

## Cancer Science & Pediatrics 2019: Limb-sparing surgery with vascular reconstruction in lower extremity soft tissue sarcoma: promising results - Khalid Mowafy - Mansoura University, Egypt

Khalid Mowafy

Mansoura University, Egypt

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. Limb salvage surgical procedure includes all the surgical strategies designed to perform removal of a malignant tumor and reconstruction of the limb with an appropriate oncologic, functional, and cosmetic result. In the latest past, most sarcomas had been handled by way of amputation.

Tumor recurrence, metastasis, and a generally dismal analysis were a powerful deterrent to development in remedy. Limb salvage surgical operation has all but replaced amputation as the treatment of choice for sarcomas of the extremities. This dramatic change came about as the result of vital developments: powerful chemotherapy 35 and precision imaging strategies. 69 In the early 1970's, new anti-neoplastic pills inclusive of Adriamycin and methotrexate have been introduced, and awesome improvements in the prognosis for some sarcomas were seen. 2'three In the past due 1970's, the development of CT and MRI allowed medical doctors to more exactly outline the anatomic quantity of the tumor, making it less difficult to eliminate the sarcoma without resorting to amputation. Today, up to 85% of sarcomas inside the extremities are treated with limb salvage surgery.

Successful limb salvage depends on a well-coordinated and timely series of events that starts with the first medical doctor to see the patient. The medical doctor who suspects a malignant tumor must do a thorough. records and preferred examination. The primary work-up must consist of high pleasant simple radiographs for bone lesions<sup>10</sup> and an MRI for gentle tissue tumors.<sup>7</sup>0'eleven. If these primary investigations screen a capability bone or smooth tissue sarcoma, the following step could be to initiate a referral to a specialist, preferably by way of phone or by means of non-public touch.

The referring physician must now not undertake an extensive work—up till this contact has been made. The choice and series of imaging and diagnostic checks ought to be carefully coordinated among the two. physicians. Evaluation of the images with the aid of an experienced orthopedic oncologist or musculoskeletal radiologist can often slender the differential diagnosis through one or two entities. Sometimes the tumor can be observed to be a benign or post—disturbing process, and

multiple expensive checks may in no way be needed. Biopsy is not a part of the initial management of these lesions and is generally the ultimate step in the work—up. Except in rare instances, the biopsy should be accomplished by means of the doctor who will be doing the definitive surgery. 11, thirteen Biopsy-related headaches have been proven to lead to an amputation being required in cases where the limb might otherwise had been salvaged.<sup>12</sup>'thirteen Prompt, suitable care inside the first stages of the ailment has an exceedingly positive impact on overall patient pride and outcome.

**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 Dec' 2014 and Jan' 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 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 follows 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.