Aesth Plast Surg (2019) 43:559–561
https://doi.org/10.1007/s00266-019-01315-7

LETTER TO THE EDITOR

Breast Prosthetic Reconstruction: Tips and Tricks on ADM Position

A. Vela-Lasagabaster[1] · P. Benito-Duque[1] · J. Ordoñez-Maygua[1]

Received: 13 December 2018 / Accepted: 15 January 2019 / Published online: 6 February 2019

Abstract In the late years, the use of acellular dermal matrix (ADM) has extended rapidly in the field of breast reconstruction. However, with the follow-up visits, we discovered some deformities on the lateral part of the lower pole, due to the folding of the ADM. The aim of this letter is to share some tricks developed in our clinical practice that would permit the surgeon to avoid getting these irregularities in the aesthetic result of breast reconstruction with ADM.

Level of Evidence V This journal requires that authors assign a level of evidence to each article. For a full description of these evidence-based medicine ratings, please refer to the Table of Contents or the online Instructions to Authors www.springer.com/00266.

Keywords Breast reconstruction · Acellular dermal matrix

After reading a very interesting article by Lee KT on Efficacy of Partial- Versus Full-Sling Acellular Dermal Matrix Use in Implant-Based Breast Reconstruction, published recently, we thought it would be interesting to complement it with a simple technique for easy placement avoiding some irregularities in the post-op. This may be of some help for the novel surgeon with little experience on the use of this device for breast reconstruction. In our experience, this technique has shown to give a better breast contour by following some easy steps.

Immediate breast reconstruction after skin-sparing mastectomy is performed ever more frequently, both autologous and prosthetic [1]. Simultaneously, reconstructive techniques have evolved along with this increase in interventions. When opting for prosthetic reconstruction, one of the tools that has come to help the reconstructive surgeon is the acellular dermal matrix (ADM) [2, 3]. Its use has allowed bracing the lower and lateral pole (some of the usual vulnerable areas) in the prosthetic reconstruction process, allowing a single surgical time.

Good results explain the increasing use of this device in the clinical practice of our department.

However, although the ADM sheets are currently marketed in a variety of shapes, namely rectangular and elliptical, it is not always easy to adapt them optimally to different patients. Besides, in the mid- and long-term follow-up visits, we have observed, especially in thin patients, palpable subcutaneous folds, mainly in the lateral pole.

To prevent this problem and achieve adequate implantation as well as an aesthetically favourable breast contour, we have modified the fixation technique of the ADM sheet in this area.

Technique

Once the subpectoral pocket is prepared, after releasing the pectoralis major muscle from its costal and lower sternal origin, we begin by fixing the ADM medially to the chest wall, following the pattern of the inframammary fold until we reach the lateral end at the level of the anterior axillary wall. At that time, we place a sizer to assess the volume of

✉ A. Vela-Lasagabaster
arturovelasaga@gmail.com

P. Benito-Duque
pbenitoduque@gmail.com

[1] Plastic Surgery Service, University Hospital Ramón y Cajal, Carretera de Colmenar Viejo, Km. 9, 100, 28034 Madrid, Spain

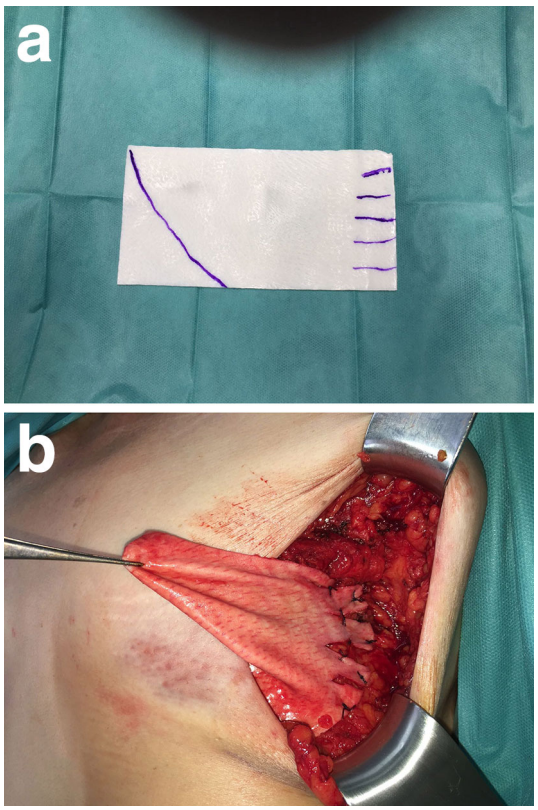

Fig. 1 **a** Drawing of the cuts: a series of 4–5 cuts of 2–3 cm on the lateral edge of the ADM sheet is made (and area removed in the medial edge). **b** Lateral pole view after fixing ADM and sizer removed

