SURGICAL PROCEDURES IN GENERAL PRACTICE

This is one of a series of articles contributed by invitation

INNOCENT TUMOURS OF THE BREAST

BY

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Unless the diagnosis is certain and the tumour of very moderate size, the removal of a benign swelling of the breast should not be undertaken as an exercise in minor surgery. While in some cases, as in the mobile fibro-adenoma of the young woman in her twenties, the lump may be unquestionably innocent, in a woman over 40 a clinically similar lump may prove to be a mobile carci-

Owing to the close relation of the great pectoral muscle to the breast early movement of the arm is very undesirable.

The dressing applied should maintain elastic pressure upon the field of operation, and, except for the smallest operations, a many-tailed bandage is best, as it ensures uniform support for the whole breast.

Removal of an Encapsulated Fibro-adenoma

A direct approach to the tumour is usually best by an incision radiating from the nipple so as to avoid division of main ducts and situated over the most prominent part of the swelling. The tumour should be steadied and made prominent by fixing it between the thumb and index

FIG. 1.—The method of approach to the tumour

FIG. 2.—Showing the incision down to the tumour and through its capsule.

noma, for which an immediate radical operation is desirable. In some cases an immediate frozen section by a pathologist in attendance may be necessary to settle the question, and if malignancy is reported it is desirable, though not absolutely essential, that immediate radical operation should follow. If this is not possible the wound should be immediately sewn up and the patient sent to a fully equipped hospital. In any case where cancer is suspected the scope of the exploratory operation should be as restricted as possible, and the incision should be one which will not prejudice a subsequent radical procedure—that is to say, the lump should be approached by a small incision made directly over it, and not by an indirect or marginal incision. It is a safe rule that no case in which a carcinoma may be present should be submitted to exploration unless the surgeon's experience and environment justify, if necessary, an immediate major intervention.

It is a mistake to minimize to the patient beforehand the importance of even a small operation, for this will make it more difficult to control her during convalescence. Even a small wound takes a week to heal firmly. In a vascular organ such as the breast rest for a week with the arm in a sling should usually be insisted on. Early movement is likely to produce a troublesome haematoma, which will delay recovery and may possibly require evacuation.

finger of the left hand (Fig. 1). A firm cut is made right down to the tumour and through its capsule (Fig. 2). The latter is an essential point, for the plane of easy enucleation is not between the tumour and its surroundings but between the capsule of the swelling and the tumour substance itself. With a blunt instrument—a blunt dissector, a closed artery forceps, or the gloved finger—the enucleation is now carried out, as a rule without difficulty (Fig. 3). The cavity is then inspected to see that no lobules of the tumour have been left behind. Some surgeons advise that the capsule should now be separately excised, but I think this is unnecessary. The cavity is examined for bleeding points, which should either be carefully ligatured or else underrun with a fine semicircular needle carrying a ligature, which is then tied over the bleeding point. The latter is the safer plan. With a similar needle the cavity left should be obliterated by approximating its sides. The needle takes a grip first of one lateral wall of the cavity and then of the corresponding point on the opposite wall. The ligature is now tied. Two or three such stitches may be necessary (Fig. 4). A narrow strip of corrugated rubber may be put in as a drain for twenty-four hours, but should not be left longer. It only remains to insert the skin sutures. Double horsehair, which is elastic and non-absorbent, leaves little mark if not left in too long,

or thin silkworm-gut or clips may be preferred. Special care must be taken that the skin edges are not inverted and are accurately coapted. If an invisible scar is hoped for the stitches must be removed early—say on the fourth or fifth day. After their removal it is well to apply a single layer of gauze over the wound and to paint it with collodion. This will prevent gaping of the incision.

FIG. 3.—The method of enucleation.

FIG. 4.—Obliterating the cavity.

Unencapsulated Fibro-adenoma

Certain fibro-adenomas have no capsule and cannot be enucleated. They can only be removed by cutting round the tumour, preferably with curved scissors, where it merges into the surrounding breast. If a fibro-adenoma proves to be non-enucleable a suspicion of carcinoma should be aroused.

Gaillard-Thomas Method

In cases in which it is desirable to avoid a scar over the surface of the breast access to the outer position of the organ can be obtained from the posterior surface by the Gaillard-Thomas marginal incision (Fig. 5). The operation, however, may be attended by free bleeding, and lies

on the edge of the domain of minor surgery. At least a dozen artery forceps should be available. Usually the incision begins in the axilla just under cover of the lower

FIG. 5.—The Gaillard-Thomas marginal incision.

FIG. 6.—The cavity as it appears after enucleation of the tumour.

FIG. 7.—The skin sutures.

edge of the great pectoral muscle, and follows downwards the curved outline of the breast for the requisite distance according to the freedom of access required. If the tumour is near the lower edge of the breast the incision will follow the submammary sulcus. The incision is deepened down to but not through the deep fascia, and then, partly by blunt dissection, the breast is raised from the fascia until the tumour can be felt through its posterior surface, which is turned over until the tumour presents. An incision is now made through the posterior surface of the breast, the tumour exposed and enucleated, and the cavity obliterated as already described (Fig. 6). The breast is turned back into position and a drainage-tube inserted after careful haemostasis. Only few skin sutures are necessary (Fig. 7), and healing is usually rapid and satisfactory.

The weakness of the Gaillard-Thomas method is that if the tumour proves after all to be malignant a subsequent satisfactory radical operation is made difficult or is impossible. This incision should not be used if there is any doubt as to the diagnosis.

