



Platysmal book flap for tracheostomy scars

Sir,

We read with interest the article on role of platysma muscle flaps for depressed scars of the neck.^[1] The authors have mobilised the platysma and sutured it in the midline to augment the soft tissue deformity associated with depressed neck scars with good results. However, in cases of excessive depression of the scar reaching upto the trachea single layer edge to edge approximation of the platysma may not be sufficient to augment the soft tissue deformity.

We have had the opportunity to manage three such patients. All the patients had post tracheostomy depressed scars, and one of the patients had a tracheocutaneous fistula. We managed these patients by using the platysmal turnover flaps as described by Yiacomettis *et al.*^[2]

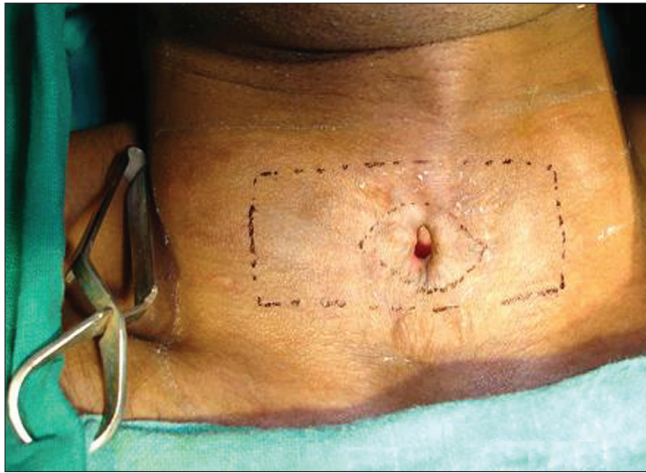


Figure 1: Tracheostomy scar and provisional planning of turnover platysmal flaps

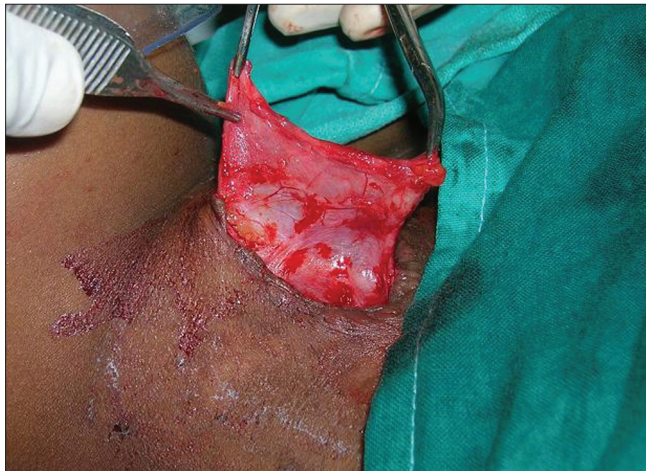


Figure 2: Well vascularised platysmal flap being harvested

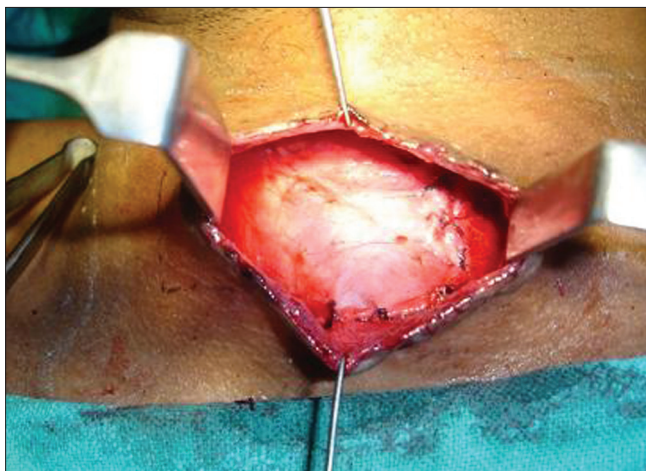


Figure 3: Double breasted platysma flap with lateral suture line

An incision was made at the edge of the scar along its border with the normal skin, and scar tissue was excised. The thin adherent scar over the tracheal wall was excised

taking care not to damage the tracheal wall. A plane was created between the skin and platysma on both sides laterally keeping the platysma intact. Flap planning was done in reverse for the turnover platysmal flaps [Figure 1]. A medial base of around 1.5 to 2 cms was kept, and two rectangular turnover platysma muscle flaps were designed to fill in the defect. The flap is easily separated laterally by sharp dissection, and from the posterior surface from the loose areolar attachments using combination of blunt and sharp dissection. Both flaps were turned over into the defect and double breasted. The first flap was sutured in the depth of the scar tissue near the edges, and the second flap was sutured to the periphery on the opposite side to ensure complete obliteration of dead space, without overlapping suture lines [Figures 2 and 3]. Skin was then closed transversely in layers using subcuticular sutures.

This method provides a reliable and easy way to repair the soft tissue defect over the trachea and revise the scarring deformity left by tracheostomy. Simple skin mobilisation and approximation results in a drum-like repair, which inevitably results in a stretched scar and recurrence of the hollow concavity.^[2]

Z-plasty of the subcutaneous fat and platysma provides single-layer cover and does not always fill the concavity.^[3]

Methods employing turn-in de-epithelialised flaps provide adequate bulk but produce further skin scarring.^[4] Approximation of the strap muscles may be effective but is done under tension, which may lead to eventual dehiscence of the moving muscles.^[5] The method we have employed have the following advantages:

1. Adequate bulk to augment the soft tissue deficiency- done in double breasting manner.
2. Tension-free closure.
3. Overlapping of suture lines was avoided. Suture lines lie in different planes, which minimise the chances of stretching of the scar.
4. A stable reconstruction with no functional deficit.

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