

# **Reconstruction of soft tissue defects around the elbow**

*Thesis*

Submitted for partial fulfillment of the Master Degree  
(M.Sc) in General Surgery

By

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## Summary

In this thesis, a review of the anatomy of the elbow region, the etiology and management of soft tissue defects around the elbow was done. In addition, eighteen patients with defects around the elbow were managed by different reconstructive techniques, namely, latissimus dorsi muscle flap, radial forearm flap, lateral arm flap, medial arm flap, brachioradialis muscle flap, Z-plasty and split thickness skin graft.

The results showed that the latissimus dorsi muscle flap is a versatile flap that can cover defects on different aspects of the elbow. The muscle survived completely in this thesis with full take of the overlying graft in 4 out of 5 patients studied. The final results were stable coverage in all the patients treated by this flap (*Stevenson et al, 1984*).

As regards the proximally based radial forearm flap, total survival of the flap occurred with complete take of split thickness skin graft over the donor site in the three cases studied in this thesis.

Distally based medial and lateral arm flaps were used to cover defects around the elbow joint in seven cases with total survival of the flap except in one case of the lateral arm flap. The distal end of the flap was necrosed which necessitates debridement and coverage of the exposed brachial artery by brachioradialis muscle flap with overlying split thickness skin graft, which in turn showed total survival of the flap and complete take of the split thickness skin graft.

In the two patients with web over the elbow, Z-plasty was done with satisfactory results in release of the contracture. Split thickness

skin graft used for coverage of elbow defects in one patient which gives also a satisfactory results.

The results were discussed and it was concluded that latissimus dorsi flap, radial forearm flap, medial arm flap and lateral arm flap are reliable flaps for reconstruction of soft tissue defects around the elbow joint. Split thickness skin graft is a simple procedure, however, they can only be applied on a suitable vascularized recipient.

## *Referències*