BOMBAY SPINE CLINIC

Dr. Siddharth Katkade • Consultant Spine Surgeon

MBBS, MS, DNB, FASSI (Germany, UK – AO Spine)

Appointments & Helpline: +91 88507 73095
Email: siddharthkatkade@gmail.com
Clinics: Masina Hospital, Byculla (E) & Khar (W), Mumbai
Website: bombayspineclinic.com

Acdf - Bombay Spine Clinic

- Anterior Cervical Discectomy & Fusion (ACDF)
- Surgery for Cervical Slip Disc, Cervical Radiculopathy & Cervical Myelopathy

What Is This Surgery?

- Anterior Cervical Discectomy & Fusion (ACDF) is one of the most commonly performed spine surgeries for patients suffering from a slipped disc in the neck (cervical disc herniation), cervical nerve compression or spinal cord compression (cervical myelopathy).
- The surgery is performed through a small incision at the front of the neck, allowing the surgeon to safely reach the affected cervical disc without disturbing the muscles at the back of the neck.
- The goals of the surgery are to:
- Remove the damaged cervical disc causing nerve or spinal cord compression.
- Relieve pressure on the spinal cord and nerve roots.
- Reduce neck pain, arm pain, numbness and weakness.
- Restore the normal height and alignment of the cervical spine.
- Stabilize the operated spinal segment using an interbody cage with or without a cervical plate and screws.
- Promote fusion between the affected vertebrae for long-term stability.
- ACDF is considered a minimally invasive open cervical spine procedure, performed using microsurgical techniques and specialised instruments through a small cosmetic incision. Worldwide, it is regarded as the gold-standard operation for appropriately selected patients with cervical disc disease and cervical myelopathy.
- Why Is This Surgery Performed?
- This surgery may be recommended for:
- Cervical Slip Disc (Cervical Disc Herniation)
- Cervical Radiculopathy (Pinched Cervical Nerve)
- Cervical Myelopathy (Spinal Cord Compression)
- Cervical Canal Stenosis
- Cervical Foraminal Stenosis
- Degenerative Cervical Disc Disease
- Bone Spurs (Cervical Osteophytes) causing nerve compression
- Progressive neurological weakness
- Common symptoms that may lead to surgery include:
- Persistent neck pain
- Pain radiating into one or both arms

- Tingling or numbness in the fingers
- Weakness in the shoulder, arm or hand
- Difficulty holding objects
- Hand clumsiness
- Frequent dropping of objects
- Difficulty with buttoning clothes or writing
- Loss of balance while walking
- Stiffness in the legs
- Progressive neurological symptoms despite conservative treatment
- Who Is A Suitable Candidate?
- You may be a suitable candidate if:
- ✓ Symptoms persist despite medications and physiotherapy.
- ✓ Neck pain is associated with significant arm pain or neurological symptoms.
- ✓ MRI confirms cervical nerve root or spinal cord compression.
- ✓ Progressive weakness develops in the arm or hand.
- ✓ Cervical myelopathy is diagnosed.
- ✓ Difficulty walking or hand clumsiness is worsening.
- ✓ Quality of life is significantly affected.
- ✓ Symptoms interfere with work, sleep or daily activities.
- How Is The Surgery Performed?
- Step 1
- The procedure is performed under general anesthesia. The patient lies comfortably on the operating table with the neck positioned appropriately.
- Step 2
- A small horizontal skin incision (approximately 3–5 cm) is made along a natural skin crease on the front of the neck for an excellent cosmetic outcome.
- Step 3
- The muscles, windpipe (trachea), food pipe (oesophagus) and major blood vessels are gently separated—not cut—to safely reach the cervical spine. The affected disc is identified using specialised instruments and magnification.
- Step 4
- The damaged disc is completely removed. Bone spurs and thickened ligaments compressing the spinal cord or nerves are carefully removed to achieve complete decompression. A specialised cage filled with bone graft or bone substitute is inserted into the disc space, and in many patients, a cervical plate with screws is used to provide additional stability and promote successful fusion.
- Step 5
- After confirming satisfactory decompression and implant positioning, the wound is closed with cosmetic sutures. Most ACDF procedures are completed within 1–2 hours, depending on the number of spinal levels treated.

- What Are The Advantages?
- Potential benefits include:
- Small cosmetically placed incision
- Minimal muscle damage
- Excellent decompression of nerves and spinal cord
- Relief of arm pain and numbness
- Improvement in hand function
- Better walking balance in patients with myelopathy
- Restoration of normal cervical alignment
- Stable spinal fusion
- Less postoperative pain
- Shorter hospital stay
- Early mobilisation
- Faster return to normal activities
- Excellent long-term outcomes for appropriately selected patients
- 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™, ACDF is performed using modern microsurgical techniques, high-quality implants and specialised instruments that allow precise decompression of the spinal cord and nerves while minimising tissue injury.
- Every patient also undergoes detailed pre-operative evaluation and optimisation with physicians, cardiologists, anaesthetists and other specialists whenever required, ensuring maximum safety and smoother recovery.
- Potential risks discussed with patients include:
- Infection
- Bleeding
- Temporary swallowing discomfort
- Temporary voice hoarseness
- Dural tear (rare)
- Nerve injury
- Persistent symptoms
- Failure of fusion (non-union)
- Implant-related complications
- Adjacent segment degeneration
- Rare need for revision surgery
- Fortunately, significant complications are uncommon when surgery is performed for appropriate indications using modern surgical techniques.
- Preparing For Surgery

