

Kyphosis Surgery - Bombay Spine Clinic

- Kyphosis Surgery
- Surgery for Hunched Back Deformity and Sagittal Balance Correction

What Is This Surgery?

- Kyphosis Surgery is performed to correct excessive forward curvature of the spine (Kyphosis), restore spinal alignment and improve overall posture and balance.
- While the normal spine has a gentle forward curve in the thoracic region, excessive kyphosis can lead to a hunched-back appearance, chronic pain, imbalance, difficulty standing upright and, in severe cases, neurological problems or breathing difficulties.
- The goals of surgery are to:
 - Correct spinal deformity
 - Restore normal spinal alignment
 - Improve posture and balance
 - Relieve pain
 - Protect the spinal cord and nerves
 - Improve walking ability
 - Enhance quality of life
- The procedure typically involves spinal instrumentation using pedicle screws, rods and fusion techniques. In severe deformities, corrective osteotomies (controlled bone cuts) may be required to achieve adequate correction.
- Kyphosis Surgery is one of the most specialized forms of spinal deformity correction and requires meticulous planning and advanced surgical expertise.
- Why Is This Surgery Performed?
- This surgery may be recommended for:
 - Scheuermann's Kyphosis
 - Post-Traumatic Kyphosis
 - Degenerative Kyphosis
 - Osteoporotic Kyphotic Deformity
 - Congenital Kyphosis
 - Post-Infective Kyphosis
 - Post-Tubercular Kyphosis
 - Sagittal Imbalance

- Progressive Spinal Deformity
- Common symptoms that may lead to surgery include:
 - Hunched back appearance
 - Poor posture
 - Chronic back pain
 - Fatigue while standing
 - Difficulty standing upright
 - Walking difficulty
 - Loss of balance
 - Progressive deformity
 - Neurological symptoms
- In severe cases:
 - Leg weakness
 - Difficulty walking
 - Breathing difficulties
 - Reduced quality of life
- Who Is A Suitable Candidate?
 - You may be a suitable candidate if:
 - ✓ Significant spinal deformity is present
 - ✓ The deformity is progressively worsening
 - ✓ Pain is affecting daily activities
 - ✓ Significant sagittal imbalance is present
 - ✓ Neurological symptoms have developed
 - ✓ Walking ability is impaired
 - ✓ Conservative treatment has failed
 - ✓ Surgery is expected to improve function and quality of life
- How Is The Surgery Performed?
 - Step 1
 - The procedure is performed under general anesthesia.
 - Step 2
 - The patient is positioned on a specialized spinal surgery table.
 - Step 3
 - Advanced imaging guidance and neuromonitoring systems are used throughout the procedure to enhance safety.
 - Step 4
 - Pedicle screws are inserted into selected vertebrae.
 - Step 5
 - Specialized rods are attached to the screws.

- Step 6
- The kyphotic deformity is gradually corrected using modern deformity correction techniques.
- Step 7
- In severe deformities, osteotomies (controlled bone cuts) may be performed to achieve adequate correction.
- Step 8
- Spinal alignment and balance are carefully assessed.
- Step 9
- Bone grafts are placed to achieve long-term spinal fusion.
- Step 10
- The wound is closed and sterile dressings are applied.
- The duration of surgery depends on the severity of deformity and the complexity of correction required.
- What Are The Advantages?
- Potential benefits include:
 - Improved posture
 - Correction of spinal deformity
 - Restoration of spinal balance
 - Reduced back pain
 - Improved walking ability
 - Improved standing endurance
 - Enhanced appearance and confidence
 - Better spinal alignment
 - Prevention of further progression
 - Improved quality of life
- In appropriately selected patients, Kyphosis Surgery can dramatically improve posture, function and overall well-being.
- What Are The Risks?
- Every surgical procedure carries certain theoretical risks and potential complications. However, every effort is made to minimise these risks through meticulous surgical planning, advanced technology and comprehensive patient optimisation.
- At Bombay Spine Clinic™, Kyphosis Surgery is performed using modern deformity correction systems, advanced spinal instrumentation, intraoperative imaging and neuromonitoring technology. These tools help maximize deformity correction while protecting the spinal cord and nerves throughout the procedure.
- In addition, every patient undergoes a detailed pre-operative assessment. Depending on individual health requirements, this may involve evaluation and optimisation by physicians, cardiologists, anaesthetists, pulmonologists and other specialists. This multidisciplinary approach helps improve surgical safety and overall outcomes.
- Potential risks that are discussed with patients include:
 - Infection
 - Bleeding

