

Breast prostheses

Jacqueline Lee

Every year 25 000 women in the United Kingdom are diagnosed as having breast cancer and for many the primary treatment will be surgery. It is important, therefore, that women are aware that after complete or even partial loss of a breast their natural shape can be restored by an artificial breast form known as a breast prosthesis. Women used to put a bag of birdseed or lentils inside their brassières (fig 1). Nowadays most breast prostheses are made of silicone, tinted to an appropriate shade and placed into preshaped bags of polyurethane, then placed into moulds and "baked" to gel the silicone to a consistency similar to normal breast tissue.

Types of prostheses

Many different brands are available and almost all can be obtained free of charge if the operation was

performed under the NHS. If the operation was performed privately the prosthesis must be purchased (a list of stockists can be obtained from the Breast Care and Mastectomy Association). The cost of prostheses can vary between £70 and £170. Certain insurance schemes make an allowance towards this cost, so inquiries should be made. Most manufacturers carry four or five different shapes and up to 40 different sizes throughout their ranges. Because almost all are available free under the NHS, in theory every patient should be provided with a suitable prosthesis. The appliance officer in the hospital will be happy to give helpful advice about breast prostheses to patients as well as to health professionals.

Immediately after the operation a lightweight pad filled with fibre or foam and covered with cotton can be placed inside the bra. This can also be worn subsequently with nightwear. Later a permanent silicone prosthesis is provided (fig 2).

For women who have had a partial mastectomy there are partial prostheses: soft, thin silicone shells that can restore the natural contour of the breast. When a lumpectomy has been performed a silicone wedge can be worn to good effect. These too are available in different sizes and free of charge under the NHS.

Several types of prosthesis are available for use after simple mastectomy. Round prostheses (fig 3) are available in many sizes and are supplied with washable cotton covers. Women who have undergone more extensive surgery may use a heart shaped model (fig 4) or forms that taper gently to a round edge (fig 5). The shape and comfort of the woman are paramount in choosing the right prosthesis.

Silicone breast prostheses feel life-like and are long lasting. The polyurethane outer skin is completely impermeable: the patient can therefore swim in chlorinated water or the sea. Special swimwear and bras are available for women who have had breast surgery. These have retaining pockets to hold the prosthesis firmly in place while allowing a full range of movement. It is not always necessary to buy special bras, but choosing the correct size is important—many women tend to wear bras that are too small.

For educational purposes, training prostheses are available in a variety of models. They range from the type that contains multiple lumps to simulate fibrocystic conditions to one that contains enlarged ancillary nodes.

Fitting and provision

The fitting of the permanent prosthesis should ideally take place about six to eight weeks after the operation if the scar has healed well, or a little longer if radiotherapy is given. Most prostheses are guaranteed for between one and three years. A replacement prosthesis can be provided if the original one is damaged or if the size of the other breast has changed. A woman needing a new prosthesis who no longer attends a hospital for check ups or has moved to a new area will be referred by her general practitioner to a consultant surgeon, who will write a prescription, preferably worded "prosthesis to suit." She may then choose a suitable prosthesis from a range that should be

