nipple, and, in another, fluctuation was felt deeply seated below the nipple. The abscess was opened, and in about a month a good recovery ensued.

CASE VII. *Chronic Inflammation of the Breast in a Single Woman, simulating Cancer.*—Ellen A., aged 56, a single healthy woman, came under my care at Guy's Hospital on July 3rd, 1865, for some affection of her left breast. It had been coming on for about three weeks without any known cause; the breast gradually becoming hard and painful. When I saw her, the whole gland was infiltrated with some new product, inflammatory or otherwise. It was indurated and tender on manipulation. There was no enlargement of the axillary glands. The nipple was completely drawn in, and out of sight. The skin over the breast was healthy and the tumour moved freely upon the parts beneath. The case was one of a doubtful kind; the age of the woman and the local symptoms raised a suspicion of its being of a cancerous nature, and yet its progress had been somewhat too rapid for the generality of such cases. On inquiry, also, it was found out that the retracted nipple was a congenital condition. Tonics were given and the case watched. In a fortnight distinct evidence of inflammation of the skin appeared with indistinct fluctuation. In another week an abscess was opened, and rapid convalescence followed.

CASE VIII. *Chronic Abscess in Breast with Retracted Nipple.*—Sarah M., a childless married woman aged 20, came under my care at Guy's Hospital on December 30th, 1863, for some enlargement of the left breast. It had been gradually coming on for eight months, after a blow. The swelling was accompanied with a dull pain, and the gradual retraction of the nipple. When I saw her the breast was clearly much enlarged, the whole gland forming a firm semi-elastic tumour; the nipple had completely disappeared. The skin over the tumour was healthy, as were the axillary glands. The gradual enlargement of the breast with the retracted nipple might probably have induced a surgeon, who put too much value in such symptoms, to suspect a cancer, although the age of the patient and the history of a blow forbade the entertainment of such an idea. The case turned out to be one of a chronic abscess. It was opened, and a good recovery took place.

CASE IX. *Chronic Inflammation of the Breast simulating Cancer: Recovery.*—Mary R., a married woman aged 41, the mother of nine children, came under my care at Guy's Hospital on August 25th, 1864, for some affection of her right breast. It had been coming on for about nine months, and was accompanied with pain. The gland had been gradually becoming larger and harder, and the nipple had been slowly retracting. When coming under observation, the breast appeared as a firm globular enlargement and the nipple was quite out of sight. The tumour moved freely upon the parts beneath, and the skin over it was quite free. There was no enlargement of the axillary glands. The age of the woman and the general appearance and condition of the breast indicated the presence of a cancer; and to those who looked upon the retracted nipple as a definite sign of such a disease, the diagnosis would have been complete. On inquiry, however, into the history of the case, it was elicited that the induration of the breast had gradually appeared after her last confinement, in which she lost her child, nine months previously; and that the possibility of the disease being of a chronic inflammatory nature was rendered probable. This view of the case turned out to be the right one; for in the course of one month an abscess appeared which was opened near the nipple, and in three months a recovery was declared. The nipple, however, continued somewhat retracted.

CASE X. *Chronic Abscess with Retracted Nipple, successively attacking both Breasts; Recovery.*—Rachel B., aged 28, came under my care at Guy's Hospital on November 10th, 1864, for some affection of her right breast. She was a childless married woman. The disease had been coming on for several weeks with induration and enlargement of the breast; the nipple gradually going in. No cause could be assigned for its appearance. When seen, the breast appeared as a globular tumour, in the centre of which was a depression or fossa containing the nipple. The tumour was movable and hard, indistinctly fluctuating. The skin over it was healthy. The age of the woman, only twenty-eight, rendered the idea of its being of a cancerous nature improbable, and, at the same time, suggested the probability of its being inflammatory. An exploring needle was consequently introduced, when pus escaped. A free opening was consequently made, giving exit to several ounces of pus, and a good recovery took place. The nipple, however, remained somewhat retracted. This patient came under my care again on February 1st, 1865, with the same affection of the left or opposite breast, which had appeared in the same insidious way and ran precisely the same course. It was treated in a like manner, and good result followed. On May 21st, the nipples were still drawn in.

