



Cigna Medical Coverage Policy

Effective Date 8/15/2014
Next Review Date 8/15/2015
Coverage Policy Number 0152

Subject **Reduction Mammoplasty**

Table of Contents

Coverage Policy	1
General Background	2
Coding/Billing Information	5
References	5

Hyperlink to Related Coverage Policies

- [Breast Reconstruction following Mastectomy or Lumpectomy](#)
- [Gender Reassignment Surgery](#)
- [Mammography](#)
- [Prophylactic Mastectomy](#)
- [Surgical Treatment of Gynecomastia](#)

INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna companies. Coverage Policies are intended to provide guidance in interpreting certain **standard** Cigna benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supersedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations. Proprietary information of Cigna. Copyright ©2014 Cigna

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

- intertrigo, dermatitis, eczema, or hidradenitis at the inframammary fold
- 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: $BSA \text{ (in m}^2\text{)} = [\text{height (cm)}]^{0.718} \times [\text{weight (kilograms [kg])}]^{0.427} \times .007449$.

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 Mammoplasty.

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

Breast Reduction (gm)		
Body Surface Area (m²)	Lower 5%	Lower 22%
1.35	127	199
1.40	139	218
1.45	152	238
1.50	166	260
1.55	181	284
1.60	198	310
1.65	216	338
1.70	236	370
1.75	258	404
1.80	282	441
1.85	308	482
1.90	336	527
1.95	367	575
2.00	401	628
2.05	439	687
2.10	479	750
2.15	523	819
2.20	572	895
2.25	625	978
2.30	682	1068
2.35	745	1167
2.40	814	1275
2.45	890	1393
2.50	972	1522
2.55	1062	1662

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:

CPT ^{®*} Codes	Description
19318	Reduction mammoplasty

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

CPT* Codes	Description
15877	Suction assisted lipectomy; trunk

*Current Procedural Terminology (CPT[®]) © 2013 American Medical Association: Chicago, IL.

References

1. American Society of Plastic Surgeons. Reduction Mammoplasty Recommended Criteria for Third-Party Payer Coverage from the American Society of Plastic Surgeons (ASPS). May 2011. Accessed July 2, 2014. Available at URL address: <http://www.plasticsurgery.org>
2. American Society of Plastic Surgeons. Reduction Mammoplasty. Evidence-Based Practice Guidelines. May 2011. Accessed July 2, 2014. Available at URL address: <http://www.guideline.gov/content.aspx?id=34042>
3. Ayhan S, Basterzi Y, Yavuzer R, Latifoglu O, Cenetoglu S, Atabay K, Celebi MC. Histologic profiles of breast reduction specimens. *Anesthetic Plast Surg.* 2002 May;26(3):203-5.
4. Blomqvist L, Brandberg Y. Three-year follow-up on clinical symptoms and health-related quality of life after reduction mammoplasty *Plast Reconstr Surg.* 2004 Jul;114(1):49-54.
5. Bruhlmann Y, Tschopp H. Breast reduction improves symptoms of macromastia and has a long-lasting effect. *Ann Plast Surg.* 1998 Sep;41(3):240-5.
6. Chadbourne EB, Zhang S, Gordon MJ, Ro EY, Ross SD, Schnur PL, Schneider-Redden PR. Clinical outcomes in reduction mammoplasty: a systematic review and meta-analysis of published studies. *Mayo Clin Proc.* 2001 May;76(5):503-10.
7. Chao JD, Memmel HC, Redding JF, Egan L, Odom LC, Casas LA. Reduction mammoplasty is a functional operation, improving quality of life in symptomatic women: a prospective, single-center breast reduction outcome study. *Plast Reconstr Surg.* 2002 Dec;110(7):1644-52.
8. Collins ED, Kerrigan CL, Kim M. The effectiveness of surgical and nonsurgical interventions in relieving the symptoms of macromastia. *Plast Reconstr Surg.* 2002 Jul;109:1556-66.
9. Cunningham BL, Gear AJ, Kerrigan CL, Collins ED. Analysis of breast reduction complications derived from the BRAVO study. *Plast Reconstr Surg.* 2005 May;115(6):1597-604.

