A CLINICAL LECTURE ON DISEASES OF THE BREAST.

Delivered at the Middlesex Hospital

BY

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DURING the last few weeks we have had under our observation in Bird Ward no fewer than 9 and in Whithead Ward 2 cases of diseases of the breast, and I take this opportunity of recalling them to your minds and making some observations which I hope may prove useful. The moment a woman notices anything wrong with her breast, whether it be painful or enlarged, or she can feel a distinct tumour in it, she at once begins to get uneasy lest she should have cancer, as there is a widespread idea, and there is certainly some ground for it, that the female breast is one of the commonest seats of cancer. The result is that we see a considerable number of patients with supposed cancer of the breast, who not only have no cancer but frequently have no tumour, and not infrequently have nothing more the matter than neuralgic pains, and this is particularly the case in women of a nervous temperament whose general health has been undermined by a long illness or nervous shock. *Apròpos* of this I might mention that it is sometimes difficult to convince a patient that she has not a tumour, as, if a breast is manipulated in a certain way, namely, the gland seized between the thumb and fingers, and compressed, the idea of a tumour is presented to the touch; what is felt being nothing more than the compressed gland tissue. When examining a breast, therefore, you should make it a cardinal rule always to place the hand flat upon it and make gentle pressure against the ribs, carefully feeling every part; in this way you cannot fail to detect a tumour if one be present, and you do not manufacture one if it be not there.

Before detailing the cases, let me enumerate the chief of the abnormal conditions which are presented to us in the breast, some of which are represented in the cases I shall mention. Neuralgia, subacute mastitis, induration left after acute abscess, chronic abscess, cystic disease—and of this there are several varieties, those arising in the ducts of the gland, the simple serous cyst arising in the areolar tissue, and cystic developments in solid tumours being the commonest—and, lastly, solid tumours, which may be divided into non-malignant and malignant. Occasional instances of most varieties of the former class have from time to time been recorded, but the so-called adenoma is that most frequently met with; the majority of these tumours are not, however, pure adenoid growths. Although some of them have been found to consist entirely of imperfectly developed gland tissue, the majority are intersected with more or less dense fibrous and connective tissue, hence the terms adeno-fibroma, adeno-sarcoma, or, putting it the other way, hard and soft fibro-adenoma; these varieties not infrequently undergo cystic degeneration, and result in the cystic adenoma.

Among the malignant tumours scirrhus is by far the commonest, but soft cancer and colloid are sometimes met with, and a good many cases of epithelioma or duct cancer arising in the columnar epithelium of the ducts have been described. Sarcoma, too, usually of the spindle-celled variety, is occasionally met with.

I will now give you an abstract of each of the eleven cases, and, in order not to weary you, shall omit details which are unnecessary for our purpose.

CASE I.—C. B., aged 38, a married woman with one child, noticed a small lump in her right breast early in the year 1892; for two years it enlarged very slowly, but for the last twelve months the enlargement has been more rapid, and she has experienced a painful sensation about it, and the skin has become reddened; she has also noticed that she has been losing flesh. She, however, sought no advice until a fortnight ago, when she went to another hospital, where, she says, she was told that she was not strong enough to undergo

an operation, and was discharged in seven days. No cancer or phthisis could be traced in the family.

On admission we found a retracted nipple, a hard tense tumour, the size of a pigeon's egg, in the right breast immediately below the nipple; the skin was red and firmly adherent to it, but it was freely movable over the chest wall, and no glands were found implicated. The diagnosis was scirrhus. The breast was removed, a good deal of the skin having to be sacrificed, which somewhat retarded recovery, as it was impossible to close the wound completely, but the patient left the hospital quite well six weeks after the operation.

CASE II.—J. M., aged 55, also a married woman, who had had two children, the youngest 27 years old, observed about four months ago that her right breast was larger than the left, and the nipple was drawn in. From that time to the present the enlargement has been increasing, but she has suffered no pain; no cancer or phthisis in the family. On admission the right nipple is seen to be retracted; a hard tumour the size of an orange can be felt in the upper segment of the breast, which is not adherent to the structures beneath, nor is the skin adherent to it. An indurated cord can be felt leading into the axilla, where there is decided glandular enlargement. The diagnosis here was scirrhus. The breast and axillary glands were removed in the usual way. The wound was completely closed except in the angle of the axilla, where a drainage tube was inserted. The greater part of the wound healed by the first intention, but recovery was retarded by some suppuration in the axilla. This patient, however, left the hospital quite well six weeks after the operation.

