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Modified arrow flap technique for nipple reconstruction

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To the Editor

Nipple reconstruction is the final surgical step for the treatment of breast cancer. Nowadays, breast reconstruction after mastectomy usually consider a using autologous fat graft¹, flaps or implants.

Nipple reconstruction is an important part of the reconstructive path. The positive effects of this surgical procedure on the psyche of the woman have already been discussed in the past.²

Unfortunately, the reconstruction of the nipple is subject to a very important problem: a not predictable projection loss in time. Many authors tried to solve this problem and many techniques have been described, over the years, for the reconstruction of the nipple, with not always proven efficacy.

Technique description

One of the techniques described with the greatest impact is the arrow flap. This flap has been described by Rubino et al. in 2003 and involves the reconstruction of the nipple performing an arrow-shaped skin flap with two areas of de-epithelization.³

Indeed, one of the advantages of this technique is its simplicity. The long-term results regarding the projection are satisfactory, with a maintenance of the initial projection of about 45%⁴.

With this paper, we want to report a change of this technique that has a long run in our operative unit. The change made by us was the elimination of the upper area of de-epithelialization (Figure 1).

In our opinion, the removal of the de-epithelized area enables a greater rapidity in the construction of the flap that also maintains its projection in time. We used this technique for about 6 years and the long-term results are almost identical to those of the original arrow flap.

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Figure legend

Figure 1: The figure shows the design of our technique. The square with dots on the left is the dehepited area. The upper hemisphere is the dome of the nipple. The not hatched part at the bottom-center is the pedicle flap.