



AMERICAN SOCIETY OF
PLASTIC SURGEONS®

Reduction Mammoplasty: ASPS Recommended Insurance Coverage Criteria for Third-Party Payers

BACKGROUND

The justification for reduction mammoplasty should be based on the probability of relieving the clinical signs and symptoms of symptomatic breast hypertrophy. Because it is difficult to determine the size at which breast enlargement becomes pathologic in any individual, it is the position of the American Society of Plastic Surgeons that the definition of symptomatic breast hypertrophy should focus on the degree of symptomatology, not the degree of breast hypertrophy present (cup size or amount of tissue removed).

These policy recommendations are based on the evidence based companion guideline for Reduction Mammoplasty. A comprehensive search of PubMed, the Cochrane Database of Systematic Reviews, and the Cumulative Index to Nursing and Allied Health Literature was performed to identify current literature on the treatment of breast hypertrophy by using various combinations of the following search terms: mammoplasty, reduction mammoplasty, breast reduction, breast hypertrophy, macromastia, as well as a wide range of indexing terms (MeSH terms), free text words and word variants.

DEFINITIONS

For reference, the following definitions of cosmetic and reconstructive surgery were adopted by the American Medical Association in 1989:

Cosmetic surgery is performed to reshape normal structures of the body in order to improve the patient's appearance and self esteem.

Reconstructive surgery is performed on abnormal structures of the body, caused by congenital defects, developmental abnormalities, trauma, infection, tumors or disease. It is generally performed to improve function, but may also be done to approximate a normal appearance.

Symptomatic breast hypertrophy is defined as a syndrome of persistent neck and shoulder pain, painful shoulder grooving from brassiere straps, chronic intertriginous rash of the inframammary fold, and frequent episodes of headache, backache, and neuropathies caused by heavy breasts caused by an increase in the volume and weight of breast tissue beyond normal proportions.^{1,2,3}

SCIENTIFIC EVIDENCE

Conservative Therapy: According to the findings of a Level II, prospective study, non-surgical therapies, such as support bras, physical therapy, exercise, and medications, have been found to be ineffective in providing permanent relief of breast hypertrophy symptoms.⁴ To date, there are no studies published affirming the cost effectiveness of conservative measures as a first line therapy for the treatment of symptomatic breast hypertrophy.

Efficacy: The scientific evidence from high quality, randomized controlled trials indicates that reduction mammoplasty is effective at reducing symptomatic breast hypertrophy-related symptoms and improving quality of life.

- **Level I Evidence:** Evidence indicates that reduction mammoplasty is an effective treatment for patients with symptomatic breast hypertrophy.^{5,6,7}

Resection Weight: Resection weight thresholds are often used as a determinant for insurance coverage criteria. While a few studies have attempted to validate the relationship between resection weight and medical necessity, currently no study exists that provides a sound scientific rationale for this theory. The commonly used Schnur Sliding Scale suggests that resection weights above the 22nd percentile should be regarded as reconstructive, while resection weights falling below the fifth percentile should be deemed cosmetic.⁸ However, from a scientific standpoint, the basis for developing this scale is flawed. The Schnur scale recommendations are derived from a survey that asked plastic surgeons their perceptions of their patients' motivations for reduction mammoplasty (i.e. reconstructive or cosmetic).⁸ This survey study design, based on surveyed perception of others, is susceptible to significant bias and does not meet the inclusion criteria for being a moderate or high quality study on the ASPS Level of Evidence Rating Scale (see below). Schnur himself has even challenged insurance carriers' misuse of the scale and has indicated that the scale should no longer be used as criteria for insurance coverage.⁹

The Seitchik Formula is also cited by some third party payers. Seitchik's retrospective study, "Reduction Mammoplasty: Criteria for Insurance Coverage" sought to determine the relationship between body weight and resection weight. However, Seitchik concluded that "I cannot derive a useful formula to determine, in advance, which patients will receive symptomatic, and therefore compensable

relief from reduction mammoplasty”.¹⁰ Based on the limited study findings, Seitchik offered his own formula based on personal recommendation, not scientific data. Since the Schnur sliding scale and Seitchik formula lack scientific rigor and validity, they should not be used as criteria for approval of insurance coverage.

