THE EIGHT-LIMB MODIFIED PROPELLER FLAP - A SAFER NEW TECHNIQUE IN MANAGEMENT OF BURN CONTRACTURES (082)

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Introduction: Contracture deformities affecting the flexor aspect of the elbow joint and the 1st web space are not uncommon sequelae of burns. Surgical treatment is contemplated in those patients with established contractual deformities in whom non-surgical treatment is ineffective or functional integrity of the joint is at jeopardy. Surgical treatment consists of incising the scar tissue to release joint contracture and covering the defect that might result with skin grafting or various tissue flaps. In this work, we used a modification of the multilobed propeller flap to treat eight patients with contracture deformities.

Materials and methods: Eight patients with contracture deformities of the elbow (five patients) and 1st web space (three patients) were subjected to release and modified propeller flap coverage. The modification implies planning eight limbs based on a central axis so that rotation occurs in 45° instead of 90° in the original propeller flaps.

Results: All patients had acceptable results with complete range of movement regained in affected joints and no serious complications. Only a case of partial loss of skin graft and another case with congestion of one lobe were reported, and both were managed conservatively.

Conclusion: The new modification has the advantages of being flexible, can be tailored to best match the defect so that it can be closed primarily or needs smaller skin grafts, can be used even when there is much scarring and, finally, the resultant appearance is cosmetically acceptable with little donor morbidity, if any.

Burns 37 (2011) 905-909