# The Short Scar Periareolar Inferior Pedicle Reduction Mammaplasty

## Management of Complications

Dennis C. Hammond, MD*, Kuylhee Kim, MD

**KEYWORDS**

• SPAIR • Breast reduction • Complications

**KEY POINTS**

- The skin pattern of the short scar periareolar inferior pedicle reduction mammaplasty creates inequality in the incision lengths around the periareolar and vertical incisions.
- This inequality can lead to delayed wound healing, widened or unattractive scars, and shape distortion.
- Based on an inferior pedicle, blood supply issues to the nipple-areolar complex are rare.
- The overall complication rate is low, and the aesthetic results are excellent.

## INTRODUCTION

Breast reduction is one of the most common plastic surgery procedures performed on the breast.[1] Over time, several different approaches to this operation have been described, each designed to variably provide the potential for more aesthetic breast shapes, reduced scars, and decreased complication rates. As a result, there are now numerous alternatives to the standard inverted-T inferior pedicle technique. The short scar periareolar inferior pedicle reduction (SPAIR) mammaplasty is one of these techniques.[2–7] Originally, the procedure was designed to reduce the scar burden associated with breast reduction. However, as experience with the technique grew, it became evident that the aesthetic results were of high quality and the degree of postoperative shape change over time was not as dramatic as can happen with the inverted-T procedure. However, as with any operative procedure, postoperative complications can occur. The purpose of this article is to outline these potential complications that are of particular concern with the SPAIR mammaplasty and describe methods for their treatment and prevention.

## TECHNIQUE

By way of reference, the SPAIR mammaplasty is based on an inferior pedicle to provide vascularity to the nipple-areolar complex (NAC). The underlying breast septum is also preserved to enhance the viability of the pedicle.[8] The redundant tissue is resected from around the pedicle creating a U-shaped block of tissue. The skin pattern uses a circumvertical approach whereby the medial and lateral breast flaps are brought around and under the inferior pedicle to close off the vertical segment and help cone the breast. This maneuver

Disclosures: Dr D.C. Hammond receives royalties related to the sale of the book *Atlas of Aesthetic Breast Surgery* published by Elsevier, 2009.
Partners in Plastic Surgery, 4070 Lake Drive, Suite 202, Grand Rapids, MI 49546, USA
* Corresponding author.
*E-mail address:* drhammond@pipsmd.com

Clin Plastic Surg 43 (2016) 365–372
http://dx.doi.org/10.1016/j.cps.2015.12.010
0094-1298/16/$ – see front matter 

creates a vertical scar that runs down from the NAC and variably courses inferolaterally to the inframammary fold (IMF). Finally the NAC is inset into the pattern using an interlocking purse-string suture (**Fig. 1**).[9]

## COMPLICATIONS

### *Standard Operative Complications*

All of the usual complications associated with breast reduction are also potentially associated with the SPAIR mammaplasty, including infection, hematoma, seroma, delayed wound healing, loss of nipple sensation, ischemia or necrosis of the NAC, rehypertrophy, asymmetry, and shape distortion. However, because of a unique combination of tissue management strategies, there are several potential complications that can be of particular concern when using the SPAIR.

#### *Delayed wound healing*

Delayed wound healing is the most common complication associated with the SPAIR mammaplasty. Although any portion of the incision pattern can experience wound breakdown with postoperative dehiscence, this most commonly occurs

