Original Communications.

ON THE DIAGNOSTIC VALUE OF THE RETRACTED NIPPLE AS A SYMPTOM OF DISEASE OF THE BREAST.

By THOMAS BRYANT, Esq., Assistant-Surgeon, Guy's Hospital.*

To overestimate the importance of a symptom, and to accord it a value which is belied by clinical experience, is an error to which we are all prone, and against which it is well that we should always guard; for by so doing we are led too frequently into faults of diagnosis and treatment which might have been avoided, as well as to a subsequent underestimate of the true significance and even the rejection of a sign which, if correctly interpreted, may be of considerable importance.

The retracted nipple, as found in a diseased breast, may be readily advanced to illustrate the truth of these remarks; for it may be asserted with some confidence that, as a sign of carcinoma of the mamma, it has been assigned a value to which it is not entitled, and that, even at the present day, its true significance is not generally understood. It is too true that it is even now regarded by many men as a symptom of special value, and that, when present, it is looked upon as pathognomonic of a cancerous affection; whilst, on the other hand, we find men mistaking a cancerous tumour for a benign one simply on account of the absence of this so-called pathognomonic symptom. To illustrate this, I will quote from a high authority and a living one—Professor Nélaton—who, in his *Clinical Surgery*, published a few years since, when discussing the diagnosis of a tumour of the breast, asks—“Was this tumour benignant, or was it scirrhus? if the latter, it would most certainly have determined the retraction of the nipple; the projection of the nipple would be rather replaced by a depression”; for he adds, “the surgeon should know that this is one of the very first signs of scirrhus.” Again, when considering another case, the nature of which was doubtful, in a woman aged 45, he says—“The first idea in regard to this tumour was that it was cancerous”; and yet he adds, “the usual circumstances did not exist, and the retraction of the nipple was wanting.” Nevertheless, the tumour turned out to have been of a cancerous nature.

It is needless to make further quotations, or to draw from other authors to prove that the presence of the retracted nipple is still taken by many for more than its true worth; the authority from which I have quoted being amply sufficient for my present purpose; and I propose now to pass on to prove that this retraction of the nipple is to be found under many different conditions. In the simple disease of the mamma as well as in the malignant—in the inflammatory affections as in others of a more morbid nature.

To the congenital, or naturally retracted nipple, I shall not allude, further than to state that it is well on examining a diseased breast with this condition of nipple, to bear this fact in mind, that the retraction of the part may have been a natural one.

The first series of cases to which I shall draw your

attention, in which this condition of nipple was present, will be the inflammatory.

CASE I. *Chronic Inflammation and Suppuration of the Breast, with Retracted Nipple.* Mary R., aged 41, a married woman, the mother of nine children, all of whom she had easily suckled, came under my care on August 25th, 1864, with an affection of her right breast.

She had been confined nine months previously, and had been able to suckle for a few weeks with the affected breast, but had not done so for some months when coming under observation. The disease had commenced with an inflammation of the gland, accompanied by great swelling, heat, and redness. By treatment, this had gradually subsided; but the parts were left hard, and somewhat tender. In about three weeks from its first appearance, the nipple began to disappear, and in about one month it had completely retracted. When seen, the breast appeared as a large globular tumour, of a firm consistence and semifluctuating feel. It was not very moveable, although it was not fixed; but the integuments over it were evidently “glued” by inflammatory effusion to the parts beneath; the nipple was completely out of sight; the axillary glands were unaffected.

Manipulation caused the patient some pain, and a dull aching of the part was also present. The woman's powers were very low. Tonics and good living were prescribed, with fomentations to the breast. On September 1st, indications of the presence of pus were tolerably clear; some thinning of the integuments and parts beneath showing themselves near the nipple. The abscess was accordingly opened, and a large quantity of healthy pus evacuated. In three weeks, this abscess had contracted, and had completely healed; but the nipple remained retracted and the gland indurated; this latter, however, had much diminished. On July 13th, 1865, nine months after treatment, the breast was natural, but the nipple was still out of sight.

CASE II. *Chronic Abscess in the Centre of the Breast. Retracted Nipple from the appearance of the Disease.* Sarah M., aged 20, came under my care on December 31st, 1863. She was a married woman, but had no children. She had enjoyed good health till eight months previously, when she received a blow upon the left breast. It was accompanied by severe pain, and was followed by swelling; this swelling gradually increasing.

