with so greatly enlarged a prostate, that extreme constipation was occasioned by it, and, since he went home to a distant part of the country, I am informed complete obstruction has taken place. The preparation lies before you connected with a curious case, in which, in consequence of gelatinous cancer of the sigmoid flexure, a free communication between the bladder and bowel was established and obstruction occasioned.

Thus, then, it may be said generally that the lesser bowel is most liable to spasm, adhesions and bands, and internal herniary formations, while the great gut is more liable to be obstructed by foreign bodies, feculent accumulations, invagination, stricture, and twists.

As regards age, it may also be considered approximately correct that obstruction arises from invagination most frequently in male children under six months old; from bands and adhesions in young and middle-aged persons, especially in females; from volvulus, foreign bodies, strictures, bands and loops, and internal hernias, in middle-aged men; and from cancer, feculent accumulations, gall-stones, and incarcerated hernia in the old.

[To be continued.]

TWO CASES OF HYDATID TUMOUR OF THE LIVER SUCCESSFULLY TREATED BY ASPIRATION: WITH REMARKS.*

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AT the Norwich meeting of the British Medical Association, I read notes of six cases of hydatid tumour of the liver treated by puncture. Of these six cases, five were cured, and, so far as I can ascertain, remain well up to the present time. These cases are recorded in detail in the second volume of the BRITISH MEDICAL JOURNAL for 1874. Since their publication, two additional instances of this disease have come under my notice, one in private, the other in hospital practice.

CASE I.—The first case is that of a married gentleman (J. I. E.), aged 36, without family, and living in Cambridgeshire, who consulted me last October for intense pain in his right side. He had been ill for a long time, and under treatment for some obscure affection of the liver. When I first saw him, he was suffering from acute pleurisy on the right side; friction-sounds of a very marked character and friction-fremitus being present. The patient's countenance betrayed great suffering. I ordered him to go home to bed at once, and prescribed eight grains of Dover's powder at bedtime, with a saline mixture to be taken the following day. He was enjoined to keep perfectly quiet, and a large linseed-meal poultice was applied to the right side. It is unnecessary to give all the details of the treatment, and it may suffice to say that the pleuritic friction-sounds disappeared in a few days, and the patient was very much relieved. On October 4th, three days after first seeing this gentleman, I elicited the following additional facts with regard to his previous illness. He had been in his usual health (never very good) till June 4th, when he had in the night a severe bilious attack, the vomited matter being slightly streaked with blood. He was attended by his usual medical attendant for congestion of the liver, being confined to bed for two weeks. He was very unwell for some time after this; and on July 17th, at the urgent wish of his friends, consulted a very distinguished physician, who told him he had enlargement of the liver. About a month previous to my seeing him, he had a severe rigor, which was succeeded at intervals by several shivering fits. At times, indeed, he had attacks not unlike those of ague. On September 26th, he had a very severe pain in his side, which continued up to the time of my seeing him on October 1st, 1875.

When the patient was relieved of his intense pain, I made a more careful examination of his chest, and found the percussion-dulness on the right side higher in front than behind. The line of dulness also descended with deep inspiration. Behind, there was not that complete dulness and absence of vocal fremitus which one would have expected in simple pleurisy. The intercostal spaces were completely obliterated. The patient was ordered a drachm of syrup of the iodide of iron twice daily in water. I told the friends I suspected my patient had hydatid tumour of the liver, and that the pleurisy was secondary to this.

On October 6th, I visited my patient again, and had the advantage of a consultation with Mr. Prince of Sawston, a friend of the family.

Mr. Prince coincided in the diagnosis. On this day, I made a note to the effect that the dulness was decidedly higher in front than behind, and that there was good breathing posteriorly almost to the base.

