Correcting The Overcorrected Gynaecomastia - A Novel Technique Using Stacked Acellular Dermal Matrix

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The 'saucer–shaped deformity' is the undesirable outcome following over-resection of gynecomastia. Correction can be challenging – lipomodelling may be unfavourable or unpredictable, and autologous grafts often require additional unwanted scars.

We present a case of unilateral gynecomastia over-resection where disks of acellular dermal matrix (ADM) were interwoven in the subdermal, intra- and interpectoral planes to correct the areolar concavity. A 34-year old man presented to clinic requesting correctional chest surgery. He had previously undergone glandular excision for Simon's grade IIA bilateral gynecomastia¹ at age 18, with a subsequent procedure shortly afterwards for unilateral left recurrent gynecomastia. This second operation had left him with a distorted nipple, visible concavity, and adherence of the areola to the underlying muscle. He also had right gynecomastia recurrence. He had no comorbidities of note, and was a non-smoker.

Under general anesthesia, the nipple-areolar complex was released the from the underlying pectoralis muscle via the old hemi-periareolar scar. Disks of porcine ADM were created using the diameter of the patient's areola as a template. Using a muscle-splitting technique, individual disks were layered into the subdermal, intramuscular, interpectoral and subpectoral planes. These stacked disks were sutured into a single secure unit, the muscle repaired, and the skin closed. A sponge dressing was applied for pressure and prevention of shear force. The right gynecomastia was also excised at this time.

The post-operative photographs at 17 months show maintained projection of the areola with a natural contour that the patient is delighted with.

Reference Citations:

1. Simon BE, Hoffman S, Kahn S. Classification and surgical correction of gynaecomastia. Plast Reconstr Surg 1973; 51: 48-52