

Aggressive Bone Tumor around the Knee Managed with Tumor Prosthesis Retrospective Case Series in a Developing Country

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Abstract

This study aims to know the functional status of patients who underwent limb-sparing surgery using the Enneking MSTS scoring system. It will also evaluate the demographics of the patients and the complications arising from the procedure. A retrospective review of our hospital records was carried from 2009-2022. There were 12 (9 men and 3 women) patients with aggressive bone tumors around the knee who underwent tumor resection and endoprosthetic reconstruction. In this review, five patients had poor MSTS, while the rest had good to excellent results. Most complications noted were related to patients' poor response to chemotherapy, which may contribute to poor outcomes. Other problems were hardware breakage at the proximal stem, flap necrosis for a too-medial previous incision, aseptic loosening, non-incorporation of the infrapatellar tenodesis causing patella alta, and skin allergy on the incision site. Limb salvage surgery with endoprosthesis is a viable option, safe and gives patients a sense of independence and return to daily activities.

Keywords: MSTS, Endoprosthesis; Aggressive bone tumor

Introduction

Sarcoma is a rare type of cancer seen most frequently in long bones and soft tissue of the extremity [1]. Musculoskeletal tumors account for 0.2-0.5% of all malignancies most often seen in children and adolescents [2]. Most affect the lower extremities, followed by the upper extremity and torso, pelvic tumors are less common but with lower survival rates

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On the breakdown of MSTS score (Table 2), on the pain score, 5 patients had reported no pain, 1 with intermediate pain and 6 with modest pain. On the function score 7 reported intermediate restriction, 4 reported recreational restriction and 1 reported intermediate restriction. On the emotional score, 2 were enthused, 5 were intermediate, 3 were satisfied, 1 was intermediate and 1 had acceptance. On the support score, 1 did not need support, 5 needed intermediate support, 4 needed brace, 1 needed intermediate support and 1 used crutch. On the walking score, 6 patients had intermediate score, 4 had limited walking, 1 had intermediate score and 1 reported walking inside only. On the gait score, 6 patients had intermediate gait, 4 had minor cosmetic issues, 1 had intermediate score and 1 had major cosmetic issue. Two patients had excellent outcomes, 4 patients had good outcomes, 1 patient had fair outcome and 5 patients had poor outcomes. The length of survival is proportional to a higher MSTS score (Table 3).

All patients underwent post-op chemotherapy and rehabilitation to restore independence. For the complications, 7 patients had metastasis

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2. Bergovec M, Kubat O, Smerdelj M, Seiwert S, Bonevski A, et al. (2015) Epidemiology of musculoskeletal tumors in a national referral orthopedic department. A study of 3482 cases. *Cancer epidemiology* 39: 298-302.
3. Ng VY, Scharschmidt TJ, Mayerson J L, Fisher JL (2013) Incidence and survival in sarcoma in the United States: a focus on musculoskeletal lesions. *Anticancer Res* 33: 2597-2604.
4. Bilal M, Jilani SRULA, Raf I, Shakeel O, Jabeen W (2021) Early outcomes of limb salvage surgery with mega-prosthesis: A single center experience. *Journal of Acute Disease* 10: 208-215.
5. Misbahuddin M, Idulhaq M (2023) Functional Outcome of Limb Salvage Surgery With Megaprosthesis In Primary Bone Tumour Arround Knee. *Eduvest-Journal of Universal Studies* 3: 219-224.
6. M Hussien K, H Kazem G, A Meselhy M (2022) Functional Outcome of Using Megaprosthesis to Extremities Reconstruction After Tumor Resection. *Benha Journal of Applied Sciences*, 7(7), 139-146.
7. Pala E, Trovarelli G, Calabrf28 States: a focus on musculoskeletal lesions