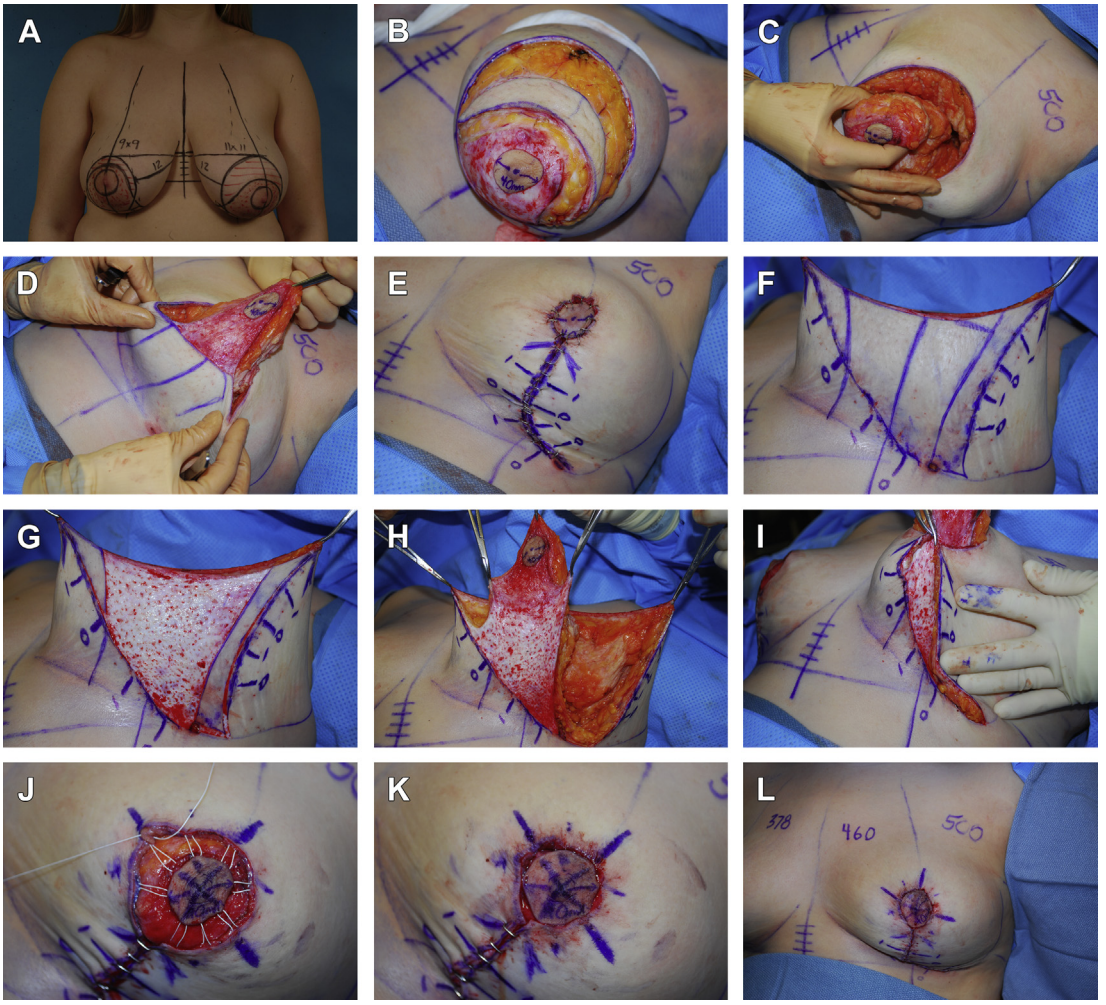


**Fig. 1.** (*A*) Preoperative marking in preparation for an SPAIR mammaplasty. (*B*) The areolar and periareolar incisions are made, and the inferior pedicle is de-epithelized. (*C*) A horseshoe-shaped segment of breast parenchyma is resected from around the inferior pedicle. (*D*, *E*) The vertical plication line can be set by progressively tailor tracking the skin edges together until a pleasing shape is created. (*F*) Appearance of vertical segment after removal of the staples. (*G*, *H*) The inferior pedicle is de-epithelized. The lateral flap is released from the pedicle. (*I*) The medial and lateral flaps are brought together to complete the vertical closure. (*J*) An interlocking Teflon suture is placed to control the periareolar defect. (*K*) Appearance of the areola after cinching down of the interlocking suture. (*L*) Final appearance.