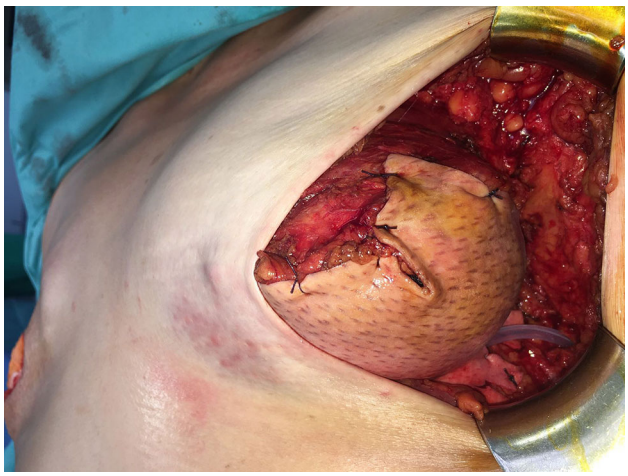

Fig. 2 Lateral pole view after breast prosthesis implanted

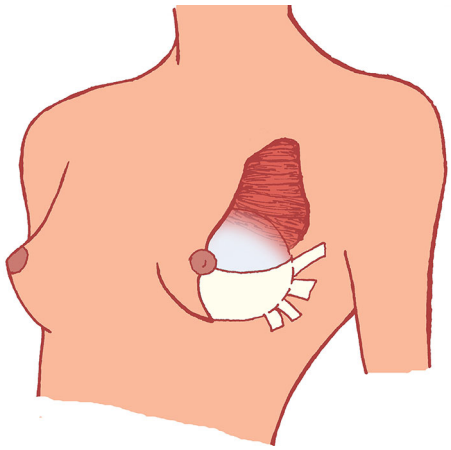

Fig. 3 Sample design where we can see the prosthesis and the ADM in position, through the skin and the pectoralis major covering it from above

the necessary prosthesis, and we keep it in place while we finalize the placement of the ADM at the lateral pole. In this last step, we apply a modification in the insetting of the sheet.

Without taking the sizer out, 4–5 cuts are made on the lateral edge of the ADM sheet (2–3 cm) as shown in the picture (Fig. 1a). This will enable us to redefine the shape of the ADM implant in position, fixing it to the chest wall easily (Fig. 1b). Then, we continue suturing the pectoralis major to the upper border of the ADM (Fig. 2).

This "multi-flaps" modification, applied to the lateral edge of the sheet, is an easy and practical tip that helps us orient the ADM and adjust its position to the volume and curvature of the chosen implant, as if it was custom made, allowing us to avoid crease-shaped deformities in this transition area due to the folding of the sheet (Figs. 2, 3).

We hope that these small tips could help to achieve better results in the upcoming cases of breast reconstruction.

Compliance with Ethical Standards

Conflict of interest The authors declare no conflict of interest or financial support.

Human and Animals Rights Statement This article does not contain any studies with human participants or animals performed by any of the authors.

Informed Consent The figures shown in the article have the free and aware informed consent of the patient to appear in the article. For this type of study, no further informed consent is required.

References

1. Rivareix F, Sarfati B, Leymarie N, Alkhashnam H et al (2018) Mastectomy and immediate reconstruction: indications, techniques

and decision algorithm. Ann Chir Plast Esthet. https://doi.org/10.1016/j.anplas.2018.07.003
2. Lee KT, Eom Y, Mun GH, Bang SI, Jeon BJ, Pyon JK (2018) Efficacy of partial-versus full-sling acellular dermal matrix use in implant-based breast reconstruction: a head-to-head comparison. Aesth Plast Surg 42:422–433
3. Breuing KH, Warren SM (2005) Immediate bilateral breast reconstruction with implants and inferolateral AlloDerm slings. Ann Plast Surg 55:232–239