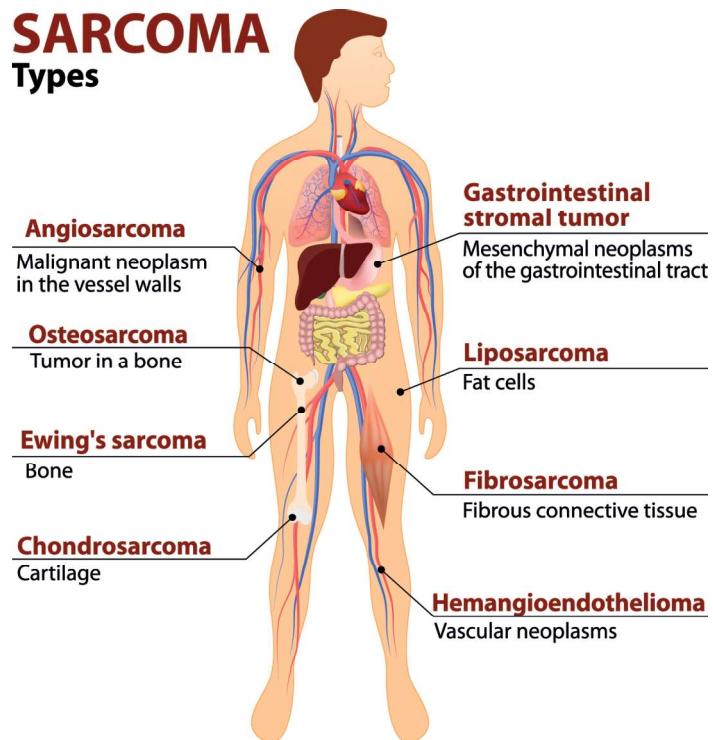


SARCOMA

A rare and deadly cancer

SARCOMA

Types



Just another Lump, Bump or Bruise?

Every Lump Matters

"For five years, I was told there was nothing to worry about, that it was just a fatty tumour." The patient was eventually diagnosed with fibrosarcoma and survived the cancer with surgery and radiation therapy.

Sarcoma—a rare and deadly cancer—is not the first diagnosis that comes to mind when a patient presents with a lump, bump or unexplainable pain. More commonly, these are attributed to hematoma, lipoma or vascular or other benign tumours. Therein lies the dilemma: common and often insidious symptoms are the most likely presentation in patients eventually diagnosed with soft tissue or bone sarcoma. Patients with sarcoma often experience a 'wait-and-watch' approach and delay in referral, leading to delay in diagnosis. Education and awareness about this rare group of cancers can change this.

Sarcoma represents less than 1 per cent of new cancers in adults. The majority of tumours in adults (80 percent) are classified as soft tissue, represented by more than 50 subtypes based on their tissue of origin. Bone tumours represent 20 percent of new sarcomas in adults.

Among children, soft tissue and bone sarcomas account for almost 15 per cent of childhood cancers.

This highly heterogeneous group of cancers arises primarily from connective and skeletal tissue of mesenchymal origin—and can occur anywhere in the body.

The signs of soft tissue and bone sarcomas are often attributed to muscle strain, joint injury, hematoma, lipoma or growing pains. But any soft tissue mass that is enlarging—with or without history of trauma—is suspect.

The 'red flag' signs -

"My father's knee became more and more swollen but did not bother him enough to see a doctor." The patient had a missed diagnosis of synovial sarcoma and died at the age of 58. Even an amputation to remove the tumour did not work because of the delay in seeking medical care.

- Any lump increasing in size
- Any lump greater than 5 cm
- Any lump deep in the body, irrespective of size
- Any lump causing pain
- Any lump has come back after being surgically removed

If ANY red flag is positive, that lump or bump needs to be evaluated. These red flag criteria are associated with increased risk of malignancy and should prompt referral to a sarcoma centre for evaluation. Pain, especially at night, is concerning for bone tumours.

Awareness of appropriate workup among practitioners remains a critical first line of defense. Because these cancers are rare and commonly mimic benign lesions, evaluation and detection of red flag signs is extremely important.