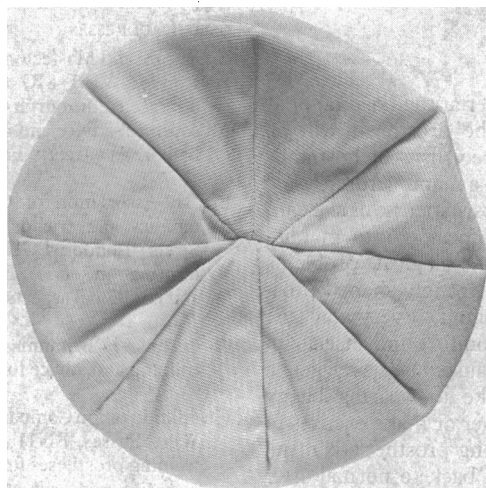


FIG 1—Early prosthesis: a bag of birdseed

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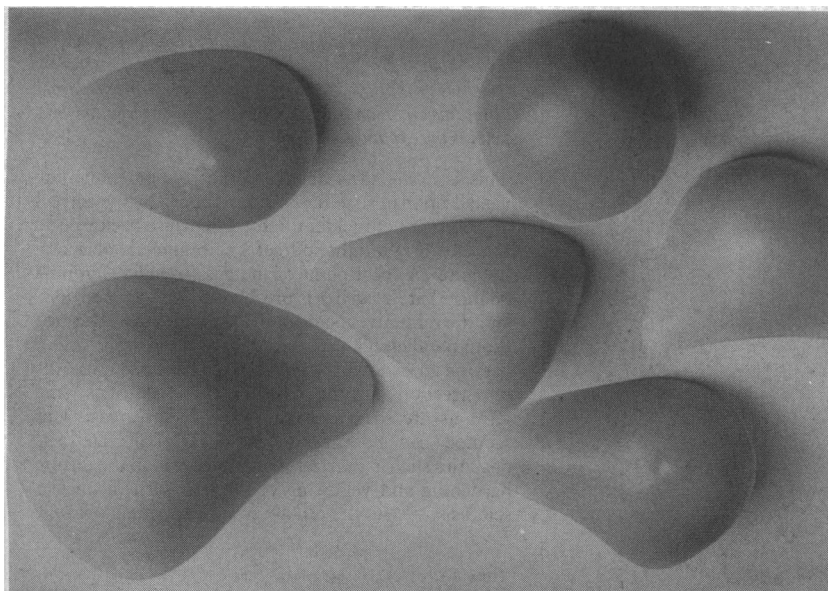


FIG 2—Variety of silicone prostheses

AMOENA (UK) LTD

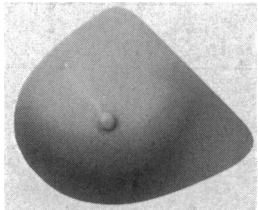


FIG 3—Breast form with nipple

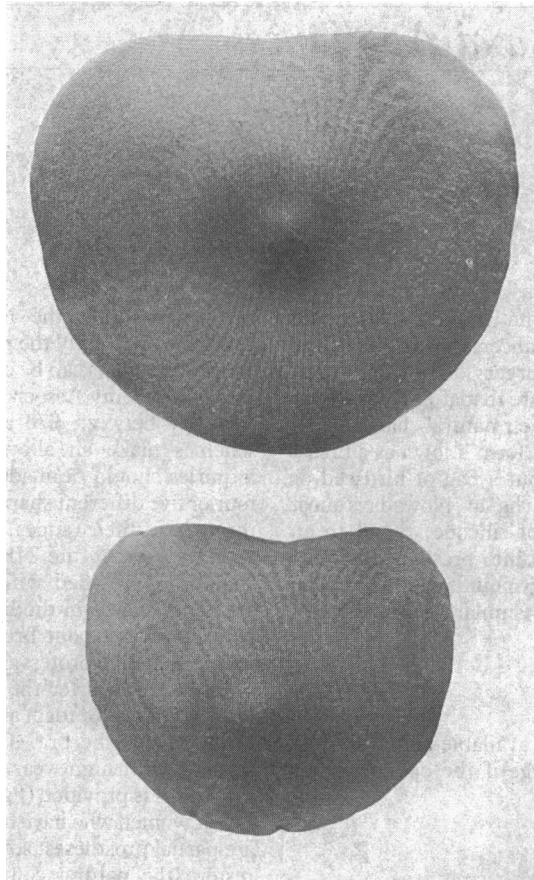


FIG 4—Heart shaped models (with washable cover)

available to view and try on either at the hospital or at an NHS approved stockist. The prosthesis will be fitted by either a breast nurse specialist, the hospital's appliance officer, or a fitter from a manufacturer.

A good fitter will give all the assistance he or she can, neither rushing nor pushing a person into making an incorrect choice. The psychological problems generated by a badly fitting or wrongly shaped prosthesis can be extremely damaging. Every day the woman is troubled by the discomfort and insecurity that the wrong prosthesis can cause: she never gets a chance to forget. She may take to wearing baggy clothes that are unflattering to her or make excuses to avoid social occasions. The wrong prosthesis is of no benefit in helping a woman get back to normal after breast surgery. Even obtaining the correct one can be a traumatic experience, so that some women opt to buy

