

Functional results after scapula resections

A. Klein¹, T. Knösel², L. Lindner³, F. Röder⁴,

A. Baur-Melnyk⁵, **H.R. Dürr**¹

¹ Department of Orthopaedic Surgery, Orthopaedic Oncology, Ludwig-Maximilians University of Munich, Munich, Germany

² Institute of Pathology, Ludwig-Maximilians University of Munich, Munich, Germany

³ Department of Internal Medicine III, Ludwig-Maximilians University of Munich, Munich, Germany

⁴ Department of Radiotherapy and Radiation Oncology, Ludwig-Maximilians University of Munich, Munich, Germany

⁵ Department of Clinical Radiology, Ludwig-Maximilians University of Munich, Munich, Germany

Introduction: Tumours of the scapula are rare. Resection of the tumour is necessary in many cases. The anatomical location is most decisive for the extend of resection. Due to the functional importance of the shoulder girdle for all daily activities major consequences are seen. In a literature review only sparse reports with small patient numbers are found.

Methods: Between 1995-2014 31 consecutive patients had been identified and included in this retrospective study. All patients had been surgically treated due to an aggressive benign or malignant tumour of the scapula. Patients who had been only curetted had not been included. Follow-up was done 2014. From 37 patients 27 could be included, 4 patients had been lost to follow-up. MSTS- and TESS-scores had been evaluated.

Results: In 16 men and 11 women the mean age was 45.6 years. 8 chondrosarcomas, 4 cartilaginous tumors, 3 liposarcomas, 3 metastasis, 2 osteosarcomas, 3 desmoid tumors and in one case each chondroblastoma, desmoplastic fibroma, Ewing-sarcoma and leiomyosarcoma. The average follow-up was 6.5 years. 2 patients had died due to tumor, one due to cardiac disease. In 7 of 27 patients a total scapulectomy had to be performed, in all others a partial resection was done. The MSTS-score was with 75.2% at a satisfactory level. There was no significant difference between the different resections.

Conclusion: The resection of scapular tumours often leads to a significant deterioration of function in the shoulder girdle. This is not represented in the MSTS-score and the overall acceptance of the patients. Only one patient (craftsman) had to change his job. In total the clinical results are quite good in short term and in long term follow-up.