An Alternative Method for Securing Surgical Drains in the Neck

P V H Lim, FRCS, M A Jalaludin, FRCS, Department of Otorhinolaryngology, Head and Neck Surgery, Faculty of Medicine, University of Malaya, Lembah Pantai, 50603 Kuala Lumpur

Adequate drainage of the wound after surgery is essential as potential collections can lead to the formation of haematoma or seroma which can complicate wound healing. To reduce the risk of contamination and cross infection, closed suction drainage is commonly employed by convention, these drains are secured by means of skin stay sutures tied around them. Not infrequently, leakage or slippage resulting in the accidental premature removal of drains secured in this manner occur and create untold problems with the subsequent management of the wound which can be complicated by dehiscence, infection, fistula formation and delayed healing.

In order to prevent this, we propose an alternative method of securing drains. After the appropriate length of drain is inserted into the wound, a non-absorbable stay suture is passed through the first two most proximal holes of the drain and sutured to the skin and an overlying short length of the tube externally. Drains secured in this manner can be left in the wound for up to fourteen days with no associated complications from our experience in sixty-two patients following head and neck surgery.

We have used this method successfully to secure all our drains following operations of the neck region in sixty-two patients without complications of leakage, slippage, blockage or drain fracture. Of these sixty two cases, there were thirty seven radical or modified radical neck dissections, sixteen parotid gland resections, three pedicled pectoralis major flap reconstructions following resection of head and neck cancers, three total laryngectomies, two pharyngeal pouch excisions and one hemithyroidectomy. The stay suture used should be non-absorbable and the size of 2/0 or 3/0 is ideal in most situations. This method can also be used on fine bore drainage tubes down to the size of 2.7mm external
diameter (Ch 8). The duration for which the drains were left functioning in the wounds ranges from twenty-four hours to fourteen days. The longest duration of fourteen days was in the conservative management of a case of chylous leak following en bloc radical neck dissection.

Fig. 1: Illustrating the method to secure a drainage tube to the skin via its proximal holes. Drain emerging through skin puncture site (a), suture passing through the two most proximal holes of the drain beneath the skin (b), drain in wound (c), short redundant cut length of drain placed externally (d) and non-absorbable suture (e).

References
