Pectoral Sparing Immediate Implant Breast Reconstruction

Kathryn E Williams, MD MB ChB; Lyndsey Highton, MB BS; Ashley Topps MB BS; Rachel Holt, MD MBBS; Julia Henderson, MBBS; John Murphy, PhD MB BS.

Introduction

Traditionally the pectoralis major muscle (PMM) is used for superomedial implant cover during implant based reconstruction. The release of PMM can cause postoperative pain. Long term problems include animation of the reconstruction and lateral displacement.

We present our experience of pectoral sparing implant reconstruction using full implant coverage using an acellular dermal matrix (ADM) and ADM in conjunction with a dermal sling (DS).

Methods

Technique used depended on breast shape and ptosis, two sheets of ADM sutured together or one sutured to a DS. The ADM is fixed supero-medially. Control of the lateral border is achieved with interrupted sutures following implant placement, allowing good medial projection and implant positioning without PMM disruption.

Results

This technique has been performed on 67 patients (100 breasts) with a median follow up time of 297 days (40-1083). There were a number of surgical indications: malignancy (n=25), risk reduction (n=40), revision (n=32) and delayed reconstruction (n=8). Incision type varied; wise pattern (32), IMF (48) and transverse/vertical (20). Mean mastectomy weight was 473g (73-1679), and median implant volume: 409cc (165-620). Length of stay was 0.96 days. Four patients experienced delayed wound healing (4%), 2 skin flap necrosis, with an overall complication rate of 13%. The explantation rate was 2%.

Conclusions

This technique is suited to women seeking single stage implant based reconstruction who are athletic and don't want disruption of their PMM. Recovery time is quick and postoperative pain reduced. Cosmetic outcomes from this single stage implant reconstruction are excellent and patient satisfaction is high.