Evidence indicates that women, across a wide range of breast sizes, experience similar benefits from reduction mamamplasty. According to two prospective studies, women of varying breast sizes, experience similar preoperative symptoms and similar postoperative relief and quality of life improvement regardless of the total resection volume.^{11, 12}

- **Level II Evidence:** Evidence indicates that resection volume is not correlated to the degree of postoperative symptom relief.^{11, 12}

POLICY

Based on the results of Level I and II Evidence, reduction mammoplasty has been proven effective at reducing macromastia related symptoms and improving postoperative quality of life. Insurance coverage criteria for symptomatic breast hypertrophy should be based upon documentation of at least two symptoms (see below) regardless of body weight or weight of breast tissue removed. The documentation of at least two symptoms is supported by a Level II, prospective study examining the medical necessity of reduction mammoplasty. Of women presenting for surgical correction of symptomatic breast hypertrophy, 87.6% listed at least two out of seven breast-related physical symptoms occurring all or most of the time, as compared with 2% of women with normal breast size (C or smaller).¹¹

Documentation:

- Physicians should document the severity of the symptoms of breast hypertrophy (ICD-9: 611.1) and impact on health related quality of life as measured by a breast specific questionnaire which includes at least two of the following signs/symptoms:
 - Chronic breast pain (ICD-9: 611.71) due to weight of the breasts
 - Intertrigo (ICD-9: 695.89) unresponsive to medical management
 - Upper back, neck, and shoulder pain (ICD-9: 724.1, 723.1, 723.9)
 - Backache, unspecified (ICD-9: 724.5)
 - Thoracic kyphosis, acquired (ICD-9: 737.10)
 - Shoulder grooving from bra straps (ICD-9: 738.3)
 - Upper extremity paresthesia (ICD-9: 782.0) due to brachial plexus compression syndrome secondary to the weight of the breasts being transferred to the shoulder strap area
 - Headache (ICD-9: 784.0)
 - Congenital breast deformity (ICD-9: 757.6)

CPT Coding:

- 19318 Unilateral reduction mammoplasty
- 19318-50 Opposite breast reduction mammoplasty

ASPS Level of Evidence Rating Scale

Evidence Rating Scale for Diagnostic Studies

Level of Evidence	Qualifying Studies
I	High-quality, multi-centered or single-centered, cohort study validating a diagnostic test (with “gold” standard as reference) in a series of consecutive patients; or a systematic review of these studies
II	Exploratory cohort study developing diagnostic criteria (with “gold” standard as reference) in a series of consecutive patient; or a systematic review of these studies
III	Diagnostic study in nonconsecutive patients (without consistently applied “gold” standard as reference); or a systematic review of these studies
IV	Case-control study; or any of the above diagnostic studies in the absence of a universally accepted “gold” standard
V	Expert opinion; case report or clinical example; or evidence based on physiology, bench research or “first principles”

Evidence Rating Scale for Prognostic/Risk Studies

Level of Evidence	Qualifying Studies
I	High-quality, multi-centered or single-centered, prospective cohort study with adequate power; or a systematic review of these studies
II	Lesser-quality prospective cohort or comparative study; retrospective cohort study; untreated controls from a randomized controlled trial; or a systematic review of these studies
III	Case-control study; or systematic review of these studies
IV	Case series with pre/post test; or only post test
V	Expert opinion; case report or clinical example; or evidence based on physiology, bench research or “first principles”

Evidence Rating Scale for Therapeutic Studies

Level of Evidence	Qualifying Studies
I	High-quality, multi-centered or single-centered, randomized controlled trial with adequate power; or systematic review of these studies
II	Lesser-quality, randomized controlled trial; prospective cohort or comparative study; or systematic review of these studies
III	Retrospective cohort or comparative study; case-control study; or systematic review of these studies
IV	Case series with pre/post test; or only post test
V	Expert opinion; case report or clinical example; or evidence based on physiology, bench research or “first principles”

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