Imaging is essential

"The patient felt pain ripple through his shoulder while playing cricket. Over many months, doctors diagnosed his increasingly debilitating shoulder pain as a sports injury. He was actually suffering from osteosarcoma of the shoulder and received chemotherapy and underwent tumour surgery and shoulder replacement."

Radiographs for bone and ultrasound for soft tissues are readily available and useful means of evaluating lesions for depth and size, but if there is any thought of malignancy, if a mass is deep, rapidly enlarging and/or >5 cm, MRI is the recommended imaging for early and accurate diagnosis. It provides optimal soft tissue contrast, potential for local staging and direction for biopsy. If sarcoma is suspected, once imaging is performed, further evaluation and treatment should be managed by a multidisciplinary team with expertise and experience in treatment of sarcoma.

A carefully planned core needle biopsy is critical and should be performed by a skilled orthopaedic onco-surgeon to avoid contamination of structures and surrounding tissues. Because sarcomas inherently carry a high risk of recurrence or distant spread, a chest CT is recommended for staging, as the lungs are the most common site of metastasis.

Avoid unplanned excision

A soft, non-painful lump on the wrist was later diagnosed as an undifferentiated pleomorphic sarcoma (UPS). "I underwent unplanned surgery that later required complex second surgery to achieve tumour clearance."

Unplanned excision refers to removal of a mass without understanding potential malignancy and subsequently risking inadequate tumour margins. It happens often, with a frequency

of up to 70 per cent for all lumps or bumps. This failure to detect the red flags to consider sarcoma as a possible diagnosis leads to secondary surgeries and potential risk of local or regional recurrence, especially in high-grade tumours. Fortunately, more than half of soft tissue sarcomas are localised at the time of diagnosis; with early diagnosis and appropriate treatment, potential for complete tumour clearance is high. Tumour staging has a significant impact on mortality, where five-year survival drops significantly with distal metastasis.

Treatment options

"My own research revealed the possibility of a tumour on the sciatic nerve; the doctors wouldn't believe my intractable pain." The patient was diagnosed with malignant nerve sheath tumour in the thigh; underwent a very complex limb salvage surgery and sciatic nerve reconstruction; and requires a leg brace to walk.

Although surgery remains the primary means for treating lumps and bumps, individualised treatment is based on tumour type, grade and genetics. Treatment may involve conventional chemotherapy, radiation therapy and newer targeted therapies. Treatment outcomes include improving long-term survival, preventing recurrence and/or limiting progression. Sarcoma cancer research has served as the foundation for the evolving field of immunotherapy, where treatment can be tailored to a tumour's genetic mutations through the use of monoclonal antibodies.

Mission: Detection

"For a long time, I ignored the possibility of a small tumour in the foot bones detected on radiographs when I was evaluated for foot pain." The patient was diagnosed with Ewing sarcoma of the 1st metatarsal – chemotherapy and radiation could not save the leg and amputation was required to win the battle with cancer.

Changing the sarcoma story requires a collaborative effort among patients and doctors. It involves listening, pausing and investigating —not dismissing. It involves leveraging the tools readily available to heed the red flags of sarcoma, which should be heeded by both clinicians and the public at large. Only then will we change the conversation from "I never heard of it" to "We caught it just in time".

RED FLAG SIGNS

1	any lump/bump increasing in size	YES / NO
2	any lump/bump greater than 5cm	YES / NO
3	any lump/bump deep in the body	YES / NO
4	any lump/bump causing pain	YES / NO
5	any lump/bump has come back after being surgically removed	YES / NO

ANY ONE POSITIVE RED FLAG –
Rule out malignancy by a trained specialist
BEFORE any surgical intervention.

Our Specialist



Dr Manit Gundavda

MBBS, DNB (Orthopaedic Surgery), MNAMS (Orthopaedics), Professional Diploma in Clinical Research (PDCR)

Consultant - Orthopaedic Oncology
(Orthopaedic Oncology — Bone and Soft Tissue Tumours)

Email:
manit.gundavda@kokilabenhospitals.com