When seen, the breast was much larger than natural, and to the hand felt hard and fluctuating; a globular tumour evidently existing in the centre of the gland. The nipple also was completely retracted; this retraction having come on gradually since the receipt of the blow. An incision was then made into the tumour at its lower part, and several ounces of pus evacuated. Convalescence rapidly followed. The condition of the nipple, however, remained unchanged.

CASE III. *Chronic Abscess in both Breasts; Retraction of the Nipple.* Rachel B., a childless married woman, aged 28, applied to me at Guy's Hospital on November 10th, 1864, with an affection of the right breast. It had existed for one week, and had come on without any recognised cause. It began by pain and swelling; and appeared as a globular, tense, fluctuating tumour, in the centre of the mammary gland. The nipple, which had been quite natural, was completely retracted. An abscess was diagnosed; and a poultice ordered, with quinine. In two weeks, the abscess was opened, and three ounces of healthy pus evacuated; and, in another week, the breast had healed. The gland, however, remained indurated; and the nipple retracted on December 7th.

* Read at the Hunterian Society, October 24th, 1866.

On February 1st, 1865, this same patient reappeared before me with a similar disease, running the same course in the left breast. The inflammation came on without any known cause. An abscess formed in the centre of the mammary gland, which required opening, and the nipple also retracted in the same way. On May 21st, 1865, the report states that the nipples were still retracted.

CASE IV. *Retracted Nipple, the Result of a Chronic Inflammation of the Mammary Gland.* Emma W., aged 35, a married woman, the mother of two children, the first eight years since, applied to me at Guy's Hospital, January 19th, 1865, with an inflamed and thickened right breast. It came on after her first confinement, eight years previously, with suppuration, and had become worse three years ago after her second; a sinus had existed behind the breast since that date, but the nipple had been retracted since the first attack. Her general health was good.

A drainage-tube was introduced into the sinus through its most dependent opening, and tonics given. In two months, the sinus had healed, and the woman left cured. The nipple, however, was still retracted.

REMARKS. In the cases I have already quoted, it will have been observed that the retracted nipples are the result of a chronic inflammatory affection of the mammary gland; and it is to be remarked that the retracted nipple was left as a result of the disease.

The next case I propose to read will illustrate the fact, that an acute inflammation of the gland may produce a similar condition.

CASE V. *Abscess in both Breasts of an Infant; Retracted Nipples.* A female infant, aged two weeks, was brought to me at Guy's Hospital on December 22nd, 1864, with abscesses in both breasts, brought on by the foolish attempt of an old nurse to express the secretion from the glands which always exists after birth. It had been present for ten days, and the inflammation was very severe. The glands were much swollen, and as large as half a walnut. The nipples were also completely retracted. The breasts discharged freely for some days, and then recovered. The contracted nipples, however, remained.

REMARKS. In the cases already quoted of inflammation and suppuration of the breast—a few only of the many which could be extracted from my notebook—the retraction of the nipple was a marked symptom; and they are amply sufficient to prove the truth of the remark, that such a condition is by no means unfrequent in connection with inflammation or suppuration of the mammary gland. It may occur during the progress of an acute or chronic inflammation in either an infant or an adult; and, as it has been already shewn, may be an early accompaniment and result of a chronic abscess.

I will now pass on to show that the same condition of nipple may exist in another simple disease of the mammary gland, the cystic disease, and to demonstrate the fact by the quotation of cases.

CASE VI. *Retracted Nipple associated with the true Cystic Disease of the Right Breast, for which Excision was successfully performed.* Anne C., aged 49, a married woman, the mother of five children, all of whom she suckled, came under my care on April 17th, 1865, with a disease of the right breast of four and a half years' duration. It began by a swelling on the outer side of the gland, and this has gradually increased. The nipple, which had been quite natural, soon disappeared, its position being indicated by a deep depression. The tumour had also been tapped at least six times, a brown glairy fluid having been drawn off at each operation. On her coming under observation, the breast and tumour were very large,

measuring about a foot from axilla to sternum. The disease was evidently cystic; for its outline was smooth, globular, tense, and fluctuating. The skin was much stretched over the growth beneath, and adherent in several spots from the frequent tappings, but not in any way diseased. Firm pressure upon the tumour was also followed by a copious discharge from the nipple of a glairy, blood-stained, mucoid fluid; or rather from the depression representing its position. This discharge had been present at times during the whole life of the new growth. The patient's general health was good, and there was no disease of the axillary glands. I tapped the cyst, and drew off several ounces of the same glairy blood-stained fluid which had been drawn off on previous occasions; and, finding much solid growth beneath, advised excision. This was done on May 30th, and a rapid recovery took place.

