Practice 10-Minute Consultation

Macromastia (large breasts): request for breast reduction

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A 39 year old woman attends your surgery with a history of “large heavy breasts” since puberty and general unhappiness with her appearance. After taking an appropriate history, you feel that she has low self esteem, with her macromastia playing an important role. She also describes experiencing back pain and neck ache. She wants to find out whether breast reduction surgery will help her.

What issues you should cover

Macromastia is often described as disproportionately heavy breasts on an otherwise average size patient. Women generally seek consultation for breast reduction surgery because of psychological reasons, physical reasons, or both. It is important initially to distinguish between two types of patient—the one who believes she has disproportionately large breasts, but hasn’t, and the one who does have macromastia. The history and physical examination should indicate patients with true macromastia, whereas those who have distorted body appearance would benefit from further psychological assessment.

Medical or social history

- Personal or family history of breast cancer.
- Previous breast surgery.
- Diabetes.
- History of or high risk of keloid scarring.

- Smoking.
- Body mass index and stability of weight (however, history of past significant weight changes might be more appropriate).
- Drugs such as anticoagulant or antiplatelet agents.
- Future wishes and intentions relating family size and to breast feeding.

Physical examination

Physical examination should include inspection and palpation. We recommend a chaperone for all doctors of either sex, but a chaperone essential for male doctors.

- Inspection: look for bra strap marks, intertrigo, ulceration, breast ptosis, and asymmetry.
- Palpation: oncological examination including axilla.

Other factors to include in the physical examination are:

- Height and weight or BMI.
- Mammography. Patients should have routine mammography if they are within the screening age group (national breast screening programme in the United Kingdom stipulates screening every 3 years for women aged 50-70).

Breast size should also be assessed. Surprisingly, a simple, consistent, accurate, and widely accepted measure of breast size remains elusive. Bra size is a particularly inaccurate method of assessing breast volume. However, although there is no absolute measurement that will diagnose macromastia, the patient's bra size will often be out of proportion to her frame. Further assessment of breast size is best undertaken by a plastic surgeon, taking in other important factors such as the droopiness (degree of ptosis) and other factors related to suitability for surgery.

Physical issues

- Is the patient suffering from upper back, neck, shoulder, or bra strap pain? For patients complaining of neck or back pain, it is important to exclude other causative pathology for their symptoms.
- Is her body posture being affected, or does she tend to lean forwards because of the weight of her breasts?
- Is she experiencing skin problems such as irritant dermatitis (intertrigo) or fungal infections?
- Is the size of her breasts causing difficulty sleeping?
- Is finding suitable clothing a problem?

Psychological issues

- Does the patient have generally low self esteem, or, in severe cases, depression?
- Is she generally unhappy with her body image, or is she focusing on her breasts?

- Is her breast size affecting her ability to do her work, or engage in normal social activities?
- Does the size of her breasts attract unwanted attention or comment?

What you should do

Given that women have various body shapes and sizes and that rules regarding insurance coverage vary from region to region, no universally accepted definition of macromastia that requires surgery exists. However, positive responses to any of the questions relating to physical issues are features of patients who are likely to benefit from breast reduction surgery. Referral to a psychologist with a special interest in body dysmorphism would be beneficial for women who have distorted body appearance.

Give advice on conservative treatment

- Advise on correct bra fitting. A study of 103 women presenting for breast reduction surgery found that 102 wore the incorrect size bra and thus were receiving less support than required.[1]
- Consider weight loss where appropriate.

