Breast Reconstruction

(A method for Augmentation)

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In India, with the changing fashions of the dresses of the women, their outdoor activities, the social intercourse, there is more need for the reconstructive surgery of the breast than in the past. An Indian woman is now coming out in every walk of life.

The causes of the bilateral enlargement of the breast may be;

(a) a virginial hypertrophy.
(b) broad heavy breasts of obesity.
(c) long, enlarged and ptosed breasts.
(d) Sac-like pendulous breasts after repeated pregnancies.

The benign tumours of the breast, may cause the enlargement of one or both breasts. We reconstruct such breasts, simultaneously, with nipple transposition.

A lady carrying the heavy breasts supported by her brassiere, always gets permanent grooves under her shoulder straps. The symptoms produced are :

(a) General tiredness, with weight of the breasts.
(b) backache.
(c) Faulty postures.
(d) Submammary intertrigo.
(e) Handicap in social activities such as, dancing, swimming, riding etc.
(f) Psychic disturbances.

In 1968 we described reduction, mammaplasty, with strombeck's procedure using Da Silva markings instead of the standard patterns used widely. We have now done reconstruction of the breast by the same procedure, after excising a huge benign tumour from the breast. The same method can be used for reconstruction, after complete excision of the chronic cystic disease of both the breasts.

Longacre (1959) described reconstruction of the breast by local dermolipomatous flaps, with nipple transplantation. It is a one stage reconstructions after excising the tumour tissue from within the breast. We utilise the dermafat bipedicle to fill up the hollow and give shape to the breast, the advantage being the trasposition of the nipple with the areola on this bipedicle. It is particularly valuable in a virgin, or a young lady, when the natural sensations of the nipple and areola remain unaltered.

Pre-operative Markings : Figures 1 & 2

After a good bath and cleaning the previous day, the preoperative markings are done on the breasts in the evening. The patient sits erect before the surgeon. The centre of the nipple is first marked. A vertical line is drawn from the mid-clavicular point, from where another line is drawn joining the centre of the present nipple. From a point on the upper arm,

midway between the acromion and the olecranon a horizontal line is drawn intersecting the bisector of the angle between the two lines dropped from the clavicle.

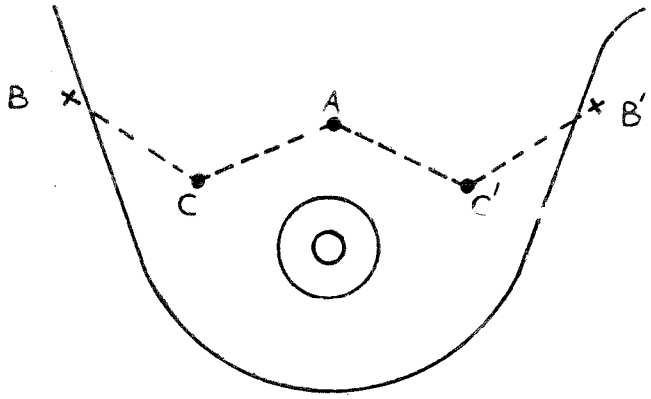

Fig. 1—Incision line BCAC'B' forms W with A as the centre of future nipple.

3 cm. below the point of intersection, point A, the centre of future nipple is marked. This point is 16 to 21 cm. from the suprasternal notch (Gillies and McIndoe). The internipple distance should not be more than 22cm. The distance of the nipple from the submammany groove should not be more than 8cm, at the end of the operation, or the nipple will point upwards, postoperatively.

The flaps are marked in the shape of 'W', which when closed, give the suture

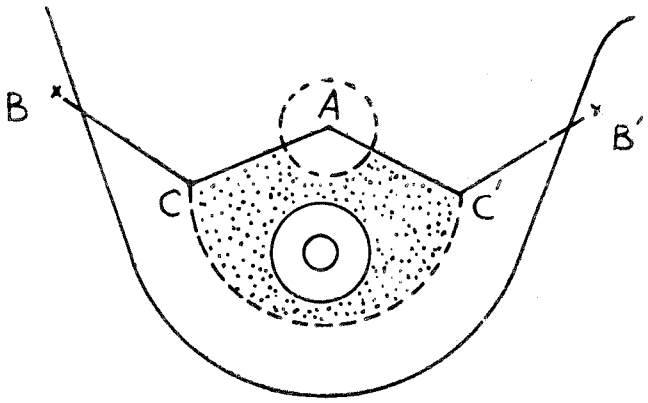

Fig. 2—Dermafat bipedicle carrying the nipple-dotted area tumour excision through CC' incision.