On October 8th, my friend Dr. Banham, at that time house-physician to Addenbrooke's Hospital and now physician to the Sheffield General Infirmary, accompanied me to see my patient. He had seen the cases of hydatids which I brought before the Norwich meeting, and I was anxious to see if he would confirm the diagnosis of Mr. Prince and myself. After making a most careful examination, Dr. Banham thought the case was not one of hydatids of the liver, although there could be no doubt of the liver being enlarged. The girth of the chest on a line with the ensiform cartilage was 34 inches; the right semicircumference being 17½ inches, and the left 16½ inches. The patient felt much better.

On October 9th, the friction-sounds and fremitus returned, and the patient had to resume the linseed poultices, etc. In the course of a few days, the fremitus disappeared, but friction-râles remained audible for a long time. He was, however, sufficiently well to go into Suffolk for three weeks towards the end of October, and was benefited by the change.

On December 30th, he was not so well. For some days he had had a good deal of pain in his right side, and the friction-sounds were still audible. Before puncturing the cyst, I recommended him to have another opinion, and the following day I accompanied him to London to see Sir William Jenner, who regarded the case as one of hydatids of the liver with attendant pleurisy. A distinct "hydatid-fremitus" was now manifest, and Sir W. Jenner recommended the immediate insertion of the needle of an aspirator.

January 2nd, 1876. To-day one of my surgical colleagues at the hospital accompanied me to tap the cyst. After carefully examining the patient, however, he hesitated to use the aspirator—(1) because he was not sure there was a cyst, although he thought he could feel hydatid-fremitus; (2) because, if there were a cyst, it was so near the gall-bladder that it would be dangerous to operate. He also thought the symptoms not sufficiently urgent for operative interference. After this expression of opinion, I at once wrote to Sir W. Jenner, and asked him if, after all, we were both wrong in our diagnosis. He replied as follows.

"Dear Dr. Bradbury,—I cannot see myself why the vicinity of the gall-bladder should be any objection to opening a hydatid cyst; and I can see no injury that could follow the insertion of an aspirator, and I think such insertion ought to be made. I know nothing but a hydatid cyst which could give the fremitus present in this case—a fremitus, be it observed, on percussion, not on auscultation. I should not hesitate to have it punctured were I the patient; and I think, if it be a hydatid cyst, that it is the right thing to puncture it. As to the gall-bladder giving any such fremitus, it is out of the question. I can only repeat that, in my opinion, it is a case in which an aspirator ought to be introduced.—Yours very truly, "W. JENNER."

January 7th. I visited him again with my surgical colleague, who introduced an aspirator and drew off two pints of a clear fluid, which had all the characters of hydatid-fluid. After the operation, the patient went on uniformly well, the temperature and pulse quickly becoming normal. There was no urticaria after the puncture. The patient was at a dance on January 28th, having previously undertaken a long railway journey.

February 28th. He had not been so well for the last fortnight. He had had a bad cold, cough, and considerable pain in the right side, which had been somewhat relieved by poultices, etc. At the end of a deep inspiration, a friction-râle could be heard at the right base in front. There was still tenderness over one point of the liver. He looked worse, and had been sweating again, and not sleeping well.

March 22nd. He still felt very unwell, with pain in both sides, cough, etc. He at times lost his voice, and had shortness of breath. The right side of the chest measured one inch more than the left at the most prominent point. No hydatid fremitus could be detected. Another puncture was recommended.

March 25th. The needle of the aspirator was again introduced at the site of the old puncture, and a pint and a half of a fluid like pus withdrawn. The withdrawal of the fluid gave the patient more pain than on the first occasion. For some days previous to the operation, he had been exceedingly nervous, not sleeping, depressed in spirits, etc. He had diarrhoea (nervous?) on the day of the operation, and could not micturate without discomfort.

March 26th. He passed a restless night; not an hour of sleep. He had gripping pains in the abdomen, sickness, and diarrhoea. Pulse 92. The temperature was not taken till 3.40 P.M. to-day, when it was 101.6 deg. Fahr. He had no cough. The tongue was much coated with white fur. He had no appetite, and was very thirsty. Dr. Burrell

* Read before the combined annual meeting of the South Midland and Cambridgeshire and Huntingdonshire Branches.

of Cambridge, a friend of the patient, who was present at the operation, kindly remained with him, and gave him twenty minims of laudanum with advantage. When I saw him in the afternoon, I gave him ten grains of chloral-hydrate, as I thought the diarrhoea was probably, like the frequent desire to micturate, spasmodic. I also prescribed thirty grains of chloral at bedtime, and hot flannels sprinkled with laudanum to the abdomen.

