The combination of fibrin glue and quilting reduces drainage in the extended latissimus dorsi flap donor site.

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Abstract:

BACKGROUND: The use of quilting sutures in the extended latissimus dorsi flap donor site significantly reduces the incidence of donor-site seroma. However, the donor site has a drain inserted, and the duration of use of this drain often dictates when a patient is discharged to home from the hospital. Fibrin glue has been shown to reduce the need for drainage at other operative sites. The authors therefore evaluated the use of fibrin glue (Tisseel Lyo; Baxter Healthcare, Norfolk, United Kingdom) in addition to quilting in reducing the total volume and duration of drainage following extended latissimus dorsi flap breast reconstruction.

METHODS: The authors compared a group of 11 consecutive, prospective patients who underwent extended latissimus dorsi donor-site closure with fibrin glue and quilting with a control group of 24 consecutive, retrospective patients who underwent extended latissimus dorsi donor-site closed with quilting alone.

RESULTS: The results show that the combination of fibrin glue and quilting in the extended latissimus dorsi flap donor site significantly reduces average drainage in the immediate postoperative period: 13 ml compared with 170 ml ($p <or= 0.001$); average total drainage, 330 ml compared with 645 ml ($p = 0.018$); and average drain stay, 4 days compared with 5 days ($p = 0.022$).

CONCLUSION: Fibrin glue potentially may reduce the numbers of days that drains are left in situ or even reduce the drainage to such a degree that drains are no longer necessary for patients undergoing extended latissimus dorsi-based breast reconstructions.