

CAUSES OF RECURRENCE OF MALIGNANT BONE TUMORS OF EXTREMITIES AND TACTICS OF THEIR TREATMENT

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INTRODUCTION. Primary bone tumors are relatively rare and account for 1–4% of the total structure of all human cancer, but the severity of the pathology is one of the most difficult in the diagnostic and treatment aspects of clinical onco-orthopaedics [1]. The main method of treatment for most malignant bone tumors is surgical treatment. Wide excision of a malignant tumor with the surrounding tissues reduces the risk of recurrence of a tumor to a minimum [2]. Neurovascular bundle involvement in the tumor process makes it impossible to remove the tumor without amputation of the affected limb. Patient survival after amputation remains high in case of adequate courses of chemotherapy [3]. Quality of life of these patients significantly improved after the residual limb prosthetics.

THE PURPOSE OF THE WORK. Determining the causes of relapse and treatment failures of primary malignant bone tumors of extremities and tactics of their treatment.

MATERIAL AND METHODS. In clinical departments for the period from 2009 to 2017 a comprehensive treatment was conducted for 117 patients with malignant bone tumors of extremities. The main type of treatment is conserving surgery followed by chemotherapy and (or) radiotherapy. The degree of aggressiveness of the tumor determines the amount of tissue removed and borders of neoplasm resection. According to the morphological structure were met: giant cell tumor of bone — 45 (38,5%) patients, osteosarcoma — 37 (31,6%), chondrosarcoma — 17 (14,5%), fibrosarcoma of bone — 6 (5,1%), malignant giant cell tumor of bone — 5 (4,3%), malignant fibrous histiocytoma of bone — 4 (3,4%), Ewing's sarcoma — 3 (2,6%). Advanced cases of malignant tumors in the presence of distant metastases or terminal stages of the tumor process determined the choice in favor of symptomatic treatment or a mutilation.

RESULTS AND DISCUSSION. The most frequent complications of organ surgical treatment of malignant tumors were recurrence or continuation of growth of the tumor after its removal. Recurrences were observed in 17 (14,3%) patients, mainly during the first year, in three patients — after the first year. The study of the causes of recurrence has shown that in most cases they were caused not only by non-radical removal of the neoplasm (compliance with the principles of zoning and circularity), but also the aggressiveness of the tumor in each particular case. Tumor recurrences were observed usually in soft tissue surrounding the prosthesis, resulting in a further rise to distant metastases. This observation suggests that the recurrence behave more aggressively, suggesting expansion of resection for reoperation. Out of 17 patients with revealed recurrence of the tumor, 10 patients had an amputation or disarticulation of limbs. All patients underwent prosthetic limb fitting. Supportability of the residual limb recovered after an average period of 7 months.

CONCLUSIONS. Causes of recurrence of malignant tumors, the frequency of which was 14,3%, were the errors of diagnosis, incorrect assessment of the degree of aggressiveness of the tumor, mistakes and errors in surgical technique.

The level of amputation of extremities with recurrent malignant bone tumors should be elected strictly individually, taking into account the location, extent and degree of malignancy of the tumor process.

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