

# The Lateral Chest Wall: A Separate Aesthetic Unit in Breast Surgery

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**Background:** The lateral chest wall is an aesthetic unit often overlooked in breast surgery. Abnormalities are often seen in candidates for aesthetic and reconstructive breast surgery and in the massive weight loss population. Preoperative evaluation of the lateral chest wall is necessary to address this area properly. These deformities are intimately associated with the final outcome of any breast operation.

**Methods:** To better define deformities of the lateral chest wall, a series of 522 patients who had aesthetic or reconstructive breast surgery was reviewed retrospectively. The preoperative and postoperative photographs were evaluated by two surgeons independently. Any surgical approaches used to correct lateral chest wall deformities were documented.

**Results:** In evaluating the lateral chest wall, the authors identified three subunit areas that need to be addressed to maximize aesthetic result: the axilla, the lateral breast, and the chest wall. Deficiency and excess of skin and fat contribute to any deformities in this region; deficiency or excess was found in 39 percent of patients. These deformities, when identified, were surgically addressed in 40 percent of patients, as management strategies included transfer of autologous tissue, fat injection, liposuction, or direct excision.

**Conclusions:** Lateral chest wall deformities are often found among breast surgery candidates and can affect the final outcome. This area should be treated as a separate aesthetic unit from the breast. Patients with deficiency or excess should be counseled appropriately, as proper treatment may require procedures in addition to the primary breast procedure. The classification system presented can serve as a guideline for management of deformities in this region. (*Plast. Reconstr. Surg.* 128: 626e, 2011.)

The aesthetic subunits of the breast have been described previously<sup>1,2</sup> and are critical in preoperative evaluation and planning. Although the lateral chest wall is intimately associated with the aesthetics of the breast, it is rarely addressed as a separate unit. Contour deformities of the lateral chest wall are common in congenital malformations and in patients presenting for aesthetic and reconstructive breast surgery. Failure to address this area can have aesthetic consequences, because the lateral chest wall and axilla cannot be easily hidden in certain clothing, such as bras and bathing suits. We believe the lateral chest wall

deserves special attention as a separate aesthetic unit of the breast.

Based on a retrospective chart review, we identified consistent patterns of lateral chest wall deformities in aesthetic or reconstructive breast surgery. Surgical techniques used in conjunction with the primary breast procedure are described addressing these lateral chest wall deformities. Illustrative cases are presented with a classification system and an algorithm for management.

## ANATOMY OF THE LATERAL CHEST WALL

The lateral chest wall has the shape of a triangle, with its apex at the axilla (Fig. 1). The anterior border is the lateral boundary of the

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