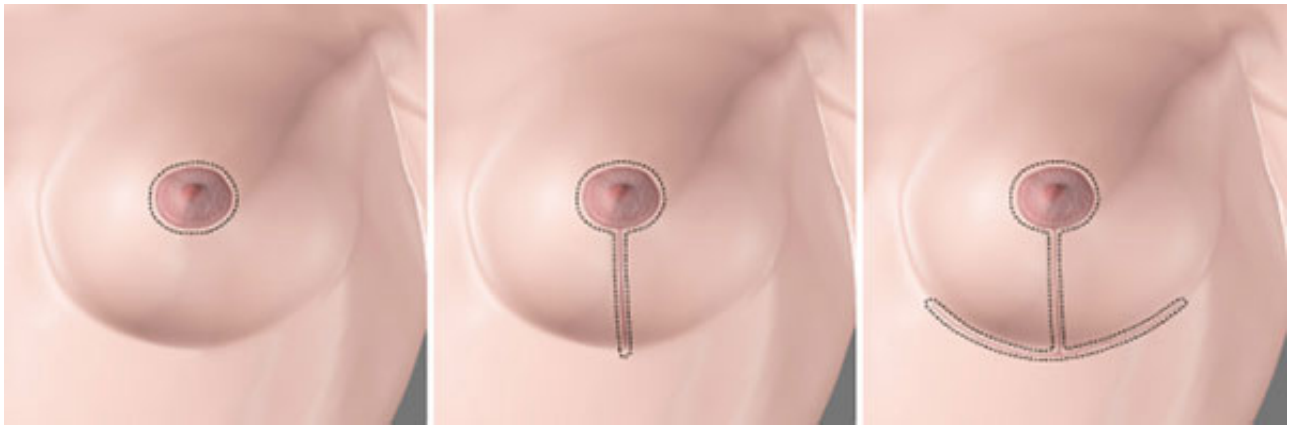
It is of note that several studies have shown that conservative measures such as weight loss, physical therapy, and special brassieres, when used alone, do not provide effective permanent relief of symptoms.[2] [3]

Refer to a plastic surgeon

Once you have referred a patient, the relevant health authority will assess the application and, if successful, the patient will get an appointment with a plastic surgeon. Women with body mass index of more than 25 may be refused surgery purely on weight grounds. This ruling varies between trusts, however, and there is no strong evidence base to suggest it is contraindicated in the slight to moderately overweight.[4] [5] Other contraindications to surgery are undiagnosed breast lumps or irregular mammograms. Relative contraindications are severe obesity, wound healing problems, diabetes, smoking, and thrombophilias.

- Breast reduction surgery is a very successful procedure, and empirical evidence shows that it produces substantial change in patients' physical, social, and psychological function.[2] [3]
- Surgical treatment is generally breast reduction surgery; liposuction is rarely indicated.
- Several approaches to surgery are used according to the surgeon's preference and technical issues regarding the size and shape of the patient's breasts. Each technique results in different scars (fig 1⇓).
- Skin, fat, and glandular tissue are excised and the breasts are then reshaped. The nipples are repositioned higher than previously.
- Surgery typically lasts at least two hours.

Fig 1 Three common patterns of scarring after breast reduction surgery



There are a number of potential complications of surgery that patients should be aware of (box). Nevertheless, most complications are minor and the vast majority of patients are very happy with the results.

Risks of breast reduction surgery

The usual risks of surgery under general anaesthetic apply, including deep vein thrombosis and pulmonary embolism.

All patients will have scars (fig 1), and the eventual scar quality will depend on the patient's skin type and genetic constitution.

Hypertrophic and keloid scars are unpredictable and occur in up to 5% of patients. Other problems with delayed wound healing along the suture line are occasionally encountered.

Nipple sensation can be significantly altered after surgery. More often there is sensory loss, but very uncomfortable hypersensitivity can be encountered. Surgical design maintains the nipple blood supply on a pedicle of breast tissue, but sometimes this is insufficient to maintain viability and nipple loss, most commonly partial necrosis, can occur.

It should be assumed that the patient will be unable to breast feed after surgery. Those that can breast feed after breast reduction usually need to supplement feeds.

Patients must bear in mind that "size on demand" is not possible, and even the most experienced of surgeons will not be able to guarantee a specific cup size.

Some asymmetry must be expected, although most patients have a degree of breast asymmetry preoperatively.

Patients must assume they will be unable to drive for some weeks after surgery, especially in relation to seatbelt usage because the seat belt diagonal strap might cross the breast making it painful. Also, movements to steer the car involve pectoralis major moving beneath the breast and might be uncomfortable.

Useful reading

British Association of Plastic Reconstructive and Aesthetic Surgeons (BAPRAS)—www.bapras.org.uk

Dafydd H, Juma A, Meyers P, Shokrollahi K. The contribution of breast and abdominal pannus weight to body mass index: implications for rationing of reduction mammaplasty and abdominoplasty. *Ann Plast Surg* 2009;62:244-5. doi:10.1097/SAP.0b013e31817fe502

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Notes

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Footnotes

- This is part of a series of occasional articles on common problems in primary care. The *BMJ* welcomes contributions from GPs
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