

# **Reconstruction of Postburn Scar Contracture of the Thigh Using the Anterolateral Thigh V-Y Advancement Flap**

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## **Abstract**

### **Background**

For the release of burn scar contractures, split thickness or full thickness skin grafting can be often done. But it requires longer immobilization, and usually results in relapse.

The reconstruction using the flap provides large and well vascularized tissue that will prevent future contracture<sup>1</sup>.

This report presents our recent experience with use of the pedicled anterolateral thigh<sup>2</sup> V-Y advancement flap for reconstruction of soft tissue defects after the release of burn lateral thigh contracture.

### **Methods**

A 70-year-old man had a scar contracture with ulceration involving the left lateral thigh to lateral knee region. After the excision of the scar and the release of the contractures, 11 X 7 cm soft tissue defect had occurred. The perforating vessels of the anterolateral thigh region were mapped with a handheld pencil Doppler probe. The flap was designed over the perforator at the medial region to the defect. The flap was elevated in the subfacial plane for identification of the perforators. The flap based on two perforators (one musculocutaneous and one septocutaneous) was transposed with V-Y advancement to close the defect (Figure.1).

### **Results**

The flap survived completely. One year after the operation, the patient demonstrated a full range of knee motion and was satisfied with the aesthetic and functional result (Figure.2).

### **Conclusion**

We found the anterolateral thigh V-Y advancement flap to be a useful option to the reconstruction of postburn thigh scar and contracture band.

## **References**

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2. Lannon DA, Ross GL, Addison PD, Novak CB, Lipa JE, Neligan PC. Versatility of the proximally pedicled anterolateral thigh flap and its use in complex abdominal and pelvic reconstruction. *Plast Reconstr Surg*. 127:677-88,2011.

## **Disclosure/Financial Support**

None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript



Figure 1. The anterolateral thigh flap based on two perforators was transposed with V-Y advancement.



Figure 2. One year after the operation