



Fig. 2. Nipple projection over time.

reconstruction and those receiving implants. The modified skate flap purse-string technique was useful in both groups, with minimum donor sacrifice and inconspicuous scarring. The use of this technique does not affect the shape of the reconstructed breast and enables reconstruction of not only circular areolas but also oval areolas; however, further improvements still need to be devised for the reconstruction of nipples with greater height.

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REFERENCES

1. Hammond DC, Khuthaila D, Kim J. The skate flap purse-string technique for nipple-areola complex reconstruction. *Plast Reconstr Surg.* 2007;120:399–406.
2. Few JW, Marcus JR, Casas LA, Aitken ME, Redding J. Long-term predictable nipple projection following reconstruction. *Plast Reconstr Surg.* 1999;104:1321–1324.

3. Kroll SS, Reece GP, Miller MJ, et al. Comparison of nipple projection with the modified double-opposing tab and star flaps. *Plast Reconstr Surg.* 1997;99:1602–1605.
4. Tanabe HY, Tai Y, Kiyokawa K, Yamauchi T. Nipple-areola reconstruction with a dermal-fat flap and rolled auricular cartilage. *Plast Reconstr Surg.* 1997;100:431–438.
5. Garramone CE, Lam B. Use of AlloDerm in primary nipple reconstruction to improve long-term nipple projection. *Plast Reconstr Surg.* 2007;119:1663–1668.

Bilateral Autologous Reconstruction from Different Sites: Indications and Outcomes after DIEP and SGAP Flaps

Sir:

The traditional dictum for bilateral breast reconstruction is to use the same type of reconstruction on both sides for optimal symmetry. This can sometimes prove difficult in patients electing to have autologous reconstruction. Challenges include patients with (1) unilateral reconstruction who subsequently need contralateral mastectomy, (2) bilateral reconstruction who suffer unilateral flap loss, and (3) a paucity of donor-site tissue. In such patients, autologous tissue from two different donor sites should theoretically provide a better match compared with autologous tissue on one side and implant on the other. Furthermore, as many of these patients undergo irradiation, reconstruction with an implant carries an increased risk of capsular contracture and asymmetry.¹ The long-term effects of reconstructions using different donor sites are unclear. We present our experience with six patients who had bilateral reconstruction with a deep inferior epigastric artery perforator (DIEP) flap on one side and a superior gluteal artery perforator (SGAP) flap on the other. Although most patients achieved satisfactory results, in one case, postoperative changes and weight gain created persistent asymmetry.

Two patients had unilateral breast cancer and DIEP flap reconstruction. Both developed a primary cancer in the contralateral breast within 3 years and chose mastectomy with SGAP flap reconstruction. Two patients had bilateral mastectomy and bilateral DIEP flap reconstruction. In both patients, venous congestion led to unilateral flap loss and tissue expander placement. They both elected to subsequently undergo expander removal and SGAP flap reconstruction. Two patients had staged reconstruction, as there was insufficient abdominal tissue for bilateral reconstruction (Fig. 1). Both patients had a DIEP flap on one side and an SGAP flap on the other. One of the patients developed a 35-lb weight gain over 4 years. The breast reconstructed with the DIEP flap appeared much larger despite similar initial flap weights (Fig. 2). Five of the six patients had acceptable postoperative results based on symmetry and volume, with a mean follow-up of 2.1 years.

Our experience suggests that bilateral autologous reconstruction from different donor sites can be sat-