

# PROGNOSIS AND SURVIVABILITY IN SURGICALLY TREATED METASTASIS OF THE LONG BONES

doi: 10.2478/rojost-2018-0021

A. Bădilă<sup>1,2</sup>, R. Manolescu<sup>2</sup>, I. Japie<sup>2</sup>, E. Bădilă<sup>1,2</sup>, A. Papuc<sup>2</sup>, C. Popovici<sup>2</sup>, M. Tihulcă<sup>2</sup>, A. Bujde<sup>2</sup>, D. Rădulescu<sup>1,2</sup>, C. Cîrstoiu<sup>1,2</sup>, R. Rădulescu<sup>1,2</sup>

<sup>1</sup>"Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania

<sup>2</sup>University Emergency Hospital, Bucharest, Romania

**Aim:** To assess the clinical results after osteosynthesis with locked intramedullary nail in metastasis of the long bones.

**Material and methods.** We designed a prospective study in which we included all the patients with metastasis of the long bones admitted and surgically treated in our department between 2013 and 2015. Data for 64 were available at the final check-up. Our cohort totalized a number of 69 fractures (2 long bones required surgical treatment in 5 patients). The mean follow-up for survivors was 37 months (limits: 18-49 months).

The primary tumor was known in 51 patients (79,69%). For the remaining 13 cases (20,31%), the primary tumor was not known and the pathological fracture was the first sign of the malignant disease. In the last group, the tumor could be identified by imagistic methods in 6 cases, while in other 3 cases, a biopsy and histological examination (which were performed in all the remaining 7 cases) determined the source organ. Clinical and radiological check-ups were performed at every 3 months in the first year and at every 6 months after that.

**Results.** Pain amelioration and mobilization of the involved limb were achieved in all the cases. In 3 patients, the osteosynthesis could not compensate the progressive bone loss and the permanent use of an external orthosis was mandatory. The survival rate was 82,81% at 6 months and 67,19% at 12 months.

**Conclusions.** All patients could be mobilized. Two thirds of the patients will survive more than a year. The goals of osteosynthesis are the same, regardless the location of the fracture and implant used: pain amelioration, stability for immediate full weight bearing, durability for patient's life expectancy.

**Keywords:** bone metastasis, intramedullary nail, long bones