Modified insetting method for breast projection in breast reconstruction with free TRAM

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ABSTRACT

I. Introduction

Free TRAM flap is the most common flap in autologous breast reconstruction. With Korean women, due to their low flap volume and high abdominal tension, the procedure may be difficult. Korean women usually have insufficient abdominal fat, which makes it hard to get a breast projection using conventional methods. In addition, relatively thin abdomen results in high abdominal tension after flap elevation which can also cause widening of the donor scar.

II. Methods

200 breast cancer patients underwent immediate breast reconstruction with free TRAM flap between January 2011 and August 2013. This study was done by retrospective chart review. In patients with thin and insufficient flap volume, all the ipsilateral deep inferior epigastric artery and vein as pedicle were anastomosed to the internal mammary artery and vein as recipient vessels. Muscle sparing II method was used. For breast projection, the flap was molded into an encircled implant shape using suture technique with preserving zone III and IV.

III. results

Aesthetically successful results were achieved with this method. In particular, lesions located in the lower pole or cases with minimal skin incision displayed superior aesthetic result compared to others. There were no post-op complications such as flap necrosis.

IV. conclusions

This easy method of acquiring adequate volume using small flap for insertion will be useful especially for Asians who have small body size.

References

[1] Garvey PB, Salavati S, Feng L, Butler CE, Perfusion-related complications are similar for DIEP and muscle-sparing free TRAM flaps harvested on medial or lateral deep inferior epigastric Artery branch perforators for breast reconstruction. Plast Reconstr Surg. 2011 Dec;128(6):581-9

[2] Khansa I, Momoh AO, Patel PP, Nguyen JT, Miller MJ, Lee BT. Fat necrosis in autologous abdomen-based breast reconstruction: a systematic review. Plast Reconstr Surg. 2013 Mar;131(3):443-52

[3] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.