

Free Para Scapular Flap for Reconstruction of the Lower Third of the Leg

The microsurgery, in its free flaps section, finds its best domain to show its all capabilities in the complicated fractures of the leg, that accompanied by important skin loss. Herein, an example of such injuries and its treatment.

Case Presentation:

Two months ago, Mr. (H.A), 27 y/o, had a violent car accident. He had bone fractures of his two legs. The fracture of the right leg was treated with intra marrow nail. The left leg was put on external fixator because of the complexity of the injury and the presence of large skin lost. *Figure (1).*



Figure (1)

The left leg: the skin defect was very large. It included the anterior and posterior aspects of the leg. The muscular defect involved the muscles of the anterior chamber only. Tibia fracture was exposed and of three fragments. *Figure (2).*



Figure (2)

Green arrow: Tibia fracture, three fragments were exposed and were unstable. Black arrow: The exposed area of Achilles tendon.

X-ray of the left leg revealed double fracture in the tibia and simple fracture of the distal third of fibula. *Figure (3).*



Figure (3)

In operating room:
 the patient was in lateral position, arm abducted up to 90°, forearm on transverse handle.
Figure (4), figure (5)



Figure (4)

Flap dimensions: 20X9 cm.

- Black square indicates to the circumflex scapular vessels when emerging from the triangular space.
- Red line indicates to the traverse of the descending branch of the circumflex scapular artery, along the lateral aspect of the left scapula, drawn with the help of hand Doppler.
- The blue line indicates to the flap borders.



Figure (5)

Para scapular free flap after been harvested: Star: The skin paddle; Arrow: The vascular pedicle.

The circumflex scapular artery has been anastomosed to the posterior tibial artery, in end-to-side fashion. As well, the circumflex scapular vein has been anastomosed to the posterior tibial vein in end-to-end fashion. **Figure (6)**.



Per –operative view



pre-operative view

Figure (6)

The Parascapular flap in place after tourniquet release. Notice the pink color of the flap. The donor area was closed primarily on hemovac drain. Whereas, the raw areas left were covered by split thickness skin graft (STSG).

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(*) *Another case report of using para scapular flap in skin reconstruction on this link:*

[" Free Parascapular Flap for Skin Reconstruction "](#)

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