

Abstracts

1. **Serafin, D., Georgiade, N.G., Smith, D.H.** : Comparison of free flaps with pedicled flaps for coverage of defects of the leg or foot, *Plast. Reconstr. Surg.*, 59:492, 1977.

The authors have compared the results of free flap transfer by microvascular anastomosis, with other methods for resurfacing full thickness skin defects of the lower limb. This series consists of 18 cross leg flaps, 6 jump flaps and 17 free flaps. It was found that the success rate was highest with the cross leg flap (77.8%) as compared to the free flap transfer (58.8%). However, the period of immobilisation, and period of hospitalisation were twice as long as with free flaps. The incidence of systemic morbidity was also more. The total cost of hospitalisation was also more with the cross leg flap. The author feels that with further refinements in technique, the success rate with the free flap is bound to improve further.

2. **Mendelson, B.C., Wood, J.E. and Masson, J.K.** : Experience with the deltopectoral flap. *Plast. & Reconstr. Surg.*, 59:360, 1977.

The authors have described their experiences in the use of 63 medially based deltopectoral flaps in 60 patients for reconstruction of defects in the head and neck region after ablative surgery for cancer for reconstruction of facial deformities and for resurfacing skin loss in the hands. The causes of failure were due to problems with the pedicle, such as kinking, traction or folding and problems of inset such as infection, haematoma, residual tumour, fistula. The authors stress the importance of paying special attention to the random distal portion of the flap. On the whole the authors feel that this flap is the most versatile source of skin coverage or for mucous lining.

3. **Jweell, G. and Jonsson, C.E.** : Increased survival of experimental skin flaps in rats following treatment with antiadrenergic drugs, *Scand. J. Plast. Reconstr. Surg.*, 10:169, 1976.

An experimental attempt is made on rats, to devise a pharmacological method to increase the survival of skin flaps following reconstructive surgery.

Five different drugs that impair sympathetic nerve activity by different mechanisms, were found to increase the skin flap survival. While, those drugs which enhance sympathetic nerve activity, either had no effect or decreased the viability. This observation strongly suggests that sympathetic innervation influence the survival of skin

flaps. The tissue damage secondary to skin flap operation is probably due to hypoxia in the skin flaps. This is due to release of noradrenaline from degenerating nerves and an over stimulation of both alpha and beta receptors. The beneficial effect of antiadrenergic drugs is explained either by a reduction in noradrenaline release from the degenerating nerves or by an inhibition of its interaction with adrenoceptors, thereby interfering with the adrenergic neurotransmission.

4. **Emery, F. E. :** Immediate mobilization following flexor tendon repair. *J, Trauma*, 17 : 1, 1977.

A method has been described for the repair of the lacerated flexor tendon injuries and tendon grafting in the hand. Immediate mobilization was allowed, to prevent adhesion and to shorten the period and disability without affecting the healing. There has been gradual improvement of function and there was no case of tendon rupture.

The suture material used has a property to slightly adhere to the tendon. Each end of the suture was placed in the proximal tendon then run through the distal end of the graft as the case may be. The two ends of the suture were placed on the straight needle and drawn through the tip of the finger and tied over a bolster. After 4 weeks the suture is cut at the skin level and allowed to retract. The removal of the suture is unnecessary.

5. **Orticochea, M. :** Total reconstruction of the lower eyelid. *Brit. J. Plast. Surg*, 30 : 44, 1977.

A two stage method of reconstruction of the lower eyelid has been described using tissue from the upper lid. There layered repair is done giving a good cosmetic appearance of lower lid without interfering with the function of the upper lid.

A bipedicle flap is raised from the upper lid by making a horizontal incision, The width of the flap is about 6 m. m. from the margin preserving the upper lacrimal canaliculi. Then a laterally based second flap is raised depending upon the tissue requirement for the reconstruction. After preparing the recipient area, the second flap is swung down and sutured in place. The bipedicle flap is sutured back in three layers to the remainder of the upper lid. A medial tarsorrhaphy is performed to maintain vertical height until the oedema subsides, when it is divided.

6. **Drever, J, M. :** The epigastric island flap, *Plast. & Reconstr. Surg.*, 59 : 343, 1977.

A defect following excision of a burn contracture below the right nipple was repaired by transposing a superiorly based ipsilateral myocutaneous island flap, through a tunnel, fed by perforators of the paramedian thoraco-abdominal vascular plexus. The plexus is formed by the anastomosis of the internal mammary and its terminal

branch, the superior epigastric with the inferior epigastric artery. Flap repair was preferred considering further development of the breast.

The flap included a long narrow strip of rectus abdominis muscle with its overlying fascia. The donor area was closed first by approximating the rectus abdominis muscle at the tendinous intersections. The fascial defect was repaired with Marlex mesh and the skin was sutured.

7. **Leeb, D. C., Ben-Hur, N. and Mazarella, L. :** Reconstruction of the floor of the mouth with a free dorsalis pedis flap, *Plast. & Reconstr. Surg.*, 59:379, 1977.

Primary reconstruction of the floor of the mouth was performed, after surgical excision of the cancer, by free dorsalis pedis flap from the ipsilateral limb using standard technique. The dorsalis pedis artery was anastomosed to the preserved fascial artery and the greater saphenous vein to the external jugular vein on the contralateral side. The donor area was split skin grafted. The complications were minimal.

The advantages were that the flap could be raised simultaneously with excision of the lesion; the skin is pliable and of adequate size; no additional procedure is required; does not worsen the cosmetic appearance; the flap can be manoeuvred along several plains; the chance of infection is less due to relatively less subcutaneous fat.

8. **Hellquist, R. and Skoog, T. :** The influence of primary periosteoplasty on maxillary growth and deciduous occlusion in cases of complete unilateral cleft lip and palate, *Scand. J. Plast. Surg.*, 10 ; 197-208, 1976.

The authors have studied the influence of infant periosteoplasty upon the growth of the maxilla, its form and size, and the prevalence of malocclusion in the deciduous dentition, in 66 patients with total unilateral clefts of the primary and secondary palate. After five years follow up it was shown that there was no difference in the growth of the maxilla between those cases treated by periosteoplasty and the controls. In all cases in whom a periosteal flap had been used good bone had formed. However, the authors feel that the final proof will come when these cases have been followed up for another ten years.

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