

Point of Technique: Protecting the Pedicle in Free Flap Breast Reconstruction from the Drain

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Sir:

Breast reconstruction with autologous free tissue transfer is a widely established technique considered to be the “gold standard.”^{1,2} The leading cause of return to theater after deep inferior epigastric flap reconstruction is hematoma occurring in the chest wall, reported in 1.2–2%^{1,3} cases. Most breast reconstructive surgeons would therefore consider suction drains under the newly reconstructed breast a mandatory step to minimize this complication from occurring, as a hematoma could compress the flap pedicle compromising venous output and possibly even arterial input leading to partial or total flap necrosis. The drains are commonly placed away from the pedicle and site of anastomosis; however, the drain tubing can in theory migrate directly injuring or compressing the pedicle and/or causing damage through the suction forces.

We describe a simple technique to safely secure the breast drain tubing to prevent migration and hence protect the anastomotic site and pedicle after free tissue transfer breast reconstruction. In this technique, two 10-gauge suction drains are used, one for the upper breast mastectomy flap and one for the lower breast mastectomy flap. The drains are inserted before vessel exposure and after achieving meticulous hemostasis of the breast mastectomy flaps. Each drain is secured to the inner aspect of the breast mastectomy flap by a loose loop of absorbable monofilament 3/0 suture under direct vision. The loop diameter is one fingerbreadth diameter: this is sufficient to secure the drain in the desired location yet at the same time facilitate easy removal. This

same technique can be applied to any other free tissue transfer situation to protect the pedicle from inadvertent damage from the drain tubing (Figs. 1 and 2).

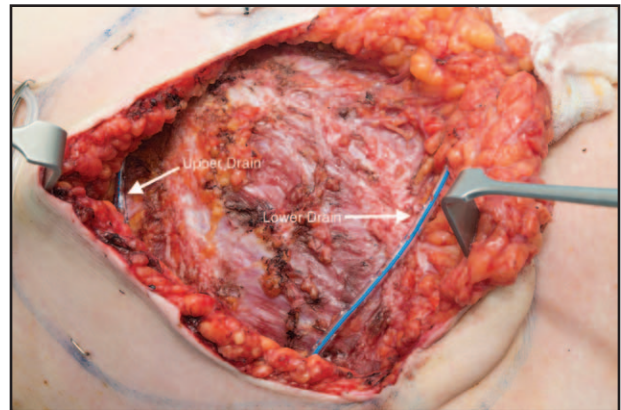


Fig. 1. Intraoperative view of mastectomy defect with two 12-gauge drains inserted for each upper and lower mastectomy flap.

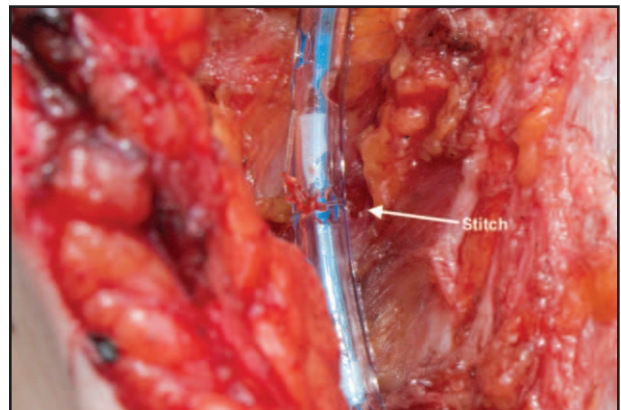


Fig. 2. Close-up of upper mastectomy drain with loose monofilament suture placed to prevent migration.

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DISCLOSURE

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