The disease turned out to be a fine specimen of the true cystic disease of the breast-gland; that is, a disease of the gland itself, developed within its ducts, the cysts containing intracystic growths and more or less glairy fluid.

CASE VII. *Cystic Disease of the Breast: Retracted Nipple.* S. M., aged 67, a married but childless woman, applied to me on June 13th, 1864, with a disease of her right breast of two years' standing. It had appeared as a gradual enlargement, and had been unaccompanied by pain. Her general health was also good. When coming under care, the tumour was evidently situated in the breast itself, and with it formed one mass; it was of about the size of a large fist, and very pendulous, hanging down from the thorax. It was quite moveable, and the integuments covering it in were healthy and uninvolved. The tumour was evidently made up of solid growth, as well as of cysts; these latter being of various sizes. The nipple was thoroughly retracted, and had been so for one year. There was no discharge from it, or any enlargement of the axillary glands. An operation was advised for this patient, but her consent was not obtained. She remained under observation for one month, when she left town.

Retracted Nipple in Cancer of the Breast. The value of a retracted nipple as a sign of cancer will now occupy our attention; and I have placed it last on our list, as I thought it well to demonstrate first of all the fact that such a symptom is by no means an uncommon associate of the inflammatory and cystic diseases of the breast; and that, as a consequence, it cannot with any certainty be regarded as pathognomonic of the cancerous affections. That it does occur in connexion with a cancerous tumour of the breast, is not to be disputed; but that it is a frequent accompaniment of such a disease, is open to doubt; for, on looking over my notes of 222 examples of cancer of the mamma, I find that a retracted nipple existed in only 32 cases, or in about 14.4 per cent. Should the surgeon expect, therefore, to find it in all cases of cancer, he will be disappointed; and should its absence in certain cases lead him to regard a tumour as innocent, he will, in the majority of cases, be found wrong. This symptom may be found in the infiltrating form of cancer of the breast, whether partial or complete; that is, when the disease has involved the whole gland, or only a lobe. It may also exist in some examples of the tubercular cancer, in those instances in which the tuber is developed between the ducts, and by its growth separates them—thus acting mechanically upon the nipple, and causing its retraction; the retraction, under such circumstances, taking place towards the diseased part (Case ix). In the generally infiltrating form of cancer, the nipple simply retracts; and, at a later stage of the disease, it may reappear (Case

viii), this reappearance being due to the increase of the disease and the mechanical pressure of the nipple forwards by the tumour beneath. These facts will be well illustrated in the following cases.

CASE VIII. Infiltrating Carcinoma of both Breasts: Retraction of the Nipple in both during the Early Stage of the Disease: its subsequent Projection in one, in the Later Stage. Mary W., aged 58, a married woman, the mother of four children, all of whom she had suckled without difficulty, came under my care at Guy's Hospital on August 22nd, 1864, with cancer of both breasts. The disease had existed in the left side for two years, and had appeared as a general induration of the mammary gland. The nipple, also, soon began to retract, and the skin to become involved by infiltration. In about one year after its first appearance, the nipple reappeared; and when coming under observation, it was as prominent as it is usually found. The whole breast was very large, and generally infiltrated. The skin over it was adherent, and covered with cancerous tubercular infiltrations. The axillary glands on that side were also diseased.

On the right side, the breast was similarly affected, although not to such an extent as the left. The disease had commenced in the right gland one month previously, by a general induration of the gland, and retraction of the nipple, the nipple having entirely disappeared. The skin was also slightly puckered. In about one month, tubercles appeared in the integument, and the axillary glands began to enlarge—the woman's health rapidly failing; the last notice in the report being on October 13th, that the patient was sinking.

