The Usage Of Adipofascial Anterolateral Thigh Flap For The Reconstruction Of Soft Tissue Defects At

Extremities

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Introduction: Although reconstruction with adipofascial anterolateral thigh flap (ALTA) is commonly recommended treatment alternative for the extremity defects there are a few studies published in the literature. In this study it was aimed to show the advantageous and disadvantageous of ALTA flap due to experiences that we got from 9 patients at whom superficial extremity defects were reconstructed with ALTA flap.

Materials and Methods: From 2008 to 2016, 9 patients with extremity defects were treated. All soft tissue defects are superficial and are localized on the hand dorsum in 2 patients, on the palmar aspect of left hand in one patient, on the right wrist in 2 patients, on the left wrist in 2 patients, on the knee in one patient and on the foot dorsum in remaining patient. Wounds were prepared by serial debridement and closed with ALTA flap as soon as possible. During the separation of the flap a minimum of 3 mm fat (a little bit more around the perforator vessel entry) should be preserved over the fascia to ensure the vascularity of the flap. The flaps were inset to the defect adipose side upward in three patient and downward in 4 patients.

Results: Eight of nine flaps were supplied with musculocutaneous perforators, while the remaining flap was supplied with septocutaneous perforator. The overall flap survival rate was 100 %. In three cases, which all are adipose tissue up-ward inset flaps, partial skin graft loss occurred. Secondary skin grafting was performed and the wounds closed successfully. Other flaps have also minor graft loss due to minor hematoma, but these areas do not need any surgical intervention and epithelized spontaneously. No secondary debulking procedures were required in any of the flap. All of the donor sites were closed directly with acceptable appearance, minimal donor site morbidity and no contour deformation except in one patient. In that patient wound dehiscence was occurred in the donor site incision. The wound was closed with split thickness skin graft.

Conclusion: In this study we observed that ALTA flap is an appropriate choice for the reconstruction of soft tissue defects at the extremity. The main advantages of the flap are; sufficient size and pedicle length with pliable structure, minimal donor side morbidity, good aesthetic result and prevention of adhesions.