

## THREE CASES OF PRIMARY OSTEOSARCOMA IN SOFT TISSUE

Jia Zongliang 贾宗良    Sun Xuejun 孙学军    Zhang Guanjun\* 张冠军  
Liu Chang 刘昌

Department of General Surgery, \*Department of Pathology, First Affiliated Hospital,  
Xi'an Medical University, Xi'an 710061

The primary osteosarcoma in soft tissue is very rare. Three cases were admitted to our hospital since 1956.

### CLINICAL DATA

The detail information is shown in the Table.

Table. Clinical data

Case No.	Sex	Age (years)	Localization and size	X-ray	Preoperative diagnosis	Maneuver	Pathological diagnosis
1	Male	48	Right inguinal region. 6cm×5cm×6cm	Unregulated density shadow in local soft tissue, neighbour bone was free from being attacked.	Angioma	Tumor was abscised partially	Osteosarcoma in soft tissue
2	Female	32	Postmediastinum and attacking right lung 6cm×7cm×6cm	High density shadow at the right of postmediastinum	Teratoma	Tumor and partial right lung were abscised	Osteosarcoma in soft tissue at mediastinum
3	Female	51	Retroperitoneum 12cm×9cm×8cm	Block shadow at right upper abdomen some unregulated density shadows in it	Teratoma	Majority of tumor was abscised.	Osteosarcoma in soft tissue in retroperitoneum

(No. 3 case existed for 5 months after operation. No.1 and No.2 cases lost)

Pathological examination: Under microscopic examination, the tumor cells were fusiform or polygon, the size of nucleus was different from each other,

through deep staining method it was found that the nucleus was in pathological splitting state. There were blood vessels and fibrous tissue among tumor cell

coacervates, and many abnormal osteoblasts, chondroblastes and abnormal fibroblastes could be seen frequently, the giant cells could be seen occasionally.

## DISCUSSION

Osteosarcoma in soft tissue is also named ectosteal osteosarcoma. It is very rare. The susceptible age of this disease is much older than it of osteogenic sarcoma, which ranges from 40 to 59. The osteosarcomas in soft tissue are often found at mamma, lower limbs and clunis. But the situation of the tumor in our cases was uncommon. They were in inguina, mediastinum and retroperitoneum separately. The main symptom of osteosarcoma in soft tissue is local lump, characterized growing rapidly and attacking skin. Through X-ray, can reveal some high density shadows in the lumps, and the around bones are unbroken. This disease is easily confused teratoma. The size of lumps are very different, their diameter can be over 20 cm, and majority of them have pseudo

integument, they grow distensibly, and can widely invade the peripheral soft tissue, but neighbor bones are not involved. The cross-section of lumps is grey or yellowish, the center of it is necrotic, cystic, ossific and calcific. The standard of pathological diagnosis of ectosteal osteosarcoma is same to that of osteogenic sarcoma. The key evidence for establishing the diagnosis is finding some abnormal osteoid tissue such as osteoblastes and chondroblastes under microscope. But it must be discriminated from ossificanal myositis, osteogenic sarcoma and malignant mesenchymoma. This tumor is a very malignant neoplasm, and prognosis is poor. At the early stage, metastasis can occur in local lymphonodus or in the lung via blood stream. So, once this disease is corroborated, the wide-ranging operation should be performed as soon as possible. Attackivity of the neoplasm is great, and resectional rate is low. The prognosis of it can be improved coordinating chemotherapy after operation. Dynamic surveillance to AKP can give some useful signal for transference, recurrence and advance of this disease.