March 27th. The diarrhoea returned in the evening, but was checked by an injection of starch and laudanum. This also relieved the pain in the abdomen, and the patient slept after it for two hours. At 2 A.M., he had the thirty grains of chloral, and slept after this till nearly 6 A.M. Diarrhoea then returned again, but was checked by fifteen minims of laudanum. When I saw him at 3.30, I found him much more comfortable. He had had a little pain in the abdomen, which had been relieved by linseed-meal poultices. The tongue was cleaner; pulse quiet, 78; temperature 101 deg. Fahr. He was not so thirsty, but slightly flushed. I ordered milk and lime-water, and a bismuth and morphia mixture for the diarrhoea.

March 28th. He had one relapse of diarrhoea last evening, which bismuth mixture soon relieved. He passed a comfortable night without chloral or opiates.

From this time his progress towards recovery was uninterrupted. He was going about again on April 3rd, his temperature and pulse being normal. No increased liver-dulness could now be detected. Dr. Burrell and I again carefully examined this gentleman on May 22nd, and we could detect nothing abnormal about the liver. The patient expressed himself as feeling quite well. On June 9th, the patient wrote to me from Hastings, stating that he was still going on satisfactorily.

CASE II.—H. W., aged 16, an errand boy, living in Cambridge, was admitted into Addenbrooke's Hospital, under my care, April 5th, 1876. The lad had a healthy appearance, and gave the following account of his illness. He came of a healthy family. His own health was quite good up to four years ago, when he was in the hospital for a period of sixteen weeks, under one of my colleagues. His symptoms at that time were slight constipation, nausea, abdominal pain, and the presence of a hard lump at the epigastrium. He got stronger during his stay in the hospital, but did not lose the swelling, which seems to have been present ever since, but has given him no trouble with the exception of a little pain at rare intervals. Two weeks ago, he felt a settled pain and soreness in the centre of the epigastrium, and aching pain across the chest.

A large tumour of the size of a foetal head occupied the right hypochondriac and epigastric regions, and was apparently continuous with the liver. The surface of the tumour was somewhat nodulated. The tumour was very prominent and globular below the right ribs; the left half did not stand out so well, and was rather difficult to define; on it could be felt several small flat elevations, one of which was acutely tender. There was a loss of the elasticity of the ribs over the tumour. The tumour itself felt rather elastic, and moved up and down on breathing. No hydatid fremitus could be detected.

The case was diagnosed by Dr. Humphry and myself as one of hydatid of the liver. Accordingly, on April 9th, Dr. Humphry, at 11 A.M., introduced a needle of the aspirator into the tumour at a spot one inch below the point of the ensiform cartilage and three-fourths of an inch to the right of the middle line. Twenty-two ounces of hydatid fluid containing echinococci were withdrawn.

6 P.M. Immediately after the withdrawal of the fluid, the patient felt easier, and was soon quite comfortable. Pulse 94. Temperature, 99.2 deg. Fahr. Ordered beef-tea and milk.

April 10th. He complained of frontal headache and of being dizzy. He twice vomited a small quantity of thin, yellowish, bilious-looking fluid. He did not sleep much last night. Temperature, 99.8 deg. Fahr. Pulse 98. The bowels acted last night.

From this time, the patient went on satisfactorily in every respect. No urticaria followed the operation.

On April 15th, it was noted that the patient felt quite well.

On May 25th, the patient presented himself at the hospital for careful examination. The lad said he felt perfectly well. There was no pain nor tenderness over the region where the tumour had been; and careful percussion failed to reveal any enlargement of the liver. So far as one could judge, the cure was perfect.