REMARKS.—There would be no difficulty in quoting other cases to illustrate more fully the subject of this communication; but I trust I have brought forward sufficient to indicate the quarter in which some

of the difficulties of diagnosis are to be found, and the means by which errors of diagnosis are to be avoided. I have pointed out how, in cases of chronic inflammation of the breast-gland, nearly every local symptom found in cancer may be simulated; and how necessary it is for the surgeon to make a careful inquiry into the history of every case, to understand how each symptom is produced, and to weigh the value of every point before giving a diagnosis. I think that I have demonstrated that local symptoms will constantly mislead when taken by themselves, and that they can only be correctly interpreted by the antecedent points connected with their history. In all the examples of disease which I have just brought forward, the surgeon would doubtless have been misled, had he trusted to local symptoms, and had he failed to inquire into the facts touching the history of the cases from an early period; for, in many of the examples, the symptoms which appeared characteristic of cancer turned out fallacious, and were due to either a congenital condition of the parts, or to an old or recent inflammatory affection.

I trust I have also demonstrated, by the quotation of cases, the value of an exploratory puncture with a needle into the centre of certain cases of tumour, when the nature of the disease is doubtful. In cancerous cases, the puncture will do no harm; in inflammatory cases, it will dispel the doubt. It will often turn doubt into certainty, and save errors of diagnosis as well as of practice.

By way of conclusion, I will observe that *cancers* generally attack the breasts of women during the functional decline of the mammary gland, that is, after forty years of age, and *inflammatory* affections, during the period of its functional activity; that nearly every local symptom of cancer may be simulated by chronic inflammation of the breast; and that the careful consideration of the history of the case will alone enable us to escape error. In all cases of disease of the breast, let it be therefore our rule to inquire into the history of the case, and the gradual development of the symptoms, before giving a diagnosis; and, in certain doubtful cases, let it be our practice to explore the tumour by means of a needle before giving an opinion, and certainly before we act upon it.

By adopting, or rather acting upon, these suggestions, we shall often be saved from serious errors; we shall render our practice more certain, and consequently more successful.

It is true that what I have just stated is not new; it has been recognised by all surgeons, and practised by most. But still it is not recognised as fully as it deserves, nor is it practised as freely as it ought. If the cases I have brought forward have any influence in reminding us of what we have sometimes neglected, or in urging us to do what we cannot fail to recognise to be right, my object will have been obtained; for in our profession, as in many others, the old saying is too true, "That more error is wrought by want of thought, by far, than want of brains."

REMARKS ON VILLOUS TUMOUR OF THE RECTUM,

AND THE RESEMBLANCE THAT IT MAY BEAR IN ITS SYMPTOMS TO CHRONIC DYSENTERY; ILLUSTRATED BY TWO CASES.*

BY H. M. TUCKWELL, M.D.,

Physician to the Radcliffe Infirmary, Oxford.

CASE I.—P. S., a man, aged 70, was admitted into the Radcliffe Infirmary on November 22nd, 1866, with the following history. He had suffered for half a year from diarrhoea; the bowels acting from twelve to twenty times in the day, with much straining and pain in the lower part of the back and bowels. The motions were reported to be very scanty, consisting chiefly of slime and blood. He had never been abroad. The man had a sallow cachectic appearance, and a feeble pulse. Nothing abnormal could be detected in any part of the body, with the exception of tenderness on pressure in the left iliac fossa. An examination of the rectum enabled me to feel a small pile just within the sphincter, but nothing else. He continued under observation till December 9th, getting temporary relief from remedies—castor-oil in small doses, Dover's powder, and, especially, opium injections; but the diarrhoea returned without fail after one or two days' cessation, so that he would have seven, ten, or twelve stools in the day, with severe tenesmus and intense pain in the lower part of the back. The stools consisted, during this time, mainly of bloody mucus and a bloody fluid. Occasionally, after a dose of oil, there would be some fecal matter in addition, but blood and mucus always predominated. The diagnosis—chronic dysentery—made at first, seemed to be confirmed by the daily progress of the case. On the 10th of December, the eighteenth day of observation, he complained

* Presented to the Surgical Section at the Annual Meeting of the British Medical Association i Oxford, August 1868.