CASE IX. Tuberculous Carcinoma of the Right Breast, and Retracted Nipple. Eliza Lee, a childless married woman, aged 54, came under my care at Guy's Hospital on July 28th, 1864, with a disease of the right breast of one year's standing. It had commenced by a swelling situated on the outer side of the right mamma, of a hard and stony character, this swelling gradually increasing. After six months, a change appeared in the nipple, a slight dragging of the part towards the tumour being very manifest. This retraction steadily progressed; the nipple, when coming under observation, being drawn completely in. The axillary glands also soon began to enlarge, and the integument in the tumour to be infiltrated. When coming under my care, the tumour was of about the size of an orange, globular in outline, and very hard; it was evidently situated in the outer or axillary border of the mammary gland. The nipple was retracted almost out of sight, and drawn towards the diseased part. The tumour was fixed to the parts beneath, being quite immovable; and the skin over it was also infiltrated. The axillary glands were likewise enlarged. In about one month, the skin began to ulcerate, and the powers of the patient to fail; the last report, made on November 24th, being, that the breaking up of the cancer was progressing rapidly, and the development of tubercles in the integument increasing. The patient's powers were fast failing.

REMARKS. We have thus shown that a retracted nipple is an occasional symptom in acute and chronic inflammation of the breast; that it is found in the cystic disease of the gland, as well as in the cancerous; in fact, that it is met with in all the diseases of the true gland, whether simple or malignant. It is absent in the ordinary chronic mammary or adenoid tumours, simply because these tumours are not of the gland itself; and, as a consequence, the nipple, with the gland-ducts, are not interfered with. In what way, then, it may be asked, is this retraction of the nipple generally brought about? It must depend on some general or simple cause, as it is

found under so many different conditions; "for," as I have stated in another place (*Clinical Surgery*, Part v, p. 429), "a retracted nipple may be described as an accidental symptom in the development of a tumour; it is the product of mechanical causes, and its presence is determined by the manner in which the gland is involved in the disease, rather than in the nature of the affection itself. Should any tumour, simple or malignant—should any abscess, chronic or acute—attack the centre of the mammary gland, a retracted nipple, in all probability, will be produced; for, as the disease so placed will necessarily cause material separation of the gland-ducts, their extremities—terminating in the nipple—must be drawn upon, and, as a consequence, a retracted nipple will be the result."

In an early stage of an infiltrating cancer of the organ, this symptom is one of occasional occurrence; the nipple being drawn towards the side of the gland, which may be involved. At a later stage of the disease, however, when the infiltration is more complete, the nipple may again project. In a central chronic abscess of the breast, the retracted nipple is equally common; and, in the true cystic adenocoeles, it may be also present. The explanation of the cause of this symptom in all of these cases is alike, being purely mechanical, and in a measure accidental.

CASE OF CHOLERA.

By JOHN BIRCHENALL, Esq., Macclesfield.

EVERY peculiarity in the history of cholera is interesting to us as the members of a liberal profession. The essential nature of the disease, the mysterious laws which influence its migrations, as indicated by the erratic course it took upwards of thirty years ago, when it swept over the entire surface of the civilised world, are questions which have not as yet received their solution. The following case of ordinary bilious diarrhoea, progressively assuming the distinctive characteristics of Asiatic cholera, prior by many months to its first visitation in this locality, is worthy of note, simply because it touches the marginal region of these problematical inquiries. It occurred in the month of June, 1838.

Mrs. H., aged 57, was a short corpulent woman, of bilious lymphatic temperament and swarthy complexion, strictly temperate, and of active habits, though of loose flabby texture. She had had occasional bilious purgings previously. From the Tuesday on which the last seizure occurred up to the Friday following, although the complaint did not yield to the usual remedies, there was nothing to awaken the slightest apprehension. The pulse, though a little lacking in force, was soft and regular; the tongue whitish, but moist and free from coating. There were the usual loathing of food, occasional nausea, but no vomiting; an entire absence of pain; no disturbance in the organs of special sense; no thirst; the urine was small in quantity; and the discharges from the bowels, which occurred on the average some half-a-dozen times in the twenty-four hours, were scanty also, and semiliquid, yellow at first, but gradually passing into a greenish hue; a transient sense of faintness being expressed after each evacuation, when this change in their aspect obtained.

In the course of the day last named, I found the pulse quickened; the countenance anxious, and expressive of exhaustion. The alvine discharges were still small in quantity, but oily-looking; and there was a prolonged sense of faintness on each occasion. As the treatment, which now consisted of an alkaline