- Dural tear (CSF leak)
- Nerve injury
- Spinal cord injury
- Implant-related complications
- Loss of correction
- Failure of fusion
- Adjacent segment degeneration
- Persistent pain
- Rare need for revision surgery
- Fortunately, modern technology, neuromonitoring and careful surgical planning have significantly improved the safety of kyphosis surgery.
- Preparing For Surgery
- Before surgery:
 - Clinical evaluation
 - Standing full-spine X-rays
 - MRI scan
 - CT scan (if required)
 - Blood investigations
 - Medical fitness assessment
 - Pulmonary evaluation (if required)
 - Anaesthesia assessment
- Patients should inform their doctor regarding:
 - Previous spinal surgery
 - Heart disease
 - Respiratory disorders
 - Osteoporosis
 - Bleeding disorders
 - Allergies
 - Current medications
- What Happens During Hospital Stay?
- Day of Surgery
- Hospital admission
- Surgery

Recovery room observation

- Pain management
- Neurological monitoring
- First 24–72 Hours

- Assisted mobilization
- Physiotherapy guidance
- Breathing exercises
- Wound care
- Functional rehabilitation
- Discharge
- Most patients are discharged within:
- 4–7 days
- depending on the complexity of surgery and recovery.

Recovery After Surgery

- Week 1
- Expected symptoms:
- Surgical site discomfort
- Improved posture
- Walking encouraged under supervision
- Gradual increase in mobility
- Weeks 2–6
- Progressive walking programme
- Improvement in stamina
- Return to routine daily activities
- Follow-up consultations
- 6 Weeks–3 Months
- Continued rehabilitation
- Strengthening exercises
- Improvement in balance and endurance
- Long-Term Recovery
- Fusion continues over several months.
- Most patients experience substantial improvement in posture, spinal alignment, mobility and quality of life.
- Regular exercise, maintenance of bone health and adherence to rehabilitation protocols contribute to long-term success.

Frequently Asked Questions

- 1. Why do I need Kyphosis Surgery?
- Because your spinal deformity is causing pain, imbalance, postural problems or neurological symptoms that may continue to worsen over time.
- 2. Are there alternatives to surgery?

- Observation, physiotherapy and bracing may be appropriate in selected patients. Surgery is usually recommended when deformity is severe, progressive or significantly affecting quality of life.
- 3. Will I become taller after surgery?
- Many patients notice an increase in height after correction because the excessive spinal curvature is reduced. The amount varies depending on the severity of deformity.
- 4. How long will I stay in hospital?
- Most patients remain in hospital for approximately 4–7 days.
- 5. When can I start walking after surgery?
- Most patients begin assisted walking within 24–48 hours after surgery.
- 6. When can I start outdoor walking?
- Outdoor walking is generally started after approximately 1–2 weeks depending on recovery.
- 7. When can I travel after surgery?
- Short local travel is usually possible after approximately 2–3 weeks. Long-distance travel is generally recommended after 6–8 weeks.
- 8. When can I return to work or school?
- Typical timelines are:
- School or College: Approximately 4–6 weeks
- Work From Home (WFH): Approximately 3–4 weeks
- Office-Based Work: Approximately 6–8 weeks
- Physical Work: Approximately 3–6 months
- 9. When can I drive, exercise, dance or resume sports?
- Driving is generally permitted after approximately 6 weeks.
- Sports, dancing, gym workouts and high-impact activities are usually resumed after 4–6 months depending on recovery and fusion progress.
- 10. What is the success rate of Kyphosis Surgery?
- When performed for appropriate indications, Kyphosis Surgery has a high success rate in correcting deformity, restoring spinal balance and improving quality of life.
- Most patients experience significant improvement in posture, appearance, confidence, pain levels and overall function.
- 11. Will the deformity return after surgery?
- The corrected spinal segments are fused and stabilized. Recurrence of the treated deformity is uncommon when a solid fusion is achieved and appropriate follow-up care is maintained.
- Myth vs Fact
- Myth:
- A hunched back is simply a part of ageing and cannot be corrected.
- Fact:
- Many forms of kyphosis can be effectively treated. In selected patients, surgery can significantly improve posture, balance and quality of life.
- Myth:

- Kyphosis Surgery is only cosmetic.
- Fact:
- While appearance often improves, the primary goals are to restore spinal balance, reduce pain, improve function and prevent progression of deformity.
- When Should I Contact My Surgeon After Surgery?
- Contact your surgeon if you experience:
- Fever
- Increasing wound discharge
- Progressive weakness
- Difficulty walking
- Severe pain
- New numbness
- Difficulty passing urine
- Sudden worsening of symptoms
- Related Conditions
- Kyphosis
- Scheuermann's Disease
- Post-Traumatic Kyphosis
- Post-Tubercular Kyphosis
- Sagittal Imbalance
- Related Procedures
- Scoliosis Surgery
- Spino-Pelvic Fixation Surgery
- Multilevel Laminectomy Decompression & Fixation (MLDF)
- Need Expert Advice?
- If you have been diagnosed with kyphosis, a hunched-back deformity, post-traumatic deformity or sagittal imbalance, or would like a second opinion regarding your X-rays, MRI or treatment plan, you may schedule a consultation or upload your imaging studies for specialist review.
- Dr. Siddharth Katkade Consultant Spine Surgeon
- Bombay Spine Clinic™

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.