CASE III.—S. B., aged 38, married, three children, youngest 9 years old. She first felt a lump in her right breast when she accidentally touched it; this was, as far as she can remember, about a year ago; it has never given her any pain, and she has enjoyed fairly good health, but she states that the tumour has perceptibly but not rapidly increased in size. No history of cancer in the family. A brother died of phthisis. On admission, the right breast was obviously larger than the left; the right nipple was on a lower level than the left nipple, but was not retracted, and immediately below it a tumour about the size of a Tangerine orange could be felt. It was said not to be painful, but was very tender, and ached for some hours after manipulation. It was hard and inelastic, moved on the subjacent structures and the skin moved over it, and there were no enlarged glands to be felt. The diagnosis was doubtful, so, after the patient had been put under an anæsthetic, prepared for whatever was necessary being done, an incision was made into the centre of the lump. This settled the diagnosis immediately—namely, scirrhus—so the breast was removed in the ordinary way, the edges approximated, and firm pressure made on the wound by strapping. The wound healed by the first intention, and the patient left the hospital quite well three weeks after the operation.

CASE IV.—E. R., aged 44, married, three children, youngest aged 7, noticed a lump about the size of a walnut in the lower quadrant of her right breast. For a month it appeared to undergo no change, when it suddenly, without any cause that she knows of, became painful and got a little larger, so she came to see me, and I found an indurated swelling, adherent all round, which I believed to be inflammatory, and recommended treatment accordingly. A fortnight's treatment, however, resulted in no change except an increase in pain. Accordingly, I punctured the swelling with a negative result and advised the patient to go to the hospital. This, however, she would not consent to do till another month had elapsed, when she went and was admitted. During this time there had been practically no change in the tumour, and the report on her state on admission says: There is a rounded tumour in the lower quadrant of the right breast, circumscribed and abrupt above, but its edge ill defined below. It is hard and brawny to the touch, adherent to the pectoral fascia and to the skin, which is reddened for some distance and almost on the point of ulcerating at the most prominent part. One enlarged gland can be felt in the axilla, but it is not hard. No history of cancer or phthisis in the family. The diagnosis here was a little doubtful; it was obviously a solid growth, and so I decided to remove it, leaving the breast. This was done by a vertical elliptical incision, and though the naked-

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eye appearance was something like scirrhus, a microscopic examination was necessary to determine its nature, which has proved it to be so. It was not possible to close the lower part of the wound, owing to the necessary sacrifice of some skin, but the patient made a good recovery and left the hospital a month after the operation, the wound well healed.

CASE V.—M. C., aged 70, married, five children, the youngest 21 years old. A month before admission she noticed that her right nipple was drawn in, and on putting her hand to the breast she felt a hard lump which seemed to her, after feeling it a few times during the last month, to be increasing in size, and for the last week she has experienced occasional pains in it. There is no history of cancer or phthisis in the family. She remembers having a swelling in the same breast after her first child, which after a time burst and discharged matter. On admission the following was her condition: the superficial veins on the right side of the chest are enlarged, the right nipple is retracted, and a hard nodular mass can be felt in the lower and outer quadrant of the breast. It is not adherent to the structures beneath, the skin is slightly puckered over it; no enlargement of lymphatic glands can be detected. Diagnosis, scirrhus. Treatment: Excision of the gland in the usual way, and it is noted that there was only one vessel requiring a ligature; the edges of the wound were brought into good apposition, a drainage tube inserted, and the wound dressed with dry dressing. The dressings were reapplied the next day, as a blood-stained discharge had come through them; the wound looked healthy, so the tube was removed and the dressings reapplied. The patient left the hospital quite well three weeks after the operation.