REMARKS.—My remarks on these cases shall be very brief. In Case I, I at first could not make up my mind whether I had to deal with simple pleurisy, or with an enlarged liver complicated with pleurisy. When the pleuritic signs had diminished and the patient could bear a more careful examination, I came to the conclusion that the patient had, in all probability, hydatid tumour of the liver, for the following reasons. 1. The dulness reached further up in the front of

the chest than behind; whereas, in pleuritic effusion, we get usually the very opposite condition. 2. The line of percussion-dulness was depressed on deep inspiration, and moved upwards on expiration, which does not take place in cases of large pleuritic effusion. 3. At the base of the right lung behind, there was not that complete dulness and absence of vocal fremitus which are usually present in simple pleurisy. 4. Although the margin of the liver was not much depressed below the ribs, the latter were pressed against by the liver, and prevented the normal resilience of that part on percussion, which, as Sir W. Jenner remarked to me, was positive evidence of increased pressure in the region of the liver. At first, I could not detect the hydatid fremitus; but, when this became evident, of course all doubts as to the nature of the malady were dispelled from my own mind, as I regard this sign, when present, as quite pathognomonic of hydatids. The absence of jaundice, ascites, etc., and the age of the patient, were against the supposition of cancer of the liver. In previous cases, when I have found the fluid purulent-looking at the second aspiration, I have thought it better to make a large opening with a trocar and insert a drainage-tube. I now prefer to perform successive aspirations rather than convert the hydatid sac into a large abscess, unless serious constitutional symptoms imperatively demand a free opening.

Case II calls for no special remarks.

A STUDY OF TWO ILLUSTRATIVE CASES OF EPILEPSY.

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THE two cases of epilepsy which I venture to relate seem to me to illustrate some points in the nature of this process. I bring them forward chiefly because they present certain divergencies from the ordinary phenomena of epilepsy, and because these very divergencies throw some light, as I believe, on the nature of epilepsy in general.

I presume that all are agreed that, in the epileptic seizure, there is a violent perturbation in some part of the central nervous system, which perturbation often extends widely in that system. It is convenient to call this, with Hughlings Jackson, a discharge by the nervous tissue. The discharge is sudden and usually violent. It is also certain that the central nervous system consists of some parts which are related to the reception of impressions from without, and which may be named sensory parts, and others which are related to the muscular apparatus, and which may be named motor portions. If we cannot divide the whole nervous system into sensory or motor portions, we can at least say that some are motor and some non-motor. We must also believe that there are some parts more intimately related to intellectual processes than others; and this would form a third division, perhaps, overlapping the other two. Recent investigations seem to show that the convolutions on the surface of the brain are divisible in some such way. It seems to be proved that there is a part of the convolutions which may be definitely called motor, and many individual motor centres have been distinguished in this district. The sensory and other centres are not so easy to distinguish; but something has been done even in this direction. It seems probable also, from the results of recent research, that epilepsy usually begins in the discharge of nervous tissue in the convolutions, and the discharge may begin in any one of these presumed districts; and may remain there, though it generally extends beyond. The symptoms, at the commencement of the attack, are of very great importance; because, for one thing, they indicate where the discharge begins, and, besides, the patient can often tell us something about them if they have occurred before consciousness is lost. The symptoms will be different according to the kind of nervous tissue which discharges. If it be motor which first discharges, then spasms or convolutions will be the earliest manifestation. If a sensory part be first affected, then some peculiar feeling, referred to the periphery, such as a sensation of colour, will be the initial symptom. If, on the other hand, a centre related to the intellect be primarily attacked, then some idea or thought will first manifest itself. It is a fact worthy of the most careful attention, that the discharge seems always to begin in the same centre; the initial symptom is, in a given case, nearly always the same. Of course, there are cases where the loss of consciousness is so sudden that the patient is able to tell us nothing about it; but when we get a description from the patient, I believe it is almost invariably found that, in the individual case, the same movement, or feeling, or thought, always begins the attack. As the attack progresses, generally the whole brain is by and by set into a state of commotion; but we can often learn much by the