

Amputations in Bone Sarcoma: Who? Why? How?

AUTHORS:

SILVIA WASSERSTEIN (main author)

DAN CARAI MAIA VIOLA

REYNALDO JESUS-GARCIA

MARCELO PETRILLI

INSTITUTION:

UNIVERSIDADE FEDERAL OF SAO PAULO (UNIFESP) -
BRAZIL

Background

Surgical treatment of bone sarcomas consists of tumor resection with wide margin. However, despite the neo-adjuvant chemotherapy, many patients still have amputation indication for the local treatment of bone sarcomas.

The loss of ability to perform normal gait is the main limitation of a patient with lower limb amputation, which implies a greater dependence for the achievement of its functional activities. The prostheses are devices intended to replace the function or the appearance of a full member or partially absent.

PURPOSE:

The purpose of this study is to evaluate the patients underwent amputation surgery for primary bone sarcomas in lower limbs.

PATIENTS AND METHODS:

We evaluated in retrospective study 29 consecutives bone sarcoma patients underwent lower limb amputation. The average age was 16.7 years olda (7 to 34 y.o.). From all patients, 55% was female and 45% male patients. In terms of diagnosis, 28/29 patients had Osteogenic sarcoma and one was Ewing Sarcoma patient. All patients were submitted to test time and go.

RESULTS

The main indication for amputation surgery was the tumor size (48%). The second was bad response to chemotherapy (17%), followed for local recurrence, fracture, localization and infection. The level of amputation was above knee (79.3%), hip disarticulation (10.3%), bellow knee (6.9%) and knee disarticulation (3.4%).

All patients made rehabilitation and were trained to wear and walk with external prosthesis. From 29 patients, 9 (31%) leave the prosthesis. From twenty prosthetized patients, 10 walk with assistance. Eight (80%) use crutches and two use canes. The average time for time and go test was 23.28 s for male and 26.98 for female patients with prosthesis. All of them had better scores without prosthesis.

CONCLUSION

Despite all oncological treatment, amputation still remain a real alternative for local control in some cases of bone sarcomas. After the amputation, the main goal must be rehabilitation and return to daily activities. Despite all troubles related to amputation surgery, bone sarcoma patients have conditions to be rehabilitated.