**Cigna Medical Coverage Policy**

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**Coverage Policy Number** .............. 0152

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**Subject**   | **Reduction Mammoplasty**

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**Hyperlink to Related Coverage Policies**
- Breast Reconstruction following Mastectomy or Lumpectomy
- Gender Reassignment Surgery
- Mammography
- Prophylactic Mastectomy
- Surgical Treatment of Gynecomastia

**INSTRUCTIONS FOR USE**

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**Coverage Policy**

Coverage for reduction mammoplasty is dependent on benefit plan language, may be subject to the provisions of a cosmetic and/or reconstructive surgery benefit and may be governed by state and/or federal mandates. Under many benefit plans, reduction mammoplasty is not covered when performed solely for the purpose of altering appearance or self-esteem or to treat psychological symptomatology or psychosocial complaints related to one's appearance. In addition, macromastia surgeries are specifically excluded under some benefit plans. Please refer to the applicable benefit plan language to determine the terms and conditions of coverage.

Cigna covers breast reduction surgery on the nondiseased/contralateral breast when performed to produce a symmetrical appearance following a mastectomy or lumpectomy.

If coverage for reduction mammoplasty is available, the following conditions of coverage apply.

Cigna covers reduction mammoplasty for symptomatic macromastia as medically necessary when ALL of the following criteria have been met:

- The individual is at least 18 years of age or breast growth is complete.
- Macromastia is causing at least ONE of the following conditions/symptoms with documented failure of at least one continuous three-month trial of appropriate medical management:
  - shoulder, upper back/neck pain, and/or ulnar nerve palsy for which no other etiology has been found on appropriate evaluation
The potential causes of the above conditions/symptoms, other than breast size (e.g., intervertebral disc disorder, arthritis and rheumatologic disorders) have been evaluated and ruled out OR breast size has been documented as exacerbating the underlying condition (e.g., intervertebral disc disorder, arthritis and rheumatologic disorders) contributing to symptoms.

- Preoperative photographs confirm the presence of BOTH of the following:
  - significant breast hypertrophy
  - shoulder grooving from bra straps and/or intertrigo if stated to be present

- Average weight of tissue planned to be removed in each breast is above the 22nd percentile on the Schnur Sliding Scale (see Appendix A) based on the individual’s body surface area (BSA).

Cigna does not cover reduction mammoplasty for either of the following indications because it is considered cosmetic in nature and not medically necessary:

- Surgery is being performed to treat psychological symptomatology or psychosocial complaints, in the absence of significant physical, objective signs.
- Surgery is being performed for the sole purpose of improving appearance.

Cigna does not cover suction lipectomy or ultrasonically-assisted suction lipectomy (liposuction) as a sole method of treatment for symptomatic macromastia because such treatment is considered unproven in the treatment of symptomatic macromastia.

General Background

Macromastia (i.e., female breast hypertrophy) is the development of abnormally large breasts. Normal breast development begins at approximately five weeks’ gestation and continues until a woman is in her early twenties, with the rate of development and degree of asymmetry often varying. Spontaneous massive growth of the breasts during puberty and adolescence is thought to be the result of excessive end-organ sensitivity to gonadal hormones. It is more commonly bilateral, often occurs over a brief period, and most commonly affects adolescent girls. Management is individualized and may range from reassurance or the use of supportive brassieres. It is recommended that surgery be delayed until late adolescence to allow complete breast development (McGrath and Pomerantz, 2012; DeSilva and Merritt, 2011).

The presence of macromastia may cause clinical manifestations when the excessive breast weight adversely affects the supporting structures of the shoulders, neck and trunk. Increased weight on the shoulders can cause pain, fatigue in the cervical and thoracic spine, which can lead to poor posture, thoracic kyphosis and occipital headaches. Grooving or ulceration of the skin on the shoulders, pressure on the brachial plexus causing neurological symptoms in the arms and skin conditions occurring at the inframammary fold such as intertrigo, dermatitis, eczema, or hidradenitis (inflammation of the apocrine sweat glands resulting in obstruction of the ducts) may also exist. The presence of these persistent signs and painful symptoms distinguish macromastia from large, normal breasts and may prompt the need for surgical intervention (McGrath and Pomerantz, 2012; American Society of Plastic Surgeons [ASPS], 2011; Schnur, et al., 1997).

Medical management of conditions/symptoms can include any of the following: weight loss, adequate bra support (proper fit and wide strap support): nonsteroidal anti-inflammatory drugs (NSAIDS)/analgesia; and physical therapy, when a functional impairment exists (Collins, et al., 2002).

Reduction mammoplasty is the surgical excision of a substantial portion of the breast, including the skin and the underlying glandular tissue, until a clinically normal size is obtained. Relocation of the nipple, which may result in decreased sensation and altered lactation, may also be required during this procedure. Therefore, it has been recommended that surgery should not be performed on an individual until the breasts are fully developed. Complications range from mild to severe and may be early or late. The most common early complication
independent of reduction technique is delayed wound healing. Late complications can include, but are not limited to, seroma, scars and pseudoptosis (McGrath and Pomerantz, 2012; Nahai, et al., 2008; Greydanus, et al., 2006).

