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Groin Flap—Report of a case

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Introduction

Groin flap reported by McGregor, 1972, is a single pedicle flap, running parallel to inguinal ligament based on superficial circumflex arterio-venous and lymphatic system. It is a direct flap which can be used as a primary flap.

Study of a case with groin flap was under taken in S.M.H.S. Hospital attached to Medical college, Srinagar, (Kashmir).

Case Report :

Nazir Ahmed 16 year boy was admitted in our surgical ward as an emergency case with the history of a fall from a tree sustaining fracture of both forearms. Patient was conscious and had no neurological findings. Right and left forearm bones revealed Coll's fracture of left forearm, there was compound oblique fracture of the lower ends of both bones of right forearm, protruding through the wound on the flexor aspect of forearm, and exposing the superficial group of flexor muscles.

His blood picture was normal, Tetanus immunization was carried out. Patient was prepared for general anaesthesia. Under general anaesthesia fracture of the left forearm was reduced by manipulation while debridement of right forearm wound was done and the wound was closed by primary suture (Fig 1.) Below elbow plaster of both forearms was given. Both hands were elevated post-operatively.

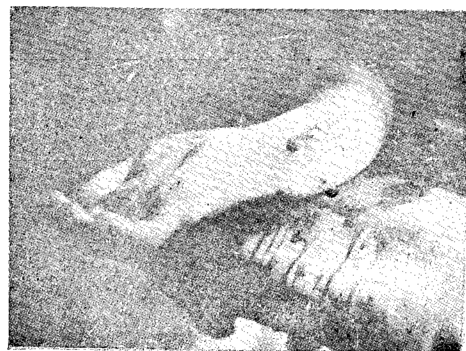

Fig. 1. Wound approximated by tension sultures which gaped later

Patient was discharged after ten days with the advice to attend out patient' department for follow up after six weeks. Patient attended the out patient department with complaint of fout smell comming from right forearm. Plaster was removed and wound was found to be gaping and sloughed. Again debridement of the wound was done. Wound was dressed by Nitrofurazone. Fresh plaster was given. A window was cut in the plaster for dressing of the wound on

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alternate days. Fresh X-rays were taken after lapse of further six weeks. Left forearm fracture had healed with normal alignment. Plaster was removed. Right forearm x-rays showed osteomyelitis of the whole of the lower half of both bones with displacement of upper segments as seen in accompanying x-ray photograph (Fig 2). Patient was admitted for sequestrectomy. Following excision of lower half of radius and ulna, Patient was put on chloramphenicol and Oxy-Phenylbutazone a posterior slab was given for right forearm. Patient was encouraged to do active exercises of hand and forearm. Two weeks after sequestrectomy patient was posted for Groin Flap cover of the right forearm wound which had got filled by healthy granulation tissue. The resultant defect was 2″ × 4″ (inches). A single pedicle groin flap measuring 2.5″ × 5″ was marked lateral to the pulsation of Rt. femoral artery to ensure effective blood supply from three branches of femoral artery. The flap was raised without any prior delay and was attached as a direct primary flap to the right forearm wound. Due to the flexability in length it could readily be attached to flexor aspect of forearm at an angle to cover the defect completely. The rest of the flap was tubed to prevent exposure of raw surface. As the forearm had no skeletal support, we had to support it on a gouge splint, dorsally.

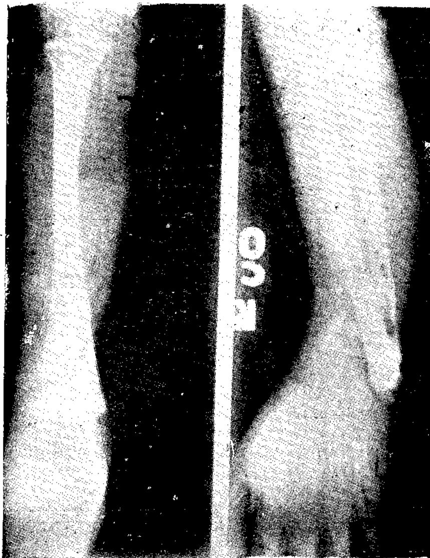
Fig. 2. X-Ray showing fracture Dislocation of Right Radius ulna

Post-operatively patient was put on intravenous Tetracycline and Oxy-phenylbutazone. No dressings were applied. Suture was covered by 'Badional gel'. The long pedicle allowed freedom of movement of fingers and wrist without embarassing the flap. The position taken by the shoulder and elbow were comfortable. Hand being in dependent position developed oedema. We overcame it by giving a cuff and collar sling, thus elevating the hand (Fig. 3) The flap did not develop oedema. Sutures were removed on 8th post operative day from Abdomen and forearm. Pedicle of flap was detached after 3 weeks and inset at same stage. No marginal necrosis took place. Wound healed perfectly well. Physiotherapy was given to make the interphal-

Fig. 3. Grain flap attached to forearm

angeal joints wrist and flexor tendons supple. A fibular graft with arthrodesis of wrist joint in 15 degree dorsifection was planned to provide skeletal suplort to the forearm.

Discussion :

McGregor in his study of 35 cases observed that the virtues of the flap are self evident (McGregor & Jackson 1970). The Groin flap needs no elaborate previous planning or previous delays and with one pedicle instead of two, handling and suturing is easier compared with the standard tube pedicle.

Due to the flexibility in length it can readily be attached to the flexor aspect of the forearm at an angle to cover the needs of the next stage of defect completely. This flap can primarily be used as a direct flap, to resurface hand and forearm defects. The long pedicle allows freedom of movement of fingers, wrist, shoulder and elbow without embarassing the flap besides their position is a comfortable one.

Summary

Study of a case of groin flap was carried out in the Department of Surgery, Medical college, Srinagar. Merits of the flap have already been discussed.

Acknowledgement :

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