

**PP-079****Surgical treatment of the patients with metastatic lesions of the proximal femur**P. Grigorev, **I. Mikailov***Vreden Russian Research Institute of Traumatology and Orthopedics, St. Petersburg, Russia*

Introduction: Metastases of the proximal femur are the fourth in frequency of occurrence among the bone tumors. There are many surgical methods and techniques of treatment of this pathology. The significance of surgical treatment for such patients considering their severe somatic status is increasing due to minimally invasive techniques. Proximal femur metastases may cause significant negative influence on quality of life and functional independence. Radiofrequency ablation is among the most effective methods used for bone metastases treatment.

Objectives: We evaluated the effect of different methods of surgical treatment of metastatic lesions of the proximal femur on the dynamics of quality of life of these patients.

Methods: 92 patients with proximal femur metastases were treated in our department from 2000 to 2014. The groups were matched by gender and age composition. The percentage of primary tumor localization in both groups was also comparable. Surgical treatment of patients in the study sample was part of the main complex therapy of oncological pathology carried out by relevant specialists. The basic group included 49 patients who underwent RF ablation combined with orthopedic treatment. The control group consisted of 43 patients who received only the surgical treatment without RF ablation. Each of the two groups was divided into three subgroups according to the method of surgical treatment.

Results: The method of orthopedic treatment was prophylactic fixation (subgroup A) in 32 cases (I-17; II-14), hip replacement with basal cervical resection level (subgroup B) in 29 patients (I-16; II-14) and hip replacement with proximal hip resection (subgroup C) in 31 patient (I-16; II-15). The level of quality of life was comprehensive performed by VAS, MSTS and SF-36 scores. The most prominent effect and most significant differences in the level of quality of life were observed in the first subgroup of the first group, in whom the pain level was 3,2 points (VAS) lower and 15,6 (SF-36) points upper than among the patients of the second group. The quality of life in specified subgroup B and C had no statistically significant differences. The rate of extended metastasis growth was lower in the first group in comparison with the control group (18% vs. 7%). Although there were no statistically significant differences in the quality of life in subgroups B and C showed a tendency to increase the index MH (SF-36) after 1 and 6 months after surgery.

Conclusions: As a result of our study we can conclude that RF ablation is a useful addition to the basic operative treatment for patients with proximal femur metastases. RF ablation with the prophylactic fixation is more applicable for the treatment of patients with threat of impending pathologic fracture and gives the option of less invasive surgical approaches for palliation and local control. Application of RF in combination with prophylactic fixation helps to restore or improve the quality of life in the early postoperative period, which contributes to the continuation of the earlier complex therapy. The most telling change in the level of quality, depending on the used the method of surgical treatment may be evaluated in terms of 1 to 6 months after surgery (before the effect of combination therapy).

Keywords: Metastases of the Proximal Femur; Radiofrequency Ablation; Orthopedic Treatment; Prophylactic Fixation