

PEDICLED GROIN FLAP FOR FINGER RECONSTRUCTION REVISITED - "A CASE REPORT"

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Introduction

The groin flap is an axial flap based on the superficial circumflex iliac artery system. ^(1,2,3) It is a reliable and well established reconstructive option which can be transferred as a pedicled or free flap. The pedicled groin flap was classically used to resurface defects of the forearm and hand. ⁽²⁾ The procedure is simple and can be performed at smaller district hospital (non-lead Cluster Hospital) with limited facilities and resources of advanced microsurgical tools to salvage limb.

History

Mr. MNH suffered from an industrial accident. He sustained a degloving injury of right index finger. The distal phalanx of the index finger was amputated during the accident. His dominant hand is the right hand and he is a chain smoker.

Methodology

A contralateral pedicled tube groin flap was performed to reconstruct patient's right index finger. Serial cross clamping started at three weeks post surgery to introduce intermittent periods of ischaemia⁽⁴⁾ followed by flap division at four weeks post operative. Donor site was closed primarily during second stage. Flap was debulked six months later.

Result

The flap survived 100%. The right hand can perform gross motor function but limited on fine motor aspect. Six months post operative patient claimed some return of pain sensation on the index finger. The donor site healed well. Patient was able return to work three months post injury. Overall outcome of the procedure was good with adequate functional recovery, acceptable aesthetic and minimal donor site morbidity.



(Modified) Schedule for Cross Clamping
Pedicled Groin Flap ⁽⁴⁾

| Post Operative Time Day | Alternating Ischaemic Period Minutes | Alternating Rest Period Minutes |
|-------------------------|--------------------------------------|---------------------------------|
| 21 | 15 | 45 |
| 22 | 15 | 45 |
| 23 | 30 | 30 |
| 24 | 30 | 30 |
| 25 | 60 | 60 |
| 26 | 90 | 60 |
| 27 | 120 | 60 |
| 28 | 150 | 60 |
| 29 | Flap divided | |

Discussion

The pedicle groin flap offers several advantages: It is relatively quick and easy to perform at district hospital with loupe assistance and it has low donor site morbidity. ^(1,3,5) In our case, the flap survived 100% and patient experienced return of pain sensation of the right index finger. The disadvantages include the need for a second procedure for division of pedicle, prolonged hospitalization, unsatisfactory appearance due to its bulkiness, and temporary elbow and shoulder stiffness. ⁽⁶⁾

References

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