

## **Medical Policy Manual**

**Topic:** Reduction Mammoplasty

**Date of Origin:** January 1996

**Section:** Surgery

**Last Reviewed Date:** July 2014

**Policy No:** 60

**Effective Date:** October 1, 2014

### **IMPORTANT REMINDER**

Medical Policies are developed to provide guidance for members and providers regarding coverage in accordance with contract terms. Benefit determinations are based in all cases on the applicable contract language. To the extent there may be any conflict between the Medical Policy and contract language, the contract language takes precedence.

PLEASE NOTE: Contracts exclude from coverage, among other things, services or procedures that are considered investigational or cosmetic. Providers may bill members for services or procedures that are considered investigational or cosmetic. Providers are encouraged to inform members before rendering such services that the members are likely to be financially responsible for the cost of these services.

### **DESCRIPTION**

Reduction mammoplasty is the surgical excision of a substantial portion of the breast, including the skin and underlying glandular tissue, until a clinically normal size is obtained.

Female breast hypertrophy, or macromastia, is the development of abnormally large breasts in the female. This condition can cause significant clinical manifestations when the excessive breast weight adversely affects the supporting structures of the shoulders, neck and trunk. Macromastia is distinguished from large, normal breasts by the presence of persistent symptoms such as shoulder, neck, or back pain, shoulder grooving, or intertrigo. This condition can be improved and the associated signs and symptoms can be alleviated by reduction mammoplasty surgery.

### **NOTES:**

- For requests for reconstruction after partial or complete mastectomy, please refer to [Reconstructive Breast Surgery/Mastopexy, and Management of Breast Implants](#), Surgery, Policy No. 40.
- This policy does not address reduction mammoplasty or mastopexy as a preparatory first stage procedure preceding a nipple-sparing mastectomy, which may be considered medically necessary.

## MEDICAL POLICY CRITERIA

I. Reduction mammoplasty may be considered **medically necessary** when *all three* of the following criteria (A - C) are met:

- A. The patient is aged 18 years or older.
- B. The amount of breast tissue removed from each breast, not including fat removed by liposuction, must be at least the minimum in grams per breast for the patient's body surface area\* according to the Schnur Sliding Scale (see below for body surface area/breast weight table)

In cases of significant asymmetry (i.e., one breast meets criterion III but the other breast does not), the combined weight of the tissue removed from both breasts must total at least twice the amount required for the patient's BSA in the chart below.

The health plan may review medical records to confirm the amount of breast tissue removed during the procedure.

- C. *Two or more* of the following clinical indications have been present for at least 12 months and these have failed to respond to appropriate conservative therapy (identified below):
  - 1. Pain in the upper back, neck, shoulders, and/or arms, which must be of long-standing duration and increasing intensity as documented in the medical records by the referring physician or provider (e.g. primary care MD or chiropractor).
    - This pain should be evaluated to determine that it is not associated with another diagnosis such as arthritis.
    - Pain is not relieved by at least three months of conservative therapy such as an appropriate support bra with wide straps, exercises, heat/cold treatments and appropriate non-steroidal anti-inflammatory agents/muscle relaxants.
  - 2. Dermatitis of the shoulder or shoulder grooving not responding to at least three months of conservative treatment including a support bra or appropriate dermatologic treatments, (e.g. taking steps to eliminate friction, heat, and maceration by keeping skin cool and dry and where appropriate, topical agents).
  - 3. Intertrigo between the pendulous breasts and the chest wall persisting despite at least three months of conservative dermatologic treatments (e.g. taking steps to eliminate friction, heat, and maceration by keeping skin cool and dry and where appropriate, antimycotic agents).
  - 4. Kyphosis documented by x-ray.
  - 5. Ulnar paresthesia not relieved by at least three months of conservative therapy such as an appropriate support bra with wide straps, range of motion exercises,

physical therapy, and appropriate non-steroidal anti-inflammatory agents/muscle relaxants.

- II Reduction mammoplasty is considered **not medically necessary** when criteria I. (A - C) are not met.
- III. The use of liposuction as the sole procedure for breast reduction is considered **investigational**.
- IV. The use of liposuction as an additional procedure with breast reduction surgery is considered **not medically necessary**.

[Click here for link to Body Surface Area Calculator](#)

BSA (m<sup>2</sup>) = ( [Height(cm) x Weight(kg) ]/ 3600 )<sup>½</sup> &nbsp;    
 e.g. BSA = SQRT( (cm\*kg)/3600 )

Reference: Mosteller RD: Simplified Calculation of Body Surface Area. N Engl J Med 1987 Oct 22;317(17):1098 (letter)

BSA (in m2) = [height (cm)]0.718 X [weight (kg)]0.427 X .007449

Reference: Carey, Charles C., et al. The Washington Manual of Medical Therapeutics. (Philadelphia: Lippincott Williams & Wilkins, 1998), p.562.