CASE VI.—A. A., aged 36, married, no children, gave the following history: Over two years ago she received a blow on the right breast, and a few months after she noticed a lump the size of a pea in the situation of the blow; this gradually enlarged, and in June, 1893, she consulted a doctor. This is the first accurate date she can give, but she thinks at that time she had had the swelling about six months. An incision was advised, which was made, and the tumour disappeared, but gradually formed again, and in March, 1894, the breast was removed. No history of cancer or phthisis in the family. On admission there was a horizontal scar 7 inches long over the right mammary region, and about a third of the distance from the inner end a swelling the size and shape of a Tangerine orange. The greater part of the swelling was hard but the inner part was softer and there was an indistinct sense of fluctuation communicated on manipulation; it was freely movable over the subjacent structures and the skin was movable over it. No enlarged glands could be detected. The diagnosis here was recurrent cystic adenoma, the old-fashioned sero-cystic sarcoma. Its removal was advised and carried out by elliptical incisions, when it was found to be a papillomatous cyst. The wound was dressed with dry dressing and strapped firmly, and the patient left the hospital quite well a fortnight after the operation.

CASE VII.—M. A. H., aged 58, married, no children, noticed a lump about the size of a walnut in her right breast between three and four months before admission. It has been gradually increasing in size since that time but has never given her any pain; no family history of cancer or phthisis. On admission the breast was observed to be very small. A tumour the size of a Jaffa orange occupies the upper and inner quadrant of the right breast; it is elastic, and gives a doubtful sense of fluctuation; at one spot the skin is slightly discoloured and adherent, the tumour is freely movable over the chest wall, the nipple is not retracted, there are no enlarged glands to be felt. Diagnosis, cystic disease. The treatment decided on was removal, which was accordingly done in the usual way. A drainage tube was inserted into the lower angle of the wound, and removed after twenty-four hours, and dry dressing applied. The patient had no untoward symptoms, the wound healed rapidly, and she left the hospital convalescent in less than three weeks after the operation.

CASE VIII.—M. B., aged 44, widow, no children, gave the following history. A fortnight ago, while washing, she noticed a small lump in her breast. It was tender to the touch, and the skin over it was slightly reddened; it has not altered in character since first observed but is the seat of occasional shooting pains, and is a worry to the patient. Her mother and her

mother's mother died of cancer, and her father's father, brother, and herself suffer from epileptic fits; no history of phthisis. On admission there is a small, ill-defined lump in the outer quadrant of the right breast, movable with the breast over the subjacent structures and not adherent to the skin, which is slightly reddened over it. It appears to be tender, and this tenderness extends into the axilla, though no enlargement of glands can be detected. Diagnosis, subacute mastitis. After a week's treatment the patient left the hospital, the swelling having entirely disappeared.

CASE IX.—M. A. C., aged 85, widow, six children, youngest 50 years old, noticed that five years ago her left nipple was retracted, but she had no pain, and took no heed of it until about twelve months ago, when the skin became ulcerated; she then sought advice, and was given something to apply to it, but the ulcer spread, and nodules formed in the neighbourhood. On admission, in the site of the left breast was an ulcer about the size of a four-shilling piece adherent to the subjacent tissues; the nipple could not be seen, and there was a hard nodule near the centre of the ulcer; there was a thin puriform discharge, and several glands could be felt in the axilla. Diagnosis, scirrhus; treatment, palliative.

CASE X.—E. B., aged 45, single, first noticed a swelling in her left breast about the middle of February last; it was slightly painful and tender. After a month she sought advice, and an operation was recommended; the swelling continued to increase in size until a fortnight ago, since which time it has remained stationary. On admission both breasts are very small; a rounded tumour, the size of a small Tangerine orange, can be felt in the upper and inner quadrant of the left breast; it is elastic and semifluctuating, neither adherent to the skin nor to the tissues beneath; no enlarged glands in the axilla. Diagnosis, cyst; treatment, excision of gland. There was an unusual amount of hæmorrhage for so small a breast, but it was completely stopped by pressure and catgut ligatures, the edges of the wound well brought into close apposition, dry dressings applied, and over this broad strips of strapping. The wound healed by the first intention, and the patient left the hospital convalescent sixteen days after the operation.