more of pain diffused over the whole abdomen, which was everywhere tender on pressure. He began to vomit; his temperature rose; and he had a pulse of 120. These evil symptoms increased on the two following days, and he died on the 13th of December, as was supposed, of peritonitis consequent on perforation of a dysenteric ulcer. The autopsy showed intense general peritonitis, but no trace of ulceration. The mucous membrane of the intestine was healthy from the duodenum to the end of the sigmoid flexure. But, extending from about four inches above the anus to the sigmoid flexure, was a vascular villous growth, sprouting from the posterior wall of the bowel and partly filling up the bowel's calibre. The base of the growth was dense and much thickened by an increase of connective tissue; but, at its very centre, it had apparently softened, and the gut was there perforated by a small opening which led into the pouch formed by the recto-vesical fold of the peritoneum. Below the tumour, the bowel was, with the exception of a small hæmorrhoid just within the sphincter, healthy. There was no enlargement of the adjacent glands, nor disease of any other organ in the body. Portions of the tumour, examined microscopically, were found to be composed of numerous processes or offshoots, shaped like a club or flask, and sprouting from a common stalk. Each of these contained abundant small round, or ovoid, cells, with nuclei, and was covered externally with the columnar epithelium of the rectum. Neither in the villous processes nor in the thick basis-substance of the tumour could any cells with large nuclei, like those commonly met with in cancerous growths, be found. One or two bloodvessels could be traced running up into many of the villi.

CASE II.—A. B., woman, aged 46, was admitted into the Infirmary, on February 13th, 1867, on account of her very sallow cachectic appearance and oedema of her legs. Her intellect was so feeble that no history could be obtained from her; and no complaint was made of pain, diarrhoea, or other symptom. With the exception of an occasional intermission of her pulse, nothing abnormal could be detected till after she had been in the hospital for twenty-four hours, when the nurse, observing that she went very frequently to the closet, made her pass her motions in a night-stool. These were now seen to consist mainly of bloody fluid and mucus with a small quantity of fecal matter. On examining the rectum, I found the bowel unusually large and capacious just above the sphincter, but could feel nothing else abnormal. As the purging of blood and mucus continued unchecked by remedies, I concluded that this was either a case of chronic dysentery, or one of villous tumour of the rectum like that which had occurred to me in the previous year. Remembering how, in that case, the tumour lay just out of reach of the finger, I waited till after an evacuation had taken place, and then again examined the bowel. I now felt distinctly, on carrying the finger upwards and backwards as high as it could reach, a cluster of soft pendulous growths of various sizes protruding from the posterior wall of the bowel, and had no hesitation in making the diagnosis—villous tumour of the rectum. She became gradually worse; the tenesmus at last being so severe that on one occasion the bowel was prolapsed sufficiently to bring into sight some of the villous processes belonging to the tumour. On March 22nd, five weeks after admission, a sudden change set in: her temperature rapidly rose; her pulse became very frequent; and she passed repeatedly in the bed very offensive bloody and slimy discharges like the washings of putrid meat. She sank on March 25th. The autopsy disclosed a condition of the rectum identical with that in the preceding case, so that the description of the one will do for that of the other, with this single exception—that whereas, in the preceding case, a perforation had taken place into the peritoneum, in this instance the bowel had given way immediately below the recto-vesical pouch, and a very fetid abscess, of some size, had formed in the thick connective tissue between the posterior wall of the rectum and the sacrum; the peritoneal cavity being uninvolved. In both lungs, but especially the right, were several superficial secondary abscesses surrounded by a halo of inflammation. At the base of the left was a patch of recent pleurisy. A microscopical examination of any one of the villous out-growths which float out in the cavity of the intestine shows them to be composed of numerous small, conical, club or flask-shaped processes, which sprout from a stalk, are filled with small round or oval nucleated cells, and are covered with columnar epithelium. Neither in them, nor in the thick base of the tumour, can any elements like those ordinarily met with in cancer be found. One or two large bloodvessels may be seen running up and forming loops in each villus. (See Museum Specimen, 414a.)

