

Tent Suture: Technique for Coverage of Exposed Vessel in the Neck

Letter to the Editor:

Elderly patients often have atrophy of the subcutaneous fat and muscle, especially in the neck region. This loss of tissue can lead to the exposure of vessels during skin cancer surgery. An exposed large-diameter vein poses the risk of trauma and bleeding in the course of reconstruction. Here, a technique is described to cover the exposed vein with surrounding platysma muscle.

A 79-year-old woman underwent Mohs micrographic surgery (MMS) for management of a recurrent basal cell carcinoma on the left neck. The tumor was removed in two layers. Examination of the wound after MMS showed a minimally pulsatile vessel in the center of the defect. The vessel collapsed when the position of the patient was changed from supine to sitting (Figure 1). It was determined that this was a branch of the external jugular vein. A primary closure was planned to reconstruct the defect. To avoid trauma to the vessel in the course of reconstruction or by the buried sutures, however, a “tent suture” was used.

With the use of absorbable suture (e.g., 5-0 polyglactin 910), the platysmal bands on each side of the vessel were sutured together, in effect forming

a tent over the exposed vessel. The knots were placed on top of the muscle to avoid irritation of the vessel wall (Figure 2). With the vein covered by muscle, the defect was then closed primarily with little risk of injury to the vein (Figure 3). Follow-up at 3 months showed a well-healed scar (Figure 4).

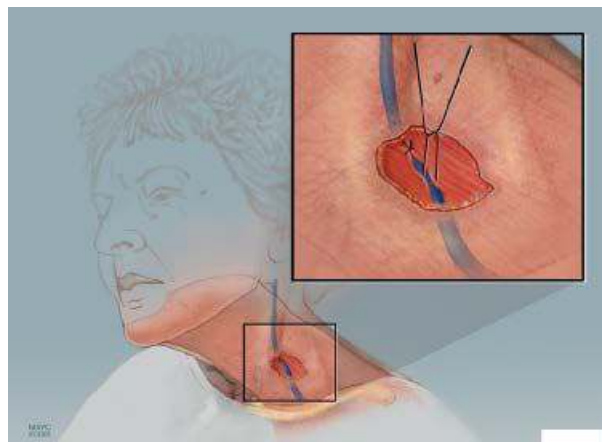


Figure 2. Illustration depicting the “tent suture” technique. (Used with permission of Mayo Foundation for Medical Education and Research.)

The tent suture described is essentially the plication of the platysma for the purpose of redraping the exposed vessel. Plication of platysmal bands is used widely for cosmetic enhancement of the neck.¹



Figure 1. Collapsed branch of the external jugular vein (arrow) with patient in a sitting position.



Figure 3. Primary closure of the defect after placement of “tent sutures.”



Figure 4. Three-month postoperative photograph.

The other alternatives for the patient presented here were to leave the vessel as it was and avoid injury during reconstruction or to ligate the vessel at each exposed end. Tenting sutures also have been described in the neurosurgical literature,^{2,3} and mucosal tenting suture has been reported for the treatment of laryngotracheal stenosis.⁴

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