

P26 THE PEDICLED GROIN FLAP IN SOFT TISSUE RECONSTRUCTION OF THE FINGER : A CASE REPORT

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INTRODUCTION

The groin flap which is based on the superficial circumflex iliac artery was described by McGregor and Jackson in 1972.^{1,2} It was revolutionary because it allowed greater potential for reconstruction of difficult upper extremity wounds. This flap has been widely used in the field of reconstructive surgery and is frequently described in the management of soft tissue defects of the hand.

CASE REPORT

A 25 year old male who is right hand dominant sustained a degloving injury of his right finger after being trapped in his vehicle's timing belt. He sustained total circumferential soft tissue loss of the ring finger up to the level of the proximal phalanx and exposing the underlying bone.

On admission, initial debridement was performed followed by a pedicled groin flap. Flap dissection began medial to the anterior superior iliac spine. Elevation proceeded from the lateral aspect and continued medially. On the lateral aspect of the flap, an incision was made down to fascia lata. As the dissection proceeded medially, the superficial circumflex iliac artery pedicle is visualized as we approached the lateral border of the sartorius muscle. The medial end of the flap lies at medial border of the sartorius muscle as further dissection endangers the artery. The flap was fashioned into a tube and the right hand was brought to the ipsilateral groin and the flap was inset onto the ring finger.

Ischemic preconditioning was started on the 17th postoperative day and flap division performed after 5 days. Follow up at 4 months post surgery showed a viable flap. Results were satisfactory to the patient and he was able to start work without much limitation.

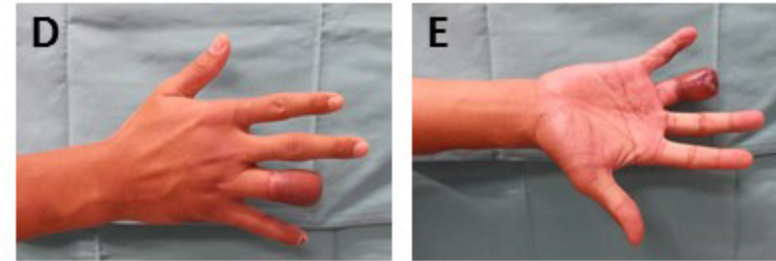


Fig. (A) Degloving injury right ring finger; (B) Groin flap elevation; (C) Flap inset; (D) and (E) Post operative 4 months

DISCUSSION

There is a variety of reconstructive options in managing soft tissue defects of the fingers. Therapeutic options include skin grafting, local flaps and free tissue transfer. The pedicled groin flap which is based on the superficial circumflex iliac artery remains one of the workhorses for hand coverage.³ Compared to the free flap option, it is less demanding and has less limitations. Among the factors which preclude free tissue transfer include large zone of injury and poor target vessels as in our case. Local flaps offer the advantage of "replacing like with like" however their use is limited by size and location and was an unsuitable option for us due to this reason.^{3,4} The pedicled groin flap provides adequate soft tissue coverage to resurface the wound of the hand and improve the viability of the borderline tissue in the injured hand due to its adequate blood supply. Drawbacks however include the need for a second procedure for division of the pedicle and the long immobilization period required for vascularization.^{5,6}

CONCLUSION

Soft tissue defects of the hand can be managed in a variety of ways. The groin flap provides one of the many options available to surgeons. It is proven to be a reliable, relatively easy, straightforward and provides significant amount of soft tissue coverage for defects of the hand with minimal donor site morbidity.

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