

Cancer Science 2019: Limb- sparing surgery with vascular reconstruction in lower extremity soft tissue sarcoma: promising results - Prof. Khalid Mowafy - Professor, Department of Vascular and endovascular Surgery, Mansoura University, Egypt

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There is uncertainty in the literature as to whether major vessel involvement in extremity soft tissue sarcomas constitutes an indication for amputation. This prospective study includes fifteen patients with lower extremity soft tissue sarcomas who underwent major vessel resection and reconstruction in the context of limb preservation for soft tissue sarcoma.

Purpose: To review the impact of vascular graft replacement following "en bloc" resection of soft tissue sarcoma (STS) invading major lower extremity vascular structure on short term outcomes as regard limb-salvage rate. **Methods:** Between December 2014 and January 2018, 22 consecutive patients with STS of the lower limb with vascular invasion were investigated, operated and followed up in Vascular Surgery Department, Mansoura University Hospital and were followed up for a period ranged from 3-36 months with mean of 13 months, and a life table analysis was constructed for patency of arterial grafts and for the limb salvage rate. **Results:** 15 patients (12 males and 3 females) aged between 16-57 years had vascular replacement grafts (11 ePTFE, 2 saphenous vein graft) for arterial reconstruction and 3 vascular replacement grafts (2 ePTFE, 1 saphenous vein graft) for venous reconstruction. Life table analysis for arterial construction showed primary patency rate of 73.85% at 10 months and 64.6% at the end of study, and limb salvage rate of 86.7% at last follow up visit. **Conclusion:** Malignant vascular infiltration should not be a barrier for wide local excision for STS patients

despite malignant vascular invasion of lower extremity and patients can avoid amputation after careful selection of patients.

Soft tissue sarcomas (STS) are rare tumors; they do not even equate to 1% of all malignant tumor cases. One-fifth of all STS occur in the upper extremities, where epithelioid sarcoma, synovial sarcoma, clear cell sarcoma and malignant fibrohistiocytoma are the most frequent subtypes. Surgical resection is the cornerstone of treatment. However, accomplishment of optimal oncological and functional results of STS of the upper extremities may represent a challenge for hand surgeons, due to the complex anatomy. In several cases, preoperative therapies are needed to facilitate tumor resection and improve the oncological outcome. Oligometastatic disease may also be a challenging scenario as curative strategies can be applied. Radiotherapy and chemotherapy are commonly used for this purpose albeit with conflicting evidence. Novel drug combinations have also been approved in the metastatic setting, further improving the quality of life and survival of eligible patients. Thus, prior to any approach, every case should be individually discussed in sarcoma centers with specialized multidisciplinary tumor boards. The aim of the present review was to gather the multidisciplinary experiences of the available therapeutic strategies for STS of the upper extremities.

Key Words: Sarcoma; vascular reconstruction, limb salvage.