The principal points which seem here to be worthy of a short comment are as follows. 1. The close resemblance which the disease in question may bear in its symptoms to chronic dysentery. In both, we have a very frequent action of the bowels, with great tenesmus, pain in the back, and pain in the left iliac fossa and lumbar region. The stools in both are bloody, slimy, and consisting at the last of fetid watery discharges like the washings of putrid meat. In both, there is a peculiarly sallow ca-

chectic appearance. The only means, as far as my observation goes, of arriving at a correct diagnosis, is the examination of the rectum: and the chief practical interest which I hope to have been the means of conveying to the Association, in troubling it with a recital of these cases is this—that such an examination must be conducted with unusual care, *directly after there has been an action of the bowels, and when, with the violent downward straining present in this disease, the villous processes are forced down within reach of the finger.* Without such precaution, I submit that a mistake like that made by myself might happen to any one who had never met with a case of the kind. For, be it remembered, there was no stricture to be felt, as in ordinary malignant disease of the rectum, nor was there, as sometimes happens in this form of intestinal tumour, any symptom of obstruction even to the last, to guide one.—2. The occurrence of death by perforation in both instances. There seems to be, in all these localised villous growths of the intestine, co-incidentally with the villous formation, a considerable hypertrophy of the subperitoneal connective tissue, by which the floor of the tumour is much thickened. At a later stage, a process of softening, apparently by fatty degeneration, may take place in this floor; and, as in the instances here related, lead to perforation of the bowel.—3. The absence of cancerous elements in the tumour itself, or in the adjacent glands, or in distant organs. Hence the term “villous tumour” is employed rather than that of “villous cancer.” This is equally the conclusion arrived at by the large majority of those who have published observations of similar cases. For, though it cannot be denied that there is such a disease as villous cancer—that is, an undoubted cancerous infiltration of the stomach or intestines, with this peculiar villous hypertrophy superadded—yet the villous tumour of the intestines and bladder has ordinarily neither the structure nor the characters of cancer.—4. The occurrence, in Case II, of secondary abscess in the lungs rather than in the liver. The source of blood-poisoning, being seated in the connective tissue outside the bowel, not in the wall of the bowel itself, was in direct connection with the vena cava, not with the vena portæ.

PUERPERAL CONVULSIONS.

By HENRY E. EASTLAKE,

Fellow of the College of Physicians, Dublin, etc.

THE following three cases of puerperal convulsions occurred in my practice during the last four months of 1867. They all terminated satisfactorily, and each case possesses certain points of interest.

CASE I.—About 4 A.M., on the 21st of September, 1867, I was requested to visit Mrs. H., aged 22, the wife of a medical man, who had just been seized with a violent convulsion. She had been delivered of her first child, a fine girl, about ten hours before my arrival. Dr. Greenhalgh had attended her, and had used forceps on account of the labour being unduly prolonged. Dr. Greenhalgh was unable to go to the patient on the occurrence of the convulsion; and I was therefore desired to attend in his stead. I found that she was unconscious; her respiration was stertorous, and the pulse very frequent, small, and compressible; the pupils were dilated; the head and skin generally were intensely hot; her tongue had been rather severely bitten. I passed the catheter and drew off a moderate amount of urine, which I found afterwards to be albuminous. I ordered ice to be applied to the head, and sinapisms to the calves of the legs and soles of the feet. Within half an hour of my arrival she had another fit, which was characterised by all the markings of true eclampsia. Her husband agreed with me in thinking that venesection was contraindicated. I advised that ten grains of calomel should be placed on the dorsum of the tongue, and that this should be followed up by a scruple of the compound powdered jalap in a couple of hours. An enema containing a half an ounce of oil of turpentine, and an ounce of castor-oil, in a pint of gruel, was also administered. Dr. Greenhalgh kindly met me in consultation in the course of the morning. He approved of the treatment which had been adopted. As the convulsions still continued, however, on an average every hour, it was agreed that six leeches should be applied to each temple. Soon after noon a very prolonged and violent convulsion took place, and between 4 and 5 P.M. two occurred in such rapid succession that scarcely any interval was perceptible. Dr. Greenhalgh then suggested dry cupping at the nape of the neck, and this was followed with the happiest results. The fits ceased entirely, and the patient was soon restored to consciousness. She had in all thirteen convulsions. Her convalescence was most satisfactory; within ten days she was able to sit up and eat a hearty meal.

CASE II.—On the 18th of November, at 10 A.M., I was desired to see Mrs. S., aged 33. She was the patient of a medical man who was unable, from illness, to visit her himself. This was her fifth confinement.