Pathological Examination Essential

Cases are on record in which, after the removal of a fibro-adenoma, carcinoma has appeared beneath the scar within a few months. The supposed fibro-adenoma, if microscopically examined, would almost certainly have proved to be a carcinoma. Remembering such facts, no conscientious surgeon will remove a portion of tissue from the breast without sending it for microscopical examination. To this rule there should be no exception, for carcinoma has been found in the interior of an apparently undoubted fibro-adenoma.

Doubtful Breast Swellings

The condition which most often arouses suspicion of early carcinoma is chronic mastitis, especially of the cystic variety. Chronic mastitis has already been considered.* This condition affects the breast by lobes, attacking certain lobes and often sparing others. The upper and outer quadrant is the most common site, as for carcinoma. Chronic mastitis, especially of the cystic variety, is a pre-cancerous condition, though it may be many years before the change to cancer supervenes, and that change may never occur. The swellings of chronic mastitis are vague, mobile, finely granular, sector-shaped, and free from adhesion to skin or fascia. The lymphatic glands may be enlarged and tender, but they are elastic and not hard. Swelling and tenderness of the breast are maximal just before the period starts, and rapidly subside once it has begun.

In its typical form, and especially under the age of 40, mastitis is best dealt with by a short course of x rays to the breast, and the question of surgery will not arise. But in women who have reached the cancer age mastitic swellings should be examined every three months, even after x-ray treatment has been given.

A watch should be kept for certain danger signals which indicate the likelihood of early supervention of carcinoma. These are:

1. The appearance of multiple hard lumps, probably cysts or fibro-adenoma, in the mastitic area.
2. Deviation of the axis of the nipple on the affected side.—The normal nipple looks forwards, downwards, and outwards. Fibrous tissue occurring in the mastitic area tends to tilt the nipple in the direction of that area. Thus in mastitis of the upper and outer quadrant the nipple is likely to point forwards and outwards, not forwards, outwards, and downwards.
3. Duct retraction.—This sign must not be confused with retraction of the nipple. Upon the normal nipple there are fifteen to twenty openings, one for each lobe of the breast. If one of the lobes becomes fibrotic the contraction of the new fibrous tissue pulls upon the corresponding duct, which then appears as a tiny depression upon the surface of the nipple. Several such depressions may be present.
4. Elevation of the nipple may occur owing to the pull of mastitic fibrous tissue upon it as a whole.
5. Incipient adhesion of skin to the lump.
6. Incipient retraction of the whole nipple.

If some of these signs appear it may be necessary to advise the removal of a portion of the breast for microscopical examination, preferably by frozen section, with leave to proceed to a mastectomy if necessary.

* See article by Mr. Cecil Rowntree in the *Journal* of November 12.

Technique of Biopsy

Under proper aseptic conditions, with preparation of the skin by painting with iodine or mercurochrome, the suspected area is isolated by sterile towels and an incision about an inch long is made, mainly with the point of the knife, deeply into the breast tissue of the suspected area. The knife must go right through the subcutaneous fat and well into the breast tissue, which can be recognized by its more fibrous and resistant quality. The knife is not removed from the incision, but is used as a guide to introduce a pair of toothed dissecting forceps which seize one edge of the incision in the breast tissue deep down in the wound. Traction is now made on the forceps by lifting it up towards the surface and, without removing the knife, cutting is resumed. The knife is carried in a circle round the point of the forceps and the forceps comes away with a wedge-shaped piece of breast tissue. While this is being examined by the pathologist the cavity of the wound is washed out with 1 in 1,000 perchloride of mercury to coagulate any loose epithelial cells. A single deep suture may be inserted in the breast tissue to approximate the sides of the small cavity in it and to arrest haemorrhage. The wound is then closed.

It is a common fault to make too long an incision for a biopsy. The smaller the incision the better, provided an adequate piece of breast substance can be reached.

Though, as an ideal, immediate radical operation, with a fresh set of towels, instruments, gloves, and swabs, should follow a pathological report of carcinoma, this is not absolutely essential. If the services of a pathologist skilled in the interpretation of frozen sections are not to be had the biopsy specimen may be sent away to a laboratory for a paraffin section and further operation deferred until the report is received.

It was formerly believed on Bloodgood's authority that this more leisurely procedure would seriously increase the risks of recurrence if carcinoma were found to be present. There would appear to be no sufficient ground for this belief; nevertheless the interval between exploration and radical removal should not exceed a week.

THE PECKHAM HEALTH CENTRE

A Three-years Survey

The words "annual report" on the face of a document induce a sinking feeling in the heart of a reviewer, and generally the more worthy the organization the greater the depression. But about the Pioneer Health Centre at Peckham, whose "annual" report dealing with three years' work has now been issued, there is something indefinably different. There is something different about the place itself, about the 600 to 1,000 people who go there every day, about the people in the gymnasium and the swimming pool. The visitor feels at once the atmosphere of social health. Moreover, many of these people suggest that they have got rid of some incubus, have found some new vitality, have released some hidden spring. Partly it is to be explained by the fact that they and their families have had a health overhaul, during which many of those minor maladies, not considered important enough to go to a doctor about, but nevertheless a drag on the wheels of life, have been discovered. They have been told what is wrong with them as a first step to getting it right. They are not treated at the Centre. The two medical directors and the medical consulting staff regard themselves as health advisers; their province is to examine and warn, but to concentrate on health and not on sickness, and not to duplicate the treatment services already provided. Up to