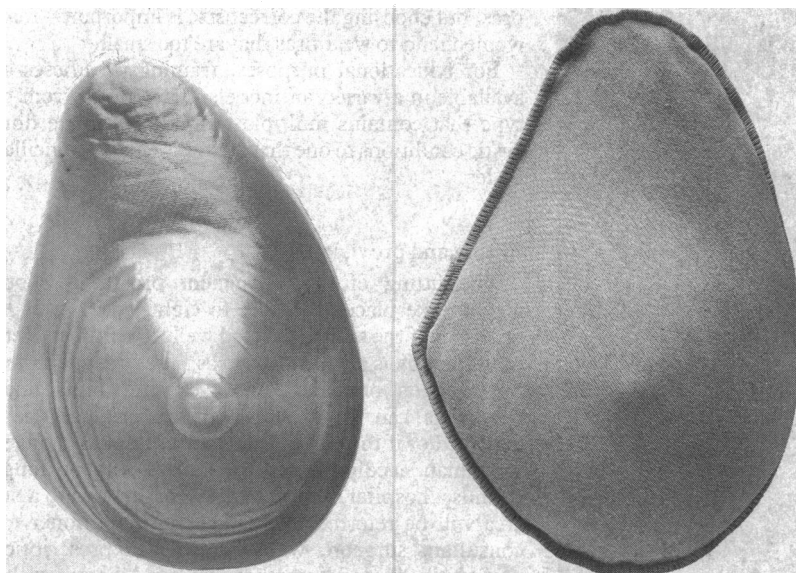


FIG 5—Anatomically shaped silicone breast form without and with cover

privately a prosthesis although they are fully entitled to receive one, free of charge, under the NHS.

Shortcomings in the provision of breast prostheses

The Breast Care and Mastectomy Association, reviewing 18 918 contracts in 1988, found that satisfaction with the fitting and provision of breast prostheses by the NHS orthotics service was low. There were six main complaints: no choice—patients were shown only one or two prostheses; not enough time taken during the fitting procedure; poor premises, no privacy, no mirror available (this caused great distress); delayed provision, some women having to wait up to six weeks after fitting for the prosthesis; being fitted by a man; although most male fitters themselves believe that fitting breast prostheses should be an exclusively female role; and the attitude of the fitter—nearly 70% of women thought that this was the most important consideration. When patients were asked which factor was the most important to them—choice, speed of provision, fitting location, or fitter—61% gave the attitude of the fitter as their top priority (M Baum and G Simpson, unpublished data).

Considerable publicity is rightly given to screening for breast cancer. It is regrettable that rather less thought and consideration is sometimes applied to the fitting and provision of breast prostheses.

Appendix

USEFUL ADDRESSES

Breastcare and Mastectomy Association, 26a Harrison Street, London WC1 8JG (tel 071 837 0908); and 9 Castle Terrace, Edinburgh EH1 2DP (tel 031 228 6715). A source of advice and information for any woman who has had breast surgery. Free leaflets available.

British Association of Cancer United Patients and their families and friends (BACUP), 121-123 Charterhouse Street, London EC1M 6AA (tel 071 608 1661). Cancer information service. Booklets and leaflets on the practical and emotional aspects of coping with cancer.

Cancerlink, 17 Britannia Street, London WC1X 9JN. Offers training and advice for people setting up support groups.

Health Education Company, 12 Liverpool Terrace, Worthing, West Sussex BN11 1TA (tel 0903 213694). Provides training prostheses for educational purposes.

ANY QUESTIONS

If I look at a white background through a pinhole in a card held about 6 cm from the eye I can clearly see the lens opacities in that eye. Is it possible to see an early cataract using this technique? Is this an original observation and what is the explanation?

This is a well described entopic phenomenon—the visualisation of structures within the eye by the correct arrangement of incident light. The white background acts as a bright light source. The pinhole is placed at the anterior focal point of the eye (usually 17 mm; I deduce that the writer is presbyopic or hypermetropic) and the refractive media of the eye make the diverging beam parallel. The subject then sees a patch of light, varying in size with the diameter of the pupil. Any imperfections in the tear film, cornea, lens, and vitreous are seen as shadows or bright areas. This method can be used to view early discrete lens opacities such as cortical spokes rather than the diffuse hardening and yellowing of the lens seen in nuclear sclerosis. —TIMOTHY COKER, senior ophthalmic registrar, Leeds

Moses RA, ed. *Adler's physiology of the eye*. St Louis: C V Mosby, 1975:545-8.