

Sport activity levels in patients with a proximal femur megaprotheses after primary malignant bone tumors

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Aim:

There is little information about sports activities in long-term survivors after primary malignant bone tumors. In this study we wanted to find out (1) if long-term survivors after resection and reconstruction of the proximal femur with megaprotheses are able to participate in sport activities (2) what sports durations and frequencies per week are possible (3) which sport activity levels can be reached?

Methods:

14 patients (10 males, 4 females) met the inclusion criteria. They had received a modular tumor prosthesis due to primary bone tumor in the proximal femur between 1979 and June 2009, were still alive and aged < 60a. We evaluated kinds of sports, frequency per week, duration of each sports session as well as the UCLA Activity -, Tegner- and modified Weighted Activity Score.

Results:

Preoperatively 79% of the pts were practicing mean 5.2 (± 4.8)h/week. In the long-term FU (>5a) 86% of the patients were practicing mean 3.4 (± 3.6)h/week sports on a regular basis. The pre-operative/long-term postoperative UCLA-, TAS-, and modified weighted activity levels were 7.6 (± 2.8)/6.1 (± 1.8), 6.0 (± 2.3)/4.4 (± 1.6), 14.4 (± 10.6)/7.1 (± 8.1). In this small cohort complications did not influence sport activity levels, neither did sport lead to complications.

Conclusions:

Sports, in the long-term after treatment of primary malignant bone tumors in the proximal femur and reconstruction by mega-protheses, is possible, however levels are reduced. Further information is necessary to weight the benefits of higher sports activity levels against their risks.