonly referred to as a “hunchback” or “rounded back”, although not all patients develop a visible deformity.
- Common Symptoms

Symptoms depend on the severity and underlying cause.

- Patients may experience:
- Visible Signs
- Rounded upper back
- Stooped posture
- Forward bending of the spine
- Prominent hump or hump-like appearance
- Head positioned forward relative to the body
- Pain-Related Symptoms
- Upper back pain
- Neck pain
- Muscle fatigue
- Stiffness
- Difficulty standing upright for prolonged periods
- Advanced Symptoms
- Progressive spinal deformity
- Balance difficulties
- Reduced mobility
- Breathing difficulties (in severe cases)
- Neurological symptoms (rarely)

- Some patients may initially seek medical attention because family members notice worsening posture.

Causes & Risk Factors

- Postural Kyphosis
 - The most common type.
 - Occurs due to:
 - Poor posture
 - Prolonged desk work
 - Excessive mobile phone use
 - Weak back muscles
 - This type is usually flexible and correctable.
- Scheuermann's Kyphosis
 - A developmental condition seen in adolescents where vertebrae develop an abnormal wedge shape.
- Osteoporotic Kyphosis
 - Occurs due to vertebral compression fractures caused by osteoporosis.
- Congenital Kyphosis
 - Present at birth due to abnormal spinal development.
- Secondary Kyphosis
 - May occur due to:
 - Spinal tuberculosis
 - Spinal infections
 - Tumors
 - Trauma
 - Ankylosing spondylitis
 - Risk factors include:
 - Osteoporosis
 - Increasing age
 - Poor posture
 - Vitamin D deficiency
 - Previous spinal fractures
- When Should You Seek Medical Advice?
 - Medical evaluation is recommended if:
 - A rounded back becomes noticeable
 - Posture progressively worsens
 - Persistent back pain develops
 - Height loss is observed
 - Walking becomes difficult

- Balance is affected
- The deformity appears to increase over time
- Seek Immediate Medical Attention If:
- Weakness develops in the arms or legs
- Difficulty walking occurs
- Bladder or bowel symptoms develop
- Severe neurological symptoms appear
- How Is It Diagnosed?
- Clinical Examination
- The doctor evaluates:
- Posture
- Spinal alignment
- Flexibility of the deformity
- Neurological function
- Associated spinal abnormalities
- X-Ray
- Standing spinal X-rays are the primary investigation.
- They help determine:
- Degree of kyphosis
- Vertebral abnormalities
- Presence of fractures
- Progression of deformity
- MRI
- MRI may be recommended when:
- Neurological symptoms are present
- Spinal cord compression is suspected
- Infection or tumor needs evaluation
- CT Scan
- Useful for detailed assessment of bony anatomy and complex deformities.
- Blood Tests
- May be advised when infection, inflammatory disease or metabolic bone disorders are suspected.

Treatment Options

- Non-Surgical Treatment

Treatment depends on the cause and severity of the deformity.

- Non-surgical management may include:

- Posture correction
- Physiotherapy
- Back strengthening exercises
- Ergonomic modifications
- Osteoporosis treatment
- Vitamin D and calcium supplementation
- Bracing (in selected growing adolescents)
- The goal is to improve posture, reduce pain and prevent progression.
- Surgical Treatment
- Surgery may be considered when:
- Significant deformity is present
- Progressive worsening occurs
- Severe pain persists
- Neurological symptoms develop
- Balance becomes impaired
- Spinal cord compression occurs
- Common procedures include:
- Kyphosis Correction Surgery
- Deformity Correction Surgery
- Instrumented Spinal Fusion
- Osteotomy Procedures (in severe deformities)
- The specific surgical approach depends on the severity and underlying cause of kyphosis.

Frequently Asked Questions

- 1. What is Kyphosis?
- Kyphosis is an excessive forward curvature of the upper spine causing a rounded back appearance.
- 2. Is every rounded back Kyphosis?
- Not necessarily. Some patients have poor posture without structural spinal deformity.
- 3. Can poor posture cause Kyphosis?
- Yes. Postural kyphosis is one of the most common forms, especially in adolescents and office workers.
- 4. Can Kyphosis be corrected with exercise?
- Postural kyphosis often improves with exercises and posture correction. Structural kyphosis may require additional treatment.
- 5. Can osteoporosis cause Kyphosis?
- Yes. Vertebral compression fractures due to osteoporosis are a common cause in older adults.
- 6. Is surgery always necessary?
- No. Most patients can be managed without surgery.
- 7. Can Kyphosis worsen over time?

- Yes. Depending on the cause, the deformity may progress if left untreated.
- 8. What is Scheuermann's Disease?
- It is a developmental form of kyphosis occurring in adolescents due to abnormal vertebral growth.
- 9. Can Kyphosis cause breathing problems?
- Severe deformities may occasionally affect lung function.
- 10. When should I worry about Kyphosis?
- Progressive deformity, severe pain, neurological symptoms or balance problems require specialist evaluation.
- Related Conditions
- Scoliosis
- Osteoporosis
- Spinal Fracture
- Ankylosing Spondylitis
- Spinal Tuberculosis
- Myelopathy
- When Should You Consult a Spine Specialist?
- If you notice worsening posture, a rounded back, persistent upper back pain, height loss or progressive spinal deformity, consultation with a spine specialist can help identify the underlying cause and guide appropriate treatment.
- Early diagnosis is particularly important in growing children, adolescents and patients with osteoporosis to prevent progression and maintain spinal function.
- Need Expert Advice?
- Book a consultation with Dr. Siddharth Katkade or upload your X-rays/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.