CASE XI.—R. M., aged 66, spinster, noticed a small hard nodule in her left breast about twelve years ago. She says it looked and felt like a finger nail implanted there; she suffered no pain from it, and sought no advice. It gradually increased until it has attained its present condition, and lately the skin has been discoloured. No cancer or consumption in the family; she herself has been suffering from rheumatism for the past four years more or less severely, and is now quite helpless on account of it, being unable to move her legs or arms without great pain. There is a warty-looking growth, the size of a large orange, in the upper and outer segment of the left breast; it is adherent to the skin, but moves freely over the subjacent structures; no retraction of nipple, and no enlarged glands. Diagnosis, duct cancer. The patient objecting to operation, it was decided to treat it with Fell's paste, and now, three weeks after the commencement of treatment, the growth has nearly sloughed off.

Such, then, is a brief account of these 11 cases, 7 of which were cancer, 3 cystic disease, and 1 mastitis. Commenting upon them as a whole, although it would be unfair to base statistics on so few cases, I think that, from 11 chance cases, coming, as they have done, so close upon one another and not selected in any way, we are entitled to draw some general conclusions. We notice first that cancer is about twice as common as all other diseases of the organ, excluding of course acute inflammation; secondly we notice that the diagnosis in all but 3 presented but little difficulty as between malignant and non-malignant disease, the exact nature of the latter not always being so easy to settle, and in 1 of these 3 (VIII) twenty-four hours' watching confirmed the diagnosis. Then we notice that age does not help us much in determining whether we have a case of malignant disease, two patients aged 38 having cancer and the patients with cystic disease being respectively aged 58 and 45. Then we observe that the only case in which there is a history of malignant disease in the family was the case of mastitis, and in not one was there a history of tubercle. We observe, too, that nearly all enjoyed good health till the time of their attack. Then in every case the lump or the retracted nipple was

what drew the patient's attention to there being something wrong, and in only 2 of the cases of cancer was pain a prominent symptom at any time. In 3 of the 11 cases the disease appears to have lain dormant for a year or longer, and in only 1 can the patient suggest any cause, either for the original development or for the activity of the growth, and the cause given in 1 of the cyst cases was a blow some months previously. In 3 of the cases, and these were all cancer, retraction of the nipple was an early symptom. In no case was disease of the nipple recorded as an antecedent condition.

I have said that in only 3 of these cases was there any difficulty in coming to a conclusion as to whether the disease was malignant or not, and we may quickly reduce that to 2, because in 1, that of subacute mastitis, although on first examining the patient there was found an ill-defined non-circumscribed lump in the breast, tender to the touch, and this tenderness extending into the axilla, and a history of darting pains and a marked family history of cancer, the course of the disease had been too rapid for an actual tumour to have developed, and the idea of an inflammatory swelling was uppermost in our minds, which a few hours' observation proved this to be. The 2 cases that presented real difficulty were Nos. 3 and 4, both of which turned out to be malignant, and in the case of No. 4 it was only a microscopical examination that determined the nature of the disease. To recognise malignant disease in its early stage is of the utmost importance, because when it has spread to the adjacent glands the chance of cure is very much lessened even if they be thoroughly removed, and though some may say, If in doubt operate, I think we should, to say the least, feel dissatisfied with ourselves if we removed a breast and then found that we might have saved it. What then are the conditions most likely to be mistaken for cancer? I think they are the following—chronic mastitis, chronic abscess, cystic disease deep in the breast, and sometimes, but not often, fibro-adenoma.

The chief signs of cancer in the early stage are a patient over, or at any rate not far from, 40 years of age, often one whose health has previously been excellent, a rapidly enlarging diffuse indurated, inelastic tumour in the breast, sometimes attended with lancinating pains, but often painless, sometimes retraction of nipple or the level of the two nipples not the same. In some cases when it is deeply seated the breast does not glide freely over the subjacent tissues, and when it is superficial the skin gets early adherent, and often on manipulation the skin puckers; sometimes, even fairly early in the disease, there is enlargement of the axillary glands. All the above signs may be present in the first three conditions just mentioned, and in not a few it is impossible to diagnose between chronic mastitis and scirrhus without resorting to an incision; a puncture is not enough. In abscess and cyst there is generally more elasticity, and the centre is softer and more elastic than the periphery. In abscess there is often some oedema of the adjacent tissues as well, and tenderness along the line of the lymphatics and in the glands of the axilla, and in these cases a puncture should be made, and may be sufficient to confirm the diagnosis. Fibro-adenomata generally occur in younger people; they are also more distinctly circumscribed, and are more movable. In these two cases we are discussing one was painful the other not; neither had a retracted nipple, but in one the level of the two nipples was altered the other not. In one the tumour was freely movable and the skin moved over it; in the other the reverse was the case; in one the glands were not affected in the other they were. In neither was there a history of malignant disease in the family. In one the previous health had been excellent in the other indifferent; in one the history extends over a year in the other about two months. You see how the symptoms differ and yet they both turned out to be malignant.

