

## **CONTRALATERAL DIEV AS AN INTERPOSITIONAL VEIN GRAFT FOR VENOUS SUPERCHARGE IN THE SALVAGE OF A CONGESTED DIEP FLAP**

Dear Editor,

**V**enous congestion is a major risk in DIEP flap breast reconstruction, ranging from 8% to 29%.<sup>1</sup> Early intervention to solve the congestion ensures successful outcomes. Despite the different salvage techniques described,<sup>2-4</sup> this is still the most common complication during a DIEP flap breast reconstruction. We report a further technique to salvage a venously congested DIEP flap using the contralateral DIEV as an interpositional graft between the ipsilateral SIEV and the serratus branch of the thoracodorsal vein. A 56 years old female underwent a delayed DIEP flap reconstruction and immediate contralateral breast reduction. A right 810 g DIEP flap was raised on two medial row perforators. The ipsilateral SIEV was preserved with a length of 4 cm. Contralateral perforators were clamped for 30 mins and the flap showed adequate perfusion. The DIEV was primarily anastomosed using a 2.0 mm coupler to the IMV with antegrade flow. After 30 min, the flap became congested despite patent anastomosis. The venous anastomosis was revised in retrograde fashion to the IMV, but the flap remained congested. The SIEV was engorged and dilated and the removal of the ligaclip immediately solved the congestion. The contralateral DIEV was harvested obtaining a 10 cm vein that was used as an interpositional graft between the SIEV and the serratus branch of the thoracodorsal vein, resolving the flap congestion. No postoperative partial flap failure, fat necrosis or

donor site functional problems were noticed 6 months post-operatively. Venous congestion of DIEP flap can be mainly associated with a superficial dominant venous system or with an excessive flap weight in relation to the diameter of the perforating veins.<sup>2</sup> Venous supercharge is a useful option to solve the congestion, but an interpositional graft may be needed to connect the superficial to the deep system or to another recipient vein. The graft can be obtained from the lower leg or the foot adding further scars. The basilica vein has been described as a venous bypass adding morbidity.<sup>3</sup> Galanis and Nguyen<sup>4</sup> summarized the different techniques within a useful algorithm for DIEP flap congestion salvage. Recently, the ipsilateral DIEV has been used to anastomose the ipsilateral SIEV to the IMV<sup>5</sup> disconnecting the deep system. We chose to harvest the contralateral DIEV as an interpositional graft because it has the advantage of the accessibility in the same surgical field, quick harvesting technique (approximately 30 min) avoiding additional scars. It has sufficient length to anastomose the SIEV to the IMV, to the ascending branch of the DIEV, or to a recipient vein in the axilla as in our case. The good calibre match and length allowed an easy anastomosis, avoiding sacrificing the pedicle of the latissimus dorsi and subsequently the possibility of a rescue flap. We found the use of the contralateral DIEV as an interpositional graft for venous supercharge a useful tool to solve venous congestion of a DIEP flap.

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