REFRESHER COURSE FOR GENERAL PRACTITIONERS

DISEASES OF THE NIPPLE*

BY

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It is a curious fact that little attention is paid in this country to malformations and diseases of the nipple. There is a tendency to regard a retracted nipple in a young woman as something that will right itself in time.

The nipple is a conical projection of skin enclosing the terminations of the lactiferous ducts, which number 15 to 20. Up to the age of puberty there is little difference between the male and the female nipple. At puberty the female nipple enlarges at the same time as the whole breast increases in size.

Retraction of the Nipple

In some girls at puberty the nipple does not develop with the rest of the breast but remains small and retracted. This state of affairs may persist even during pregnancy. It is important that school medical officers should examine the nipples of girls before they leave school, as it is quite easy to correct this deformity. A depressed nipple can as a rule be drawn out by finger and thumb and held for a minute or so and then relaxed. If this is done regularly night and morning for a week or so a depressed nipple will in most cases assume a normal appearance. When this simple procedure fails some form of suction should be employed. A large warmed test-tube which will fit over the retracted nipple can be used as a cupping tube. The unstoppered mouth of a warm bottle will act in the same way, and in some cases an electric breast-pump can be used with advantage. Once the nipple has been drawn out it can easily be kept erect by gentle traction. This traction should be exerted for a few minutes night and morning. After a few weeks the nipple will retain its proper shape and further traction is not then required. This simple form of treatment will often result in a normal nipple, and if pregnancy ensues breast-feeding will be possible.

In those women who wish to undertake breast-feeding but have suffered from retracted nipples for many years,

*Lecture delivered at King's College Hospital on September 30, 1950.

suction by a cupping tube may not bring about a cure, and an operation will be necessary. Two crescentic flaps of skin are removed from the medial and lateral borders of the skin surrounding the depressed nipple (Fig. 1). The nipple is carefully grasped with fine forceps and drawn out so that it becomes erect. It is held in this position while the raw surfaces of the small crescentic wounds are stitched up. This operation is quite successful even if performed during the early months of pregnancy.

Some cases of retracted nipples are caused by the modern tight brassière, which leaves no room for the nipple; a well-fitting brassière should always leave enough space for the nipple.

Cracked Nipples

Although this condition is not so common to-day as it was at the beginning of the century, it is still seen. A cracked nipple is a preventable condition and may be the forerunner of a mammary abscess. With proper antenatal care and attention to the nipples in the later stages of pregnancy there is no excuse for this painful occurrence. During the later months of pregnancy the nipples should be carefully cleaned and anointed with a little glycerin. The whole nipple must be attended to, as cracks may manifest themselves at the apex or the base of the nipple and at times multiple cracks or fissures may appear. Cracks are far more common in partially retracted than in normal fully developed and erectile nipples, and any tendency towards retraction should already have been overcome.

If the crack appears during lactation the breast should be rested for 36 to 48 hours and feeding should be restarted gradually, the baby being put to the breast for only a few minutes at a time. As a rule a cracked nipple can be cured in a day or two. The treatment should be rational, as over-treatment may be as detrimental as no treatment. The nipple should be carefully washed with a solution of sodium hypochlorite (or any other suitable non-irritating antiseptic) and covered with a sterile dressing. Healing will be rapid and complete, and there will be no tendency for an underlying abscess to form. When feeding is begun again a sterilized nipple shield may be found to be advisable and comfortable to the patient.

Bleeding from the Nipple

A discharge of serosanguineous or sanguineous fluid from the nipple is always a sign which requires prompt investigation. Although throughout the ages attention has been drawn to this condition, many and varied have been the explanations of its cause. In the fifth

FIG. 1.—Operation for retracted nipple, showing crescentic incisions and removal of skin to outer side of areola.

FIG. 2.—Section of breast, showing relation of ducts to nipple.

century B.C. Hippocrates postulated that when blood collects at the breast of a woman it indicates madness. Since that date, as our knowledge of pathology has advanced, we have come to know that bleeding from the nipple may be caused by innocent or malignant tumours of the breast.

It is important to examine the discharge from the affected nipple, as quite often chronic adenosis and cystic mastitis may give rise to a discharge from the nipple which simulates blood but in reality is a brownish inspissated secretion of some dilated ducts. A microscopical examination of the discharge is therefore very important.

Although rare cases of true vicarious menstruation have been reported in the literature, I have never seen a case and I am sceptical of their occurrence.

In this age of mechanical transport injury to the breast is a frequent occurrence and at times haemorrhage from the nipple may be seen, but it always ceases in a day or so and does not reappear.

The two common conditions which are responsible for haemorrhage from the nipple are intracystic duct papilloma and duct carcinoma. Between 1915 and 1950 I have had 88 cases of bleeding from the nipple and in 69 of them the bleeding was due to a duct papilloma. The bleeding may be transient, intermittent, or constant; in the majority it is intermittent. It may be difficult to palpate any abnormality in the breast, and then there is no indication of the part of the breast from which the haemorrhage has originated. In such cases a very good plan is to cover the nipple with some colloid and see the patient again after two or three days. Quite often the blood is dammed back and kept in the dilated duct; if so, an incision can be made over the

dilated duct and the intracystic papilloma excised through a radiating incision from the nipple. It is important to use a radiating incision, as only one duct is incised; if a vertical or other incision were made there would be a great danger of injuring several ducts (Fig. 2).

