



P6:104

Difficulties of morphological diagnosis of telangiectatic osteosarcomas.

Gennady Berchenko¹, Olga Shugaeva²

¹) CITO ²), Russian Federation

Has been analyzed the biopsy and surgical material of patients who had been operated in clinic CITO as well as consulting cases with the diagnosis telangiectatic osteosarcoma (TOS) for the last 12 years. The analysis of the data has shown that for the investigated period of time TOS was found in 71 cases. TOS most commonly affects the femur (31%), tibia (26,8%) and humerus (15,5%). Lesions were centered around the knee in 46,5% (n=33) of cases.

Most of the lesions were located in the metaphyseal region, but usually they extended into the epiphysis. The lesions were poorly marginated and usually characterized by essentially pure lytic destruction without any significant sclerosis. There were seen extensive cortical expansion or destruction and often a soft tissue mass.

Conventional TOS is a high-grade lesion with easily recognizable sarcomatous septa. Usually there is a high degree of nuclear atypia, cellular pleomorphism, and numerous atypical mitoses.

These areas, although only focally present, are easily recognized as malignant and can almost always be found. However, well known significant difficulties in the differential diagnosis between low-grade TOS and benign aneurismal bone cyst. Microscopic examination shows similarity of histological structure of low-grade TOS and aneurysmal bone cyst. Areas of stroma look like as benign aneurysmal bone cyst are present. It should be noted that the atypical cells can be determined only on the periphery of the tumor cavity, malignant cells have a high degree of differentiation, the number of tumor osteoid are minimal, there are areas of tissue in which the cellular elements and osteoid have not signs of atypia, osteoclast-like cells located in the edges of the cysts and cavities tumor.

TOS should be distinguished principally from aneurysmal bone cyst. The weak signs of cellular atypia are especially revealed in the study of cytological preparations.

If in biopsies had been detected the TOS-LG, then were performed surgery in the form of extended marginal bone resection, the removal of abnormal tissue, electrocoagulation, alloplastica of defects. Later patients were observed in specialized hospitals.

E-mail (main author): berchenko@cito-bone.ru