In the one case an incision into the tumour at once revealed the nature of the disease, the peculiar hard creaking sensation communicated to the fingers the moment the knife entered the tumour being sufficient to make the diagnosis a certainty, but in the other case, after removal and an incision, the diagnosis was not certain, and it is only the microscope that has settled the question for us. Had time permitted I should have liked to have compared Case iv and those of non-malignant disease with a view to discussing the differential diagnosis of non-malignant tumours. I may, how-

ever, have an opportunity of doing that on some future occasion.

I wish now to say a few words on the treatment. Eight of the cases were subjected to operation, and the operation is a perfectly safe one; death is very rare even when the axilla is freely opened up, and union by the first intention, at any rate of the greater part of the wound, is the rule. All the patients got well without a bad symptom, the time required for the healing process varying from sixteen days to six weeks. In 1 of the cases the axillary glands were removed, and in 2 it was necessary to sacrifice so much skin that the edges of the wound could not be approximated, and it was these that took the longer time to heal, and in which union was accompanied by suppuration. Healing was most satisfactory in those cases that were healed by dry dressing and strapping firmly applied, great care being taken to stop all oozing before the dressings were put on. In those cases in which we could not satisfactorily apply the strapping so as to make firm pressure, a drainage tube was used, and removed at the expiration of twenty-four hours. They were all dressed with our usual dry dressing: the skin was dusted with iodoform, and covered with antiseptic gauze and wool.

The rule that I have adopted in regard to the extent of the operation is to remove the tumour when non-malignant and the breast when the disease proves to be malignant, as well as the axillary glands, if they are affected, but you may have observed that in these 8 cases there were 2 exceptions to this rule. In the one (Case iv) I left the breast, though the disease was scirrhus, removing only the tumour. The reason of this was that at the time of the operation I could not satisfy myself of the nature of the disease, and, though the principle When in doubt remove too much rather than too little, is a good one, in this case I felt satisfied in removing the tumour only, as it appeared to me that none of the diseased tissue remained. Time will prove whether this is correct. I saw the patient last week—a month after she had left the hospital—and up to that time everything was satisfactory, but I shall watch her carefully, and in the event of any recurrence in or near the scar I shall advise a radical operation. In Case x, although the disease was not malignant, the breast was excised. The reason of this was that the breast was very small and the tumour involved practically the whole of it. One more remark, and that is about Case xi. Why was not that excised instead of being treated by Fell's paste? I wished to excise it, and believe that would have been the best course, but the patient absolutely refused any operation, so the next best thing seemed to be the treatment adopted. She is still in the hospital, and you can see now in the place of the tumour, which has sloughed off, a healthy ulcer. In certain cases, such as this one, that method of treatment is effectual, though it is slower and more painful.

HUNTERIAN LECTURES

ON THE

EXPERIENCE OF ST. GEORGE'S HOSPITAL IN LAPAROTOMY;

EXCLUSIVE OF GYNÆCOLOGICAL OPERATIONS,
FROM 1888 TO 1894 INCLUSIVE.

Delivered at St. George's Hospital Medical School

By T. HOLMES, F.R.C.S.,

Consulting Surgeon and Treasurer to the Hospital.

LECTURE II.—CHOLECYSTOTOMY: LAPAROTOMY FOR TUMOURS AND FOR GASTRIC ULCER.

THE first topic of to-day's lecture is cholecystotomy, our recorded experience of which has been remarkably small, only three cases being noted; but I believe that there have been other successful cases which have not been recorded. In all three cases the operation was, as an operation, perfectly successful, but in the one which first occurred, that of a woman under Mr. Bennett's care, it was useless, as after the extraction of two gall stones from the bladder, it was found that a