10. DeSilva NK, Brandt ML. Disorders of the breast in children and adolescents, Part 1: Disorders of growth and infections of the breast. *J Pediatr Adolesc Gynecol*. 2006 Oct;19(5):345-9.
11. DeSilva NK, Merritt DF. Breast Concerns. In: Kliegman RM, Stanton BF, St Geme JW, Schor NF, Behrman RE, editors. *Kliegman: Nelson Textbook of Pediatrics*. 19th ed. Philadelphia, PA: Elsevier; 2011. Ch 545.
12. ECRI Institute. Hotline Response [database online]. Plymouth Meeting (PA): ECRI Institute; 2014 May 13. Liposuction only-breast reduction surgery. Available at URL address: <http://www.ecri.org>
13. Gonzalez MA, Glickman LT, Aladegbami B, Simpson RL. Quality of life after breast reduction surgery: a 10-year retrospective analysis using the Breast Q questionnaire: does breast size matter? *Ann Plast Surg*. 2012 Oct;69(4):361-3.
14. Greydanus DE, Matytsina L, Gains M. Breast Disorders in Children and Adolescents. *Prim Care*. 2006 Jun;33(2):455-502.
15. Kalliainen LK; ASPS Health Policy Committee. ASPS clinical practice guideline summary on reduction mammoplasty. *Plast Reconstr Surg*. 2012 Oct;130(4):785-9.
16. Kocak E, Carruthers KH, McMahan JD. A reliable method for the preoperative estimation of tissue to be removed during reduction mammoplasty. *Plast Reconstr Surg*. 2011 Mar;127(3):1059-64.
17. McGrath MH, Pomerantz J. Plastic Surgery. Reduction Mammoplasty. In: Townsend CM, Beuchamp RD, Evers BM, editors. *Townsend: Sabiston Textbook of Surgery*, 19th ed. Philadelphia, PA: WB Saunders Company. 2012. pg 1932-33. Ch 69.
18. McGrath MH, Schooler WG. Elective plastic surgical procedures in adolescence. *Adolesc Med Clin*. 2004 Oct;15(3):487-502.
19. Moskovitz MJ, Baxt SA, Jain AK, Hausman RE. Liposuction breast reduction: a prospective trial in African American women. *Plast Reconstr Surg*. 2007 Feb;119(2):718-26; discussion 727-8.
20. Nahai FR, Nahai F. MOC-PSSM CME article: Breast reduction. *Plast Reconstr Surg*. 2008 Jan;121(1 Suppl):1-13.
21. Sadove R. New observations in liposuction-only breast reduction. *Aesthetic Plast Surg*. 2005 Jan-Feb;29(1):28-31. Epub 2005 Mar 17.
22. Schnur PL, Hoehn JG, Ilstrup DM, Cahoy MJ, Chu CP. Reduction mammoplasty: cosmetic or reconstructive procedure? *Ann Plast Surg*. 1991 Sep;27(3):232-7.
23. Schnur PL, Schnur DP, Petty PM, Hanson TJ, Weaver AI. Reduction mammoplasty: an outcome study. *Plast Reconstr Surg*. 1997 Sep;100(4):875-83.
24. Singh KA, Losken A. Additional benefits of reduction mammoplasty: a systematic review of the literature. *Plast Reconstr Surg*. 2012 Mar;129(3):562-70.
25. Souto GC, Giugliani ER, Giugliani C, Schneider MA. The impact of breast reduction surgery on breastfeeding performance. *J Hum Lact*. 2003 Feb;19(1):43-9;quiz 66-9, 120.

The registered marks "Cigna" and the "Tree of Life" logo are owned by Cigna Intellectual Property, Inc., licensed for use by Cigna Corporation and its operating subsidiaries. All products and services are provided by or through such operating subsidiaries and not by Cigna Corporation. Such operating subsidiaries include Connecticut General Life Insurance Company, Cigna Health and Life Insurance Company, Cigna Behavioral Health, Inc., Cigna Health Management, Inc., and HMO or service company subsidiaries of Cigna Health Corporation.