line the form of inverted 'T'. In a well shaped breast, the distance from the centre of the nipple to the submammany fold is 8cm. The breast may be taken as half sphere with a radius of 8cm. With the centre in the point A, describe the arc of a circle 8cm. in radius. The points C & C' are taken on this circle, in such a way,

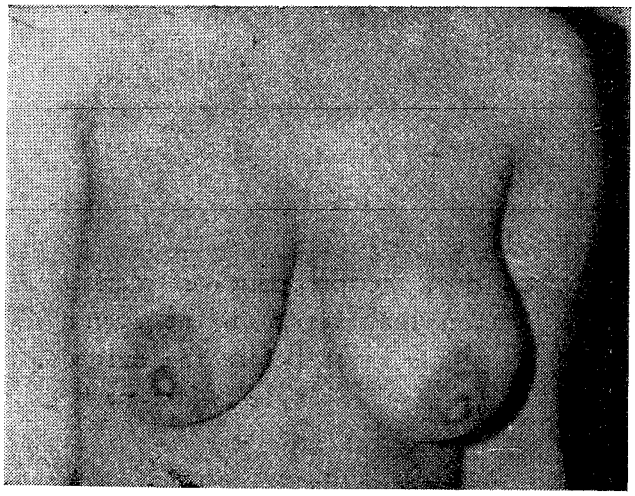

Fig.—3 A

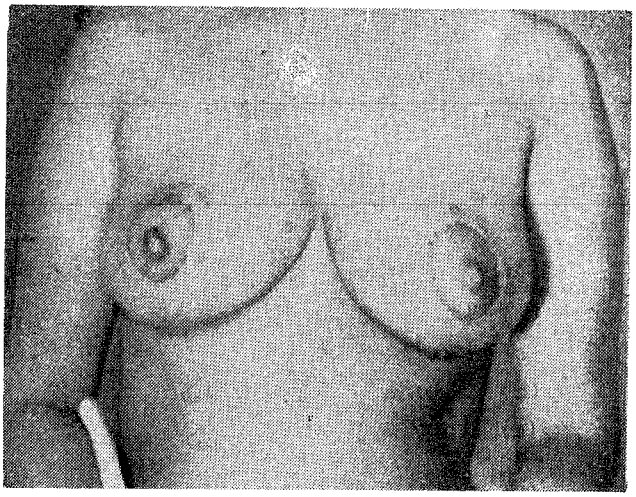

Fig.—3B

Preoperative and post operative photographs of reduction mammaplasty

that the angle CAC′ of the W guides the amount of the breast tissue and skin to be left back. Thus, this angle can be varied according to the postoperative requirement of the size of the breast by the patient. The inner point B, and the outer point B′ correspond to the central point A, and describe their arcs at C and C′ respectively. A line connecting these points from inside out and running through B, C, A, C′, B′, outline the flaps.

At the point A, the site of future nipple a 5cm. circle is made to form a notch to fit the nipple, which is carried on the dermafat bipedicle flap. The line CDC encircles the nipple and the areola, and marks the bipedicle. This can be varied to include larger amount of skin and fat, in case of reconstruction of the breast.

Advantages of these Markings :

1. The standard patterns used by Strombeck, which are modified by individual operator according to his experience and the size of the breast, are not required.
2. A surgeon without much experience can use these markings for reduction mammaplasty by Strombeck procedure, preparing a bipedicle to transpose the nipple.
3. The shaping of the breast is more exact by taking the definite points (Fig. 3).

