An analysis of the outcomes of orthopaedic surgery performed in patients with metastatic bone tumour and clinic patients with pathological fracture in the province of Malatya in Turkey

Reşit SEVİMLİ*, Mehmet Fatih KORKMAZ*
*** Inonu University Turgut Ozal Medical Center Department of Orthopaedics and Traumatology, Malatya, Turkey**

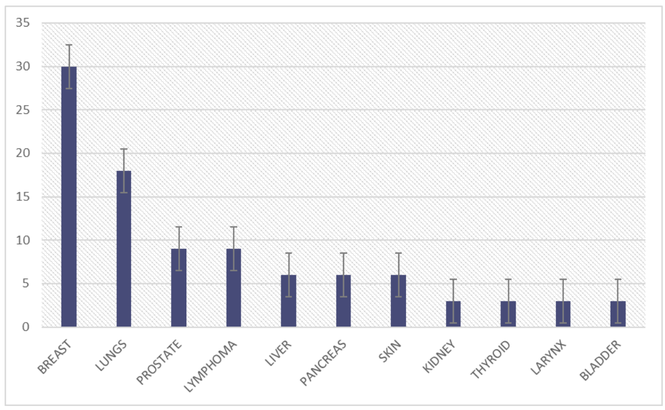
- **Abstract**

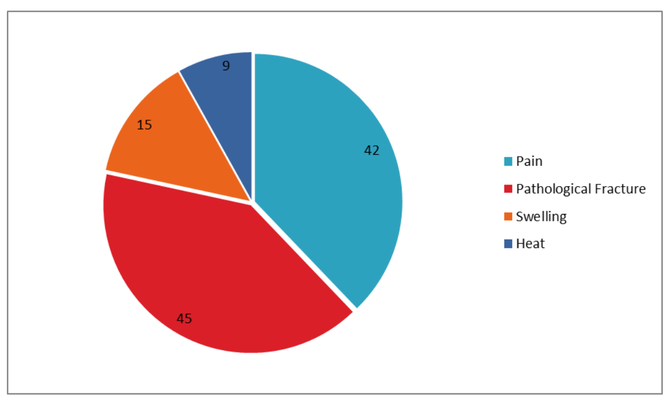
- Bone tumours seen in advanced ages are, unless otherwise proven, considered to be metastatic and its diagnostic and treatment algorithm are attempted to be developed. In our study it was aimed to determine and introduce the most common causes of metastasizing primary tumours, their localizations and the treatments that are administered, through evaluation of the patients with metastatic bone tumours who admitted to our clinic

- After ethics committee approval numbered 2017/1-5 was obtained from the Inonu University Committee on Scientific Research and Publication Ethics for this study, data of 96 patients (51 males, 45 females; mean age 64.50; distribution 45-87) who were hospitalized due to diagnosis of metastatic bone tumour or whose treatment was planned in our clinic between 2000 and 2016 were evaluated. The most common cause of admission to our clinic due to metastatic bone lesions were pain and pathological fracture. Whereas 75 of the patients underwent for a surgical intervention with fixation, the remaining patients were followed-up with radiotherapy.

- Breast (30 patients 32%) and lung (18 patients 18.5%) metastases were determined to be the most commonly metastasized primary organs. In regard to the bone area involved, femur was the most commonly metastasized bone localization. Reconstruction surgery with internal fixation or prostheses was performed for all of 75 patients operated.

- Improvement of general condition of the patient with tumour with bone metastasis as to increase the quality of life of the patient by providing early mobilization of the patient should be attempted. Thus, planning of appropriate patient selection and proper internal fixation is essential.





In conclusion, bone tumours seen in advanced ages are, unless otherwise proven, considered to be metastatic and then its treatment should be planned according to this fact. In treatment of metastatic tumours, orthopaedic surgical treatment is palliative and should have the aim of relieving of the pain and enabling early mobilization and general medical care for the patient.

Recent Publications

- 1. Libson E, Bloom RA, Husband JE, Stoker DJ. Metastatic tumours of bones of the hand and foot. A comparative review and report of 43 additional cases. Skeletal Radiol 1987;16(5):387-92.
- 2. Wagner G. Frequency of pain in patients with cancer. Recent Results Cancer Res 1984;89:64-71.
- 3. Hayashi N, Yamauchi H, Nakamura S. Management of bone metastases from breast cancer. Gan To Kagaku Ryoho. 2012;39:1174–7.
- 4. Costa L. Bisphosphonates: reducing the risk of skeletal complications from bone metastasis. Breast. 2007;16:16–20.
- 5. Jeremic B, Shibamoto Y, Acimovic L, Milicic B, Milisavljevic S, Nikolic N, et al. A randomized trial of three single-dose radiation therapy regimens in the treatment of metastatic bone pain. Int J Radiat Oncol Biol Phys. 1998;42:161–7.
- 6. Duo J, Han X, Zhang L, Wang G, Ma Y, Yang Y. Comparison of FDG PET/CT and gadolinium-enhanced MRI for the detection of bone metastases in patients with cancer: a meta-analysis. Clin Nucl Med. 2013;38:343–8.
- 7. Shen CT, Qiu ZL, Han TT, Luo QY. Performance of 18F-fluoride PET or PET/CT for the detection of bone metastases: a meta-analysis. Clin Nucl Med. 2015;40:103–10.



Reşit Sevimli has his expiriense about orthopedic oncology and arthroplasty on knee and hip.

resitsevimli@mynet.com