In young women it is essential not to be stampeded into performing a local mastectomy on account of bleeding from the nipple. During the 1939–45 war far too many young women in the Services lost their breasts for innocent conditions. In those cases in which there is a lump that almost disappears on pressure or bleeding from the nipple the diagnosis is a duct papilloma, and excision can be performed through a radiating incision. It is essential that every papilloma should be carefully examined microscopically to confirm the diagnosis. In other cases the bleeding can be seen to come from a dilated duct, which may be probed by a thin metal instrument such as the blunt end of a straight surgical needle, as advocated by Babcock. The end of the needle will pass into the cyst, and on depressing the end of the needle the cyst can be made to stand out under the skin of the breast (Figs. 3 and 4). Excision of the papilloma can then be performed. Transillumination rarely helps in locating a duct papilloma, but it may be of value in cases of duct carcinoma.

The introduction of opaque media into the ducts of the breast, though it may result in spectacular x-ray pictures, is of little value and may give rise to retention cysts in the breast; therefore it should not be done.

In several women in whom I have excised intracystic papillomata repeated pregnancies have not caused any pain in the breast and normal breast-feeding has taken place without any local trouble.

FIG. 3.—Operation for excision of a dilated duct by radiating incision. (After Babcock.)

FIG. 4.—Excision of an intracystic papilloma, showing dilated duct brought to the surface by means of a surgical needle. (After Babcock.)

In women over 40 with bleeding from the nipple the probability of a duct carcinoma must be carefully considered. In many a lump will be palpable, and in some cases the axillary glands may also be palpable. In doubtful cases the lump should be excised and examined histologically. If found to be malignant, then a radical mastectomy should be performed.

Malignant Disease of the Nipple (Paget's Disease)

This is a rare condition, and I have seen only seven cases in a series of over 1,000 cases of carcinoma of the breast. It occurs in women between the ages of 60 and 70 and begins quite often as a weeping eczema of the nipple, with a blood-stained discharge in the early stages. The nipple becomes retracted and often ulcerated and flattened (Fig. 5). If treatment is not forthcoming nodules may be felt in the breast and the axillary glands may become enlarged. Radical mastectomy should be performed for this disease as soon as the diagnosis is made.

FIG. 5.—Paget's disease of the nipple in an elderly woman.

Eczema of the nipple in an elderly woman should be treated as a malignant condition and amputation performed.

FELLOWSHIPS IN CLINICAL MEDICINE

We print here details of the Fellowships in clinical medicine which the Medical Research Council is offering this year.

The Medical Research Council has decided to institute a limited number of Fellowships for medical graduates who wish to prepare themselves for a career in clinical research. The Council is convinced that to-day, more than ever, the successful clinical investigator must possess a sound knowledge of the non-clinical subject which is most relevant to his main clinical interest: the proposed Fellowships have been designed for this purpose. It is intended that each Fellow appointed under the scheme should be given an opportunity to study methods of research in the basic subject most germane to his particular clinical interest as part of his training for clinical research. During the initial period of tenure the Fellow will work in the relevant non-clinical subject, and subsequently in a department where the clinical subject itself is being studied.

A limited number of Fellowships of this type are now offered for the academic year beginning on October 1, 1951. The awards will be made for a period of one year in the first instance, and will be renewable annually in approved cases up to a maximum of three years in all. Stipend will be at the rate of £850 per annum, rising by annual increments of £75 to £1,000 per annum, and in addition superannuation provision will be made (or continued within the National Health Service Scheme, if applicable, by arrangement with the Ministry of Health and the Department of Health for Scotland).

Conditions of Award

Candidates for these Fellowships must be medically qualified and should have had at least one year's clinical experience, part of which should preferably have been spent in a department where clinical research was in progress. Applicants will be invited to submit their own proposals as to type and place of work, but the Council will be glad to advise successful candidates on the selection of suitable centres of study and to assist in placing them in departments or laboratories where the desired training and experience can be obtained.

Applications for these Fellowships, which should be made personally by the candidates, must be sponsored in each case by the head of the appropriate department in the candidate's university or medical school, and an undertaking will be required that a suitable academic post in a clinical department will be available to the candidate in that institution on satisfactory completion of the period of study under the Fellowship.

If a Fellow should discover that his preference is for a career in a non-clinical subject rather than in clinical medicine, the Council will be prepared to consider an application for the remaining period of the Fellowship to be spent in work on this subject.

Forms of application for these Fellowships may be obtained from the secretary, Medical Research Council, 38, Old Queen Street, London, S.W.1, with whom applications must be lodged not later than April 30, 1951.

Preparations and Appliances

MODIFICATION OF THE GORDH INTRA-VEINOUS NEEDLE

Dr. DONALD BLATCHLEY, anaesthetist, Royal Northern Hospital, Holloway, and Hospital for Women, Soho, writes: There are two drawbacks to the Gordh intra-venous needle when in constant use: (a) the large bore makes its insertion painful in some cases, and in patients with small veins venepuncture is difficult or impossible; (b) the needle point soon becomes blunt, and facilities for resharpening are not always readily accessible.

At a recent meeting of the South-west Region Society of Anaesthetists at the Westminster Hospital an ingenious modification was demonstrated, utilizing an ordinary hypodermic needle of any suitable size. The conversion to a

diaphragm needle was made by using a small rubber cap on the shank of the needle, such a cap being originally designed for covering the ureteric catheter's entry port on a cystoscope. As I have found these caps jealously guarded by theatre sisters for their original purpose and no other, I have devised a simple modification, as illustrated. The diaphragm cap is made from narrow-gauge rubber tubing, $\frac{1}{4}$ to $\frac{1}{2}$ in. (1.25 to 1.9 cm.) long. One end is slipped over the shank of the needle, the other is closed by a small rubber or cork bung, such as used in phials of citrate solution or for closing the air-entry tube of a standard intra-venous resuscitation set. To prevent leakage the fit over the needle shank and that of the cork must be very tight. Also, the smallest possible dead space must be allowed between the needle shank and the cork, and injections be made into this space through the side of the tubing.