\*Body surface area in meters squared (m2) is calculated using the Mosteller formula:

Take the square root of:  $\frac{\text{Ht. (inches)} \times \text{Wt. (lbs.)}}{3,131}$

Body Surface Area m <sup>2</sup> and Minimum Requirement for Breast Tissue Removal	
Body Surface Area m <sup>2</sup>	Grams per Breast of Minimum Breast Tissue to be Removed
1.350-1.374	199
1.375-1.399	208
1.400-1.424	218
1.425-1.449	227
1.450-1.474	238
1.475-1.499	249
1.500-1.524	260

1.525-1.549	272
1.550-1.574	284
1.575-1.599	297
1.600-1.624	310
1.625-1.649	324
1.650-1.674	338
1.675-1.699	354
1.700-1.724	370
1.725-1.749	386
1.750-1.774	404
1.775-1.799	422
1.800-1.824	441
1.825-1.849	461
1.850-1.874	482
1.875-1.899	504
1.900-1.924	527
1.925-1.949	550
1.950-1.974	575
1.975-1.999	601
2.000-2.024	628
2.025-2.049	657
2.050-2.074	687
2.075-2.099	717
2.100-2.124	750
2.125-2.149	784

2.150-2.174	819
2.175-2.199	856
2.200-2.224	895
2.225-2.249	935
2.250-2.274	978
2.275-2.299	1022
2.300-2.324	1068
2.325-2.349	1117
2.350-2.374	1167
2.375-2.399	1219
2.400-2.424	1275
2.425-2.449	1333
2.450-2.474	1393
2.475-2.499	1455
2.500-2.524	1522
2.525-2.549	1590
2.550 or greater	1662

## SCIENTIFIC BACKGROUND

The following literature appraisal is focused on the investigational technique of reduction mammoplasty by liposuction alone. In order to understand the impact on health outcomes of reduction mammoplasty by liposuction alone, prospective clinical trials are needed, comparing liposuction with standard reduction mammoplasty. These comparisons are necessary in order to understand the safety and efficacy of liposuction and to determine whether liposuction offers advantages over conventional surgical procedures with respect to patient satisfaction, complications, durability, and cosmesis.

### Literature Appraisal

While there are some published articles concerning the use of liposuction as the sole procedure for breast reduction, none compare the outcomes of liposuction alone to standard excisional reduction mammoplasty.<sup>[1-5]</sup> Examples of these articles are detailed below:

- Moskovitz and colleagues conducted a study of liposuction alone for treatment of macromastia in twenty-four African-American women due to their high risk for complex scar formation following standard excision mammoplasty.<sup>[6]</sup> The mean aspirate was 1075 cc of fat per breast; however, the before and after liposuction pictures indicate that the participants continued to support large breasts. Outcome measures included the SF-36, EuroQol, Multidimensional Body-Self Relations Questionnaire, McGill Pain Questionnaire and Breast-Related Symptoms Questionnaire. Statistical analysis demonstrated a significant improvement in breast-related symptoms and pain. This was a relatively small, non-randomized trial and patients were not blinded to the intervention. Conclusions concerning the effect of liposuction alone on breast-related symptoms in patients with macromastia cannot be made.
- Jakubietz et al. reported the indications and limitations of this procedure compared to conventional surgical excision.<sup>[7]</sup> Advantages included selective removal of fat, ease of procedure, and the advantages of less invasive procedures such as faster recovery time and reduced scarring. One disadvantage of liposuction alone included the inability to correct shape and ptosis, making aesthetic results optimal only for young patients. In addition, there are concerns about the extent to which subsequent breast imaging may be impaired, and the possible spread of cancer cells. The authors recommended caution when considering use of this technique.

In summary, high quality evidence on the use of liposuction for reduction mammoplasty has not been identified; comparative trials of sufficient size and duration are needed before any conclusions can be made about the use of this technique for breast reduction.

## **Clinical Practice Guideline**

### American Society of Plastic Surgeons

In 2011, the American Society of Plastic Surgeons released an evidence-based clinical practice guideline on the use of reduction mammoplasty.<sup>[8]</sup> Several clinical questions were addressed, including whether women who did not meet standard health insurance criteria for volume of breast resection experience postoperative relief. On the basis of a single study which compared satisfaction outcomes of women who met standard insurance criteria with women who did not meet such criteria, the society concluded that, “resection volume is not correlated to the degree of postoperative symptom relief.” The society recommended extending the option of reduction mammoplasty to this category of patient. However, among women not meeting standard criteria for resection volume, no comparisons were made between surgical and standard conservative treatment, limiting interpretation of the above findings. Additionally, these recommendations did not specifically address the safety and effectiveness of reduction mammoplasty by liposuction.

## **Summary**

Due to insufficient evidence concerning suction mammoplasty, it is not possible to reach conclusions concerning health outcomes, particularly with respect to the impact of this procedure on subsequent mammography. Therefore, reduction mammoplasty by liposuction alone is considered investigational.

## REFERENCES

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## CROSS REFERENCES

[Cosmetic and Reconstructive Surgery](#), Surgery, Policy No. 12

[Reconstructive Breast Surgery/Mastopexy, and Management of Breast Implants](#), Surgery, Policy No. 40

[Autologous Fat Grafting to the Breast and Adipose-derived Stem Cells](#), Surgery, Policy No. 182

CODES	NUMBER	DESCRIPTION
CPT	15877	Suction assisted lipectomy; trunk
	19318	Reduction mammoplasty
HCPCS	None	