The Schnur Sliding Scale is an evaluation tool that may be used to determine the appropriate amount of tissue to be removed compared to a patient’s total body surface area (BSA). This can be instrumental in determining if breast reduction is being planned for a purely cosmetic reason or as a medically necessary procedure. In a survey of plastic surgeons, Schnur et al. (1991) concluded that women whose removed breast weight was less than the 5th percentile sought the procedure for cosmetic reasons and all women whose breast weight was greater than the 22nd percentile sought the procedure for medical reasons. A calculation for BSA is: 

$$BSA = [\frac{\text{height (cm)}}{0.718} \times [\frac{\text{weight (kilograms [kg])}}{0.427} \times 0.007449]}$$

Breast tissue regrowth following initial breast reduction in adolescence has been reported (Greydanus, et al., 2006). The growth of the female breast is generally described by five stages referred to as Tanner stages or sexually maturity rating (SMR) stages. A number of clinical correlations are noted with the SMR stages, including the timing of breast reduction at stage V (i.e., mature stage) (DeSilva, et al., 2006). In a review of elective plastic surgical procedures in adolescence, McGrath and Schooler (2004) stated “Breast development is variable but usually plateaus at 15–16 years of age. Reduction mammoplasty is postponed until breast maturity is reached. Occasionally, surgery is considered earlier when severe symptoms are encountered; there is a risk of recurrent hypertrophy, however.” In general, breast maturity should have been reached prior to considering breast reduction surgery.

**Literature Review**

Controlled clinical studies assessing the effectiveness of surgical removal of modest amounts of breast tissue in reducing neck, shoulder, and back pain and related disabilities in women are lacking. Despite the lack of controlled studies, reduction mammoplasty has become the standard of care for a subset of individuals with symptomatic macromastia. Evidence suggests that calculating breast reduction in correlation to each patient's body weight and height can have an effect on reducing preoperative signs and persistent physical conditions. (Cunningham, et al., 2005; Blomqvist, et al., 2004; Souto, et al., 2003; Collins, et al., 2002; Ayhan, et al., 2002; Bruhlmann, et al., 1998).

Chadbourne et al. (2001) conducted a systematic review and meta-analysis of 29 studies of 4173 patients to determine whether reduction mammoplasty improves measurable outcomes in women with breast hypertrophy. Experimental and observational studies were included; no randomized controlled trials were found. Outcomes assessed were postoperative physical signs and symptoms such as shoulder pain, shoulder (bra strap) grooving, and quality-of-life domains, such as physical and psychological functioning, and were expressed primarily as risk differences. The mean body mass index of the patients was 27.5 kg/m² in the observational studies and 29.6 kg/m² in the experimental studies. The average tissue mass removed per breast was approximately 1400 grams. The authors concluded that reduction mammoplasty was associated with a statistically significant improvement in physical signs and symptoms involving shoulder pain, shoulder grooving, upper/lower back pain, neck pain, intertrigo, breast pain, headache, and pain/numbness in the hands. The quality-of-life parameter of physical functioning was also statistically significant, while psychological functioning was not significant. The evidence suggests that women undergoing reduction mammoplasty for breast hypertrophy have significant postoperative improvement in preoperative signs and symptoms, quality of life, or both.

**Breast Reduction by Liposuction**

Suction lipectomy or ultrasonically-assisted suction lipectomy (liposuction) as a sole procedure has been introduced as an alternative method in reducing breast size. The effectiveness of liposuction, in terms of removing glandular breast tissue, rather than fatty tissue in the breast, remains to be demonstrated. Evidence supporting the effects of this approach on patient outcomes has been limited to case series and there are minimal long-term data comparing this technique to the standard surgical approach (Maskovitz, et al., 2007; ECRI, 2014; Sadove, et al., 2005).

**Professional Societies/Organizations**

**American Society of Plastic Surgeons (ASPS):** The 2011 update to the 2002 ASPS policy statement, insurance coverage criteria for third-party payors for reduction mammoplasty, recommends that justification for reduction mammoplasty should be based on the probability of relieving the clinical signs and symptoms of
macromastia, not the degree of breast hypertrophy present (cup size or amount of tissue removed). 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. These policy recommendations are based on the 2011 ASPS evidence based companion guideline for Reduction Mammaplasty.

Use Outside of the US
No relevant information.

Summary
The evidence in the peer-reviewed published literature supports use of reduction mammoplasty to improve signs and symptoms associated with macromastia. There is a lack of well-designed controlled clinical trials to assess the amount of breast tissue removed and the reduction of signs and symptoms of macromastia. A patient’s signs and symptoms and the amount of breast tissue to be resected needs to be evaluated before the performance of reduction mammoplasty for macromastia.

The effectiveness of suction lipectomy or ultrasonically-assisted suction lipectomy (liposuction) as a sole method of treatment for symptomatic macromastia in terms of removing glandular breast tissue, rather than fatty tissue in the breast, remains to be demonstrated. Evidence in the peer-reviewed published literature supporting the effects of this approach on patient outcomes has been limited to case series and there are minimal long-term data comparing this technique to the standard surgical approach for reduction mammoplasty.

Appendix A
Schnur Sliding Scale

Body Surface Area and Cutoff Weight of Breast Tissue Removed

<table>
<thead>
<tr>
<th>Breast Reduction (gm)</th>
<th>Body Surface Area (m²)</th>
<th>Lower 5%</th>
<th>Lower 22%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.35</td>
<td>127</td>
<td>199</td>
<td></td>
</tr>
<tr>
<td>1.40</td>
<td>139</td>
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<td></td>
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<td>238</td>
<td></td>
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<tr>
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<td>1662</td>
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</tr>
</tbody>
</table>
Schnur Sliding Scale (Schnur, et al., 1991)

Coding/Billing Information

Note: 1) This list of codes may not be all-inclusive.
       2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible
       for reimbursement.

Covered as medically necessary:

<table>
<thead>
<tr>
<th>CPT® Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19318</td>
<td>Reduction mammoplasty</td>
</tr>
</tbody>
</table>

Unproven/Not Covered when performed as a sole method of treatment for symptomatic macromastia:

<table>
<thead>
<tr>
<th>CPT® Codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15877</td>
<td>Suction assisted liposuction; trunk</td>
</tr>
</tbody>
</table>


References


