

Spinal Tumor Overview - Bombay Spine Clinic

- Spinal Tumor

What Is It?

- A Spinal Tumor is an abnormal growth of tissue occurring within or around the spine. Spinal tumors may arise from the vertebral bones, spinal cord, nerve roots or surrounding soft tissues.
- Spinal tumors can be classified as:
 - Benign Tumors
 - Non-cancerous tumors that generally grow slowly and do not spread to other parts of the body.
 - Examples include:
 - Osteoid Osteoma
 - Osteoblastoma
 - Schwannoma
 - Meningioma
 - Hemangioma
 - Malignant Tumors
 - Cancerous tumors that may grow aggressively and potentially spread to other parts of the body.
 - Examples include:
 - Multiple Myeloma
 - Lymphoma
 - Chordoma
 - Primary Bone Tumors
 - Metastatic Spine Tumors
 - Metastatic Tumors
 - The most common spinal tumors in adults are metastatic tumors, where cancer spreads to the spine from another organ such as:
 - Breast
 - Lung
 - Prostate
 - Kidney
 - Thyroid
- Early diagnosis is important because spinal tumors may cause spinal instability, fractures and neurological deficits.

- Common Symptoms

Symptoms depend on the tumor type, location and extent of involvement.

- Pain Symptoms
- Persistent back pain
- Neck pain
- Pain that progressively worsens
- Night pain
- Pain at rest
- Pain not responding to routine treatment
- Neurological Symptoms
- If nerves or the spinal cord become compressed:
- Tingling or numbness
- Weakness in the arms or legs
- Difficulty walking
- Loss of balance
- Hand clumsiness
- Bladder or bowel dysfunction
- Constitutional Symptoms
- Some patients may experience:
- Unexplained weight loss
- Fatigue
- Loss of appetite
- Generalized weakness
- Structural Symptoms
- Pathological spinal fractures
- Spinal deformity
- Height loss
- Spinal instability

Causes & Risk Factors

- Primary Spinal Tumors
- These originate within the spine itself.
- Examples include:
- Osteoid Osteoma
- Osteoblastoma
- Giant Cell Tumor

- Chordoma
- Ewing Sarcoma
- Metastatic Tumors
- Cancer spread from another part of the body is the most common cause of spinal tumors in adults.
- Risk Factors
- Previous history of cancer
- Increasing age
- Family history of certain cancers
- Genetic syndromes
- Smoking
- Exposure to radiation
- Many patients with metastatic spinal tumors already have a known cancer diagnosis, although spinal symptoms may occasionally be the first presentation.
- When Should You Seek Medical Advice?
- Medical evaluation is recommended if:
- Back pain persists for several weeks
- Pain worsens progressively
- Night pain is present
- Pain occurs even at rest
- Unexplained weight loss develops
- Weakness develops
- Walking becomes difficult
- Previous cancer history is present
- Seek Immediate Medical Attention If:
- Progressive weakness develops
- Difficulty walking occurs
- Bladder or bowel symptoms develop
- Severe neurological symptoms appear
- These may indicate spinal cord compression requiring urgent treatment.
- How Is It Diagnosed?
- Clinical Examination
- Your doctor will evaluate:
- Pain characteristics
- Neurological function
- Spinal stability
- Signs of systemic disease
- X-Ray
- May reveal:

- Bone destruction
- Vertebral collapse
- Pathological fractures
- Spinal deformity
- MRI
- MRI is the most important imaging investigation.
- It helps assess:
 - Tumor location
 - Extent of disease
 - Nerve compression
 - Spinal cord compression
 - Soft tissue involvement
- CT Scan
- Useful for:
 - Detailed bone evaluation
 - Surgical planning
 - Biopsy guidance
- PET-CT Scan
- May be recommended when:
 - Cancer spread is suspected
 - Staging is required
 - Multiple lesions need evaluation
- Blood Tests
- May include:
 - Complete blood count
 - Inflammatory markers
 - Tumor markers
 - Myeloma screening tests
- Biopsy
- A biopsy is often necessary to:
 - Confirm diagnosis
 - Determine tumor type
 - Guide treatment planning

Treatment Options

- Non-Surgical Treatment

Treatment depends on the tumor type.

- Management may include:
- Observation (for selected benign tumors)
- Pain management
- Chemotherapy
- Targeted therapy
- Immunotherapy
- Radiation therapy
- Bisphosphonate therapy
- Rehabilitation

Treatment is often coordinated by a multidisciplinary team including spine surgeons, oncologists and radiation specialists.

- Surgical Treatment
- Surgery may be considered when:
- Spinal cord compression is present
- Neurological deficits develop
- Spinal instability occurs
- Pathological fractures develop
- Tissue diagnosis is required
- Significant pain persists
- Common procedures include:
- Tumor Biopsy
- To establish diagnosis.
- Decompression Surgery
- To relieve pressure on nerves or the spinal cord.
- Spinal Stabilization Surgery
- To restore spinal stability.
- Tumor Excision
- Removal of benign or selected malignant tumors.
- Reconstruction Surgery
- Performed when extensive vertebral involvement is present.
- The surgical approach depends on the tumor type, location and overall patient health.

Frequently Asked Questions

- 1. What is a Spinal Tumor?
- A spinal tumor is an abnormal growth occurring within or around the spine.

- 2. Are all spinal tumors cancerous?
- No. Many spinal tumors are benign and non-cancerous.
- 3. What is the most common spinal tumor in adults?
- Metastatic tumors (cancer spread from another organ) are the most common.
- 4. Can spinal tumors cause back pain?
- Yes. Persistent, progressive back pain is one of the most common symptoms.
- 5. Why is night pain concerning?
- Pain that worsens at night or occurs at rest may indicate a serious underlying condition requiring evaluation.
- 6. Is MRI necessary?
- MRI is usually the most important investigation for assessing spinal tumors.
- 7. Will I need a biopsy?
- Many patients require a biopsy to confirm the diagnosis and guide treatment.
- 8. Can spinal tumors cause paralysis?
- If spinal cord compression occurs, neurological deficits including paralysis may develop.
- 9. Is surgery always necessary?
- No. Treatment depends on the tumor type, symptoms and overall condition of the patient.
- 10. Can spinal tumors be treated successfully?
- Many benign tumors and selected malignant tumors can be treated effectively, especially when diagnosed early.
- Related Conditions
- Spinal Tuberculosis (TB Spine)
- Spinal Infection
- Spinal Fracture
- Myelopathy
- Osteoporosis
- Kyphosis
- When Should You Consult a Spine Specialist?
- If you have persistent back pain, night pain, unexplained weight loss, progressive neurological symptoms, a history of cancer or concerns regarding a spinal lesion identified on imaging, prompt specialist evaluation is recommended.
- Early diagnosis and timely treatment can help preserve neurological function, maintain spinal stability and improve overall outcomes.
- Need Expert Advice?
- Book a consultation with Dr. Siddharth Katkade or upload your MRI, CT scan, PET-CT or reports 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.