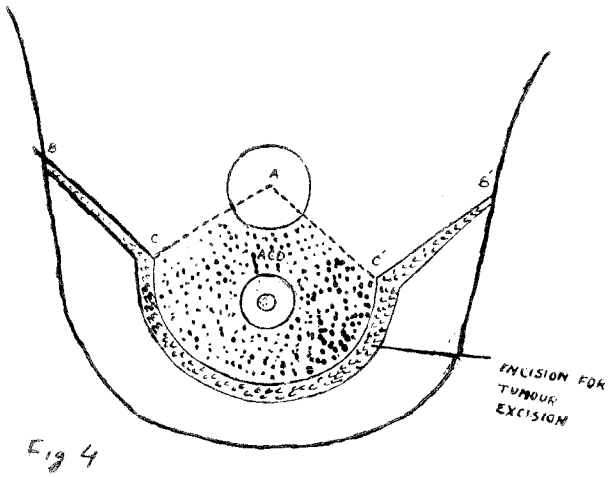

Fig. 4—Diagramatic sketch showing incision for tumour excision. ACD is the de-epithelised area forming a bipedicle flap.

Reconstruction of the breast, after complete or partial extripation of the breast tissue (Fig. 2 & 4) :—

Technique :

After marking on the enlarged breast, the de-epithelised area is prepared which is to be used as a bipedicled flap to carry the nipple and the areola. The incision along CC′ is made and carried deep enough, through which the benign tumour or breast tissue is extirpated as in chronic cystic or fibrocystic disease and fibroadenomas of enormous size. The size and extent of the nipple, determines the size and shape bipedicle, which consists of dermafat and of the future breast. But there is also a limit to the amount of tissue on the bipedicle, which can be invaginated. This is also guided by the cavity produced after the excision of the tumour mass. The wound is closed with a drain for 24 hours, or a continuous suction.

Advantage :

This procedure has certain advantage over those done by deepithelised dermafat flaps of Longacre. The areola and the nipple retain the normal and natural sensations, and there are no chances of the

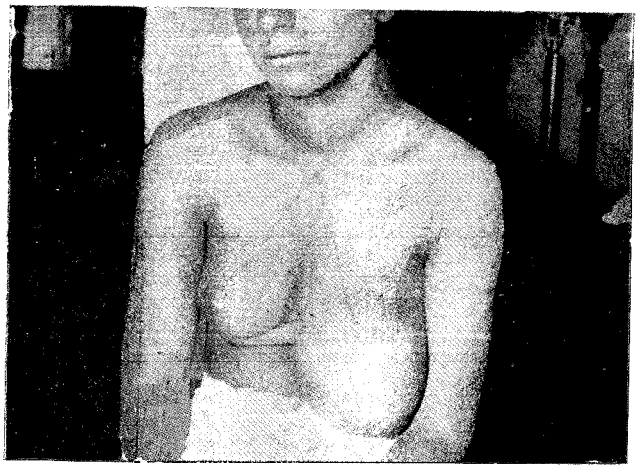

Fig.—5 A

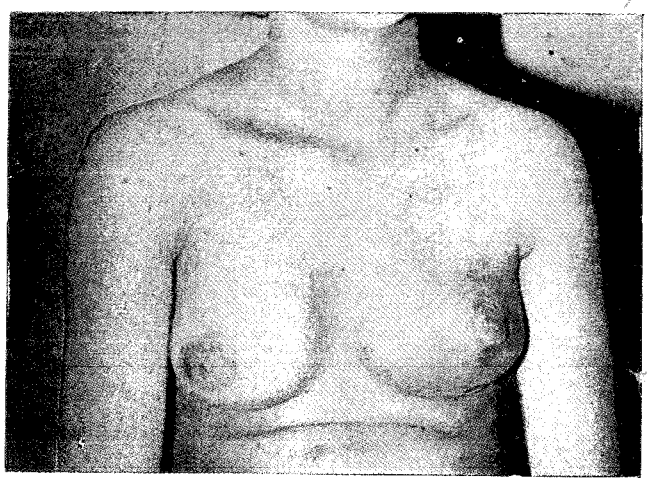

Fig.—5 B

Preoperative and post operative photographs of breast reconstruction after excision of tumour

loss of nipple occurring. Our case was a virgin with a huge soft fibro/adenoma and some intact breast tissue. She is likely to have some lactation. (Fig. 5).

Summary

1. Da Silva markings of the breast have been described for performing Strombeck procedure for reduction mammaplasty, instead of Strombeck's standard patterns.
2. Strambeck's procedure is also used for reconstruction of the breast, after extirpation of the breast-tissue for premalignant conditions, or a benign tumour.
3. The technique and the advantages are discussed.

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