

SCAPULO-DELTOID FLAP IN RECONSTRUCTION OF AXILLA (A CASE REPORT)

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The incidence of burns is considerably high in children. Like any other region axilla is equally vulnerable to it. At times it is of such magnitude that its sequelae i.e. contracture incapacitates the child for the rest of his life. The problem is not only to release the contracture provide stable surface covering and ensure full mobility at shoulder in as short time as possible but also to see that contracture and restricted mobility does not take place again.

Case Report

A five years old female child came with contracture of axilla as a result of accidental burn which she sustained about one year back. At the time of admission she had 60° abduction at shoulder joint and elbow could not be extended beyond 160°. She had also contracture of index and middle finger. (Photo No. 1)

The contracture of axilla was relieved by excision of scar tissue. It resulted in considerable raw area involving left lateral chest wall, axilla and medial aspect of left arm. A Scapulo-deltoid flap was raised (Photo 2 and 3) on left side and rotated to reconstruct axilla. The donor area was covered by Thierche's graft. The left upper extremity was immobilized by a plaster cast with 180° abduction at shoulder joint for 7 days. After 7 days plaster cast was discarded. (Photo 4) After a week's Physiotherapy patient could perform normal movements at shoulder joint.

Contracture of middle and index fingers were relieved by Z plasty at a later date.

Discussion

Scar contracture across axilla, when due to single band with healthy skin on either side, can be treated by Z-plasty. The release of more severe contractures produces a large defect and split skin grafts when applied invariably contracts and results in restricted mobility, unless the arm is kept abducted to 180° by plaster cast for 3-4 months. Most of the patients who come from rural areas do not obey the instructions carefully.

Skin flaps can not be raised from the chest wall as the region itself is often involved in burn. These burns of axilla are sustained more often when child falls on fire and scapulo-deltoid area almost invariably escapes. In this case a direct scapulo-deltoid flap has been raised and rotated to cover axilla from posterior to anterior aspect. Seven days immobilisation in plaster cast is enough.

The procedure not only shortens the period of convalescence and hospitalisation but provides with full range of mobility without any danger of recurrence of contracture. The skin of Scapulo-deltoid region is not only available in most of the cases but being out of view would not permit any criticism on cosmetic grounds.

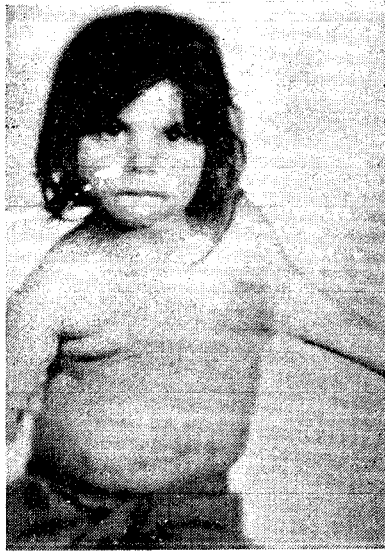
Summary

Scapulo-deltoid flap is advocated for reconstruction of contracture axilla for the following reasons :

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1. It does not interfere with movement at shoulder joint and with stand it.
2. Chances of recontracture are remote.
3. Hospitalisation of patient is of a short duration.
4. Better on cosmetic grounds.



Photo—1. Showing Contracture Axilla. Scapulo Deltoid flap.



Photo—2. Contracture Corrected by Scapulo-deltoid flap.



Photo—3. Contracture Corrected by Scapulo-Deltoid flap.



Photo—4. Final result. Scapulo Deltoid flap

REFERENCES

Tanzer R. C. : Reconstruction of burned hand. New England J. of Med. 238 : 687 : 1948.
Littler J. W. : The principles of reconstructive hand surgery. Am. J. Surg. 92 : 88 : 1956.
Peet E. W. & Patterson T. J. S. : Essentials of plastic surgery (1963) F.A. Davis Co.