



Regd. No.3095/DMC  
**Dr. Shankar Acharya**

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Senior Consultant & Chairman Department of Ortho Spine Surgery  
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## Complex Deformity Correction: Spinal Osteotomy

Welcome to Sir Gangaram Hospital, where we provide cutting-edge treatments for complex spine conditions. Under the guidance of **Dr. Shankar Acharya**, a highly experienced spine surgeon with over 30 years of expertise, we offer personalized care to patients from both urban and rural areas. One of our advanced procedures is **spinal osteotomy**, a surgical method to correct severe spinal deformities.

### What is a Spinal Osteotomy?

Spinal osteotomy is a specialized surgical procedure to correct severe spinal deformities like abnormal curves, hunchbacks (kyphosis), or swaybacks (lordosis). This procedure involves removing or reshaping parts of the vertebrae to restore the natural alignment of the spine.

It is often used when:

- Non-surgical treatments, such as braces or physiotherapy, are not effective.
- The deformity causes significant pain, limited mobility, or affects the functioning of other organs like the lungs or heart.

### Who Needs Spinal Osteotomy?

Spinal osteotomy is recommended for patients with:

- **Kyphosis:** Severe forward curvature of the spine.
- **Flat-Back Syndrome:** Loss of the natural lumbar curve.
- **Ankylosing Spondylitis:** A condition where the spine becomes stiff and bent.



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- **Post-Traumatic Deformities:** Spinal misalignment due to previous injuries.
- **Failed Spine Surgery:** Correction of complications from earlier procedures.

## Types of Spinal Osteotomy

1. **Smith-Petersen Osteotomy (SPO):**
  - Removes small sections of bone from the spine's back.
  - Used for mild to moderate deformities.
2. **Pedicle Subtraction Osteotomy (PSO):**
  - Removes a triangular section of bone to allow significant spinal realignment.
  - Suitable for severe kyphosis or rigid deformities.
3. **Vertebral Column Resection (VCR):**
  - Removes an entire vertebra for correcting complex or multi-directional deformities.
  - Ideal for the most severe cases.

## Benefits of Spinal Osteotomy

- **Restored Alignment:** Straightens the spine and improves posture.
- **Pain Relief:** Reduces or eliminates chronic pain caused by the deformity.
- **Improved Mobility:** Makes daily activities easier and enhances quality of life.
- **Better Organ Function:** Helps in cases where deformity compresses the lungs or other organs.
- **Boosted Confidence:** A straighter spine improves appearance and emotional well-being.

## Preparing for Spinal Osteotomy



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Before surgery, the following steps are taken:

1. **Detailed Diagnosis:** Imaging tests like X-rays, CT scans, or MRIs to assess the deformity.
2. **Comprehensive Evaluation:** Medical history and physical examination to ensure the patient is fit for surgery.
3. **Pre-Surgical Counseling:** The surgeon explains the procedure, risks, and expected outcomes.

## How is the Procedure Performed?

1. **Anesthesia:** General anesthesia ensures the patient is asleep and pain-free.
2. **Osteotomy Execution:**
  - The surgeon removes or reshapes specific vertebrae to realign the spine.
  - Fixation devices like rods and screws stabilize the spine in its new position.
3. **Final Adjustments:** Bone grafts may be used to promote fusion and ensure long-term stability.
4. **Closure:** The incision is closed, and the patient is moved to recovery.

## Recovery After Spinal Osteotomy

1. **Hospital Stay:** Patients typically stay in the hospital for 5-7 days for monitoring.
2. **Pain Management:** Medications are provided to manage post-surgical discomfort.
3. **Physical Therapy:** Rehabilitation exercises help regain strength and mobility.
4. **Gradual Return to Activities:** Most patients can resume light activities within 6-8 weeks, with full recovery taking several months.



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## Risks and Complications

Like any major surgery, spinal osteotomy has potential risks, including:

- Infection
- Blood loss
- Nerve injury
- Implant issues (rare)

With Dr. Acharya's expertise and the advanced facilities at Sir Gangaram Hospital, these risks are minimized, ensuring safe and successful outcomes.

## Why Choose Dr. Shankar Acharya for Spinal Osteotomy?

- **Decades of Experience:** Over 30 years of expertise in treating complex spinal deformities.
- **Advanced Techniques:** Utilization of the latest surgical methods for precise corrections.
- **Compassionate Care:** Dr. Acharya and his team ensure every patient receives personalized attention.
- **Proven Results:** A strong track record of successful surgeries and happy patients.

## Frequently Asked Questions (FAQs)

### 1. Is spinal osteotomy painful?

Patients are under anesthesia during the procedure and receive effective pain management during recovery.



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## **2. How long is the recovery period?**

Recovery varies but most patients resume normal activities within 6-12 weeks, with continued improvement over several months.

## **3. Can elderly patients undergo spinal osteotomy?**

Yes, if the patient is in good health, age is not a barrier.

## **4. How do I prepare for surgery?**

Follow your doctor's pre-surgery guidelines, including any dietary or medication adjustments.

## **5. Is this procedure expensive?**

While the procedure involves advanced techniques, its long-term benefits in relieving pain and improving life quality make it a worthwhile investment.

## **Contact Us**

If you or a loved one is suffering from a spinal deformity, don't delay seeking expert care. Dr. Shankar Acharya and his team at Sir Gangaram Hospital are here to help you stand tall and live a pain-free life.





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At Sir Gangaram Hospital, we combine cutting-edge technology with compassionate care to help you reclaim your life. Let us guide you on your journey to a healthier spine.



**SIR GANGA RAM HOSPITAL**  
*Trust of Generations*

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