- Before surgery:
- Clinical evaluation
- MRI and X-ray review
- CT scan (when required)
- Blood investigations
- Medical fitness assessment
- Medication review
- Anaesthesia assessment
- Patients should inform their doctor regarding:
- Blood thinning medications
- Diabetes
- Heart disease
- Previous neck surgeries
- Allergies
- Smoking history
- Smoking cessation is strongly recommended as it improves bone healing and fusion.
- What Happens During Hospital Stay?
- Day of Surgery
- Hospital admission
- Surgery

Recovery room observation

- Pain management
- Early neurological assessment
- First 24 Hours
- Assisted walking
- Liquid to soft diet as tolerated
- Physiotherapy guidance
- Wound care instructions
- Discharge
- Most patients are discharged within:
- 24–48 hours
- depending on recovery and the number of levels operated.

Recovery After Surgery

- Week 1
- Expected symptoms:

- Mild neck discomfort
- Temporary swallowing difficulty in some patients
- Walking encouraged
- Light daily activities permitted
- Weeks 2–6
- Gradual increase in activity
- Follow-up consultation
- Physiotherapy if advised
- Improvement in arm pain and neurological symptoms
- 6 Weeks–3 Months
- Progressive strengthening exercises
- Return to routine daily activities
- Continued bone fusion
- Long-Term Recovery
- Most patients experience excellent relief of arm pain and improvement in neurological function. Maintaining good posture, neck exercises and a healthy lifestyle helps optimise long-term outcomes.
- When Can I Return To Work?
- Occupation
- Approximate Timeline
- Desk Job
- 2–4 weeks
- Light Work
- 4–6 weeks
- Manual Labour
- 8–12 weeks
- Driving
- 3–4 weeks (after medical clearance)
- Sports
- 10–12 weeks

Frequently Asked Questions

- 1. Why do I need this surgery?
- Because a damaged cervical disc or bone spur is compressing your spinal cord or nerve, causing persistent pain, weakness or neurological symptoms.
- 2. Are there alternatives to surgery?
- Yes. Many patients improve with medications, physiotherapy and activity modification. Surgery is recommended when conservative treatment fails or neurological deficits develop.
- 3. Will I have a large scar?

- No. The incision is usually 3–5 cm and is placed within a natural skin crease for a good cosmetic appearance.
- 4. How long will I stay in hospital?
- Most patients stay in hospital for 24–48 hours.
- 5. When can I start walking?
- Walking usually begins within a few hours after surgery under supervision.
- 6. When can I climb stairs?
- Most patients can safely climb stairs with support before discharge.
- 7. When can I drive?
- Driving is usually permitted after approximately 3–4 weeks, once neck movements are comfortable and you are no longer taking strong pain medication.
- 8. When can I return to work?
- Most office workers return within 2–4 weeks, while physically demanding jobs may require 8–12 weeks.
- 9. What is the success rate?
- ACDF has an excellent success rate for relieving arm pain caused by nerve compression. Most patients also experience improvement in numbness, weakness and walking balance when surgery is performed at the appropriate time.
- 10. Can the problem recur?
- The operated level is fused and usually does not recur. However, age-related changes may gradually develop at adjacent spinal levels over many years.
- Myth vs Fact
- Myth:
- Neck surgery is extremely dangerous and always leads to paralysis.
- Fact:
- Modern ACDF is a well-established and safe procedure when performed by trained spine surgeons for appropriate indications using modern microsurgical techniques.
- Myth:
- Every patient with a slipped cervical disc requires surgery.
- Fact:
- Most cervical disc problems improve without surgery. Surgery is recommended only when symptoms persist despite adequate conservative treatment or when significant nerve or spinal cord compression is present.
- When Should I Contact My Surgeon After Surgery?
- Contact your surgeon if you experience:
- Fever
- Increasing wound discharge
- Difficulty breathing or swallowing
- Progressive weakness
- Severe neck or arm pain
- Difficulty passing urine
- New numbness

- Sudden worsening of neurological symptoms
- Related Conditions
- Cervical Slip Disc
- Cervical Radiculopathy
- Cervical Myelopathy
- Cervical Canal Stenosis
- Related Procedures
- Cervical Disc Replacement (Artificial Disc Replacement)
- Posterior Cervical Decompression
- Posterior Cervical Instrumented Fusion
- Need Expert Advice?
- If you have been advised cervical spine surgery or would like a second opinion regarding your MRI findings, you may schedule a consultation or upload your MRI for specialist review.
- Dr. Siddharth KatkadeConsultant Spine Surgeon
- Bombay Spine Clinic™
- Top of Form
- Bottom of Form

> **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.
