this left pleural effusion, there was every evidence of pericardial effusion, undulatory impulse, triangular-shaped dullness, the blunt apex of the triangle reaching as high as the second left interspace; the heart's sounds were muffled; there was cessation of friction; the respirations were hurried; the cough hacking; there was no expectoration. She had also an ulcer with a yellowish white floor on her right tonsil, and there was some enlargement and tenderness of the cervical glands at the bifurcation of her right carotid artery. Her temperature attained its maximum on August 24th, when it reached 104.4 deg. Fahr. Her pulse was small and feeble, ranging between 120 and 130. She wandered in her sleep, and her pupils were dilated. By September 17th, the signs of effusion into her pericardium and left pleural cavity were fast disappearing; grating friction could be heard in the left axillary and infrascapular regions, and loud rumbling friction all over the præcordial region. Her general symptoms improved from this time: the bowels were no longer loose; the tongue cleaned and became moist, and she was able to sit up in bed. On November 6th, the temperature was 100.4 deg. Fahr.; it varied from 99 deg. to 100 deg. Fahr. up to her death. She now got pleurisy of the right side.

During the early part of December, oedema of the ankles set in; this extended up her legs, and by the end of the month, there were signs of some fluid in her abdomen. At this period, I found, on examining her chest, the following condition. The heart's apex was nowhere to be seen or felt; the præcordial dullness was pyramidal, commencing above at the second left interspace; it extended on the right side downwards and outwards to within an inch of the right nipple; transversely, it reached from this point to the left nipple. There was no alteration of the area of dullness during a full inspiration. The heart's sounds were of regular rhythm, uncomplicated but extremely feeble; there was no increase in their strength as the stethoscope was carried up the sternum. Her jugular veins, more especially the right, were turgid and pulsated slightly; on pressing one's finger up the vein and making the patient hold her breath, there was no filling of the vein from below; but, on relaxing the pressure and telling her to take a deep inspiration, it became immediately distended. Her pulse was between 120 and 130, remarkably feeble in character; a full inspiration almost completely extinguished it. Her respirations were short and hurried; there was still some dullness in the right mammary and lower part of the axillary and infrascapular regions, with weak respiration and here and there crepitation. The lower border of the liver could be felt two finger-breadths below the right costal margin in the vertical nipple-line. The spleen, as far as could be ascertained by percussion, had resumed its normal size and position.

By January 26th, the ascites had greatly increased in amount; there was no oedema of the head, neck, or chest; the urine became albuminous. On February 27th, paracentesis of the abdomen was performed by Dr. Cameron, the resident medical officer to the dispensary, and eleven quarts of greenish yellow highly albuminous fluid were drawn off. On February 28th, the temperature was 100 deg. Fahr.; pulse 104. She had some tenderness at the seat of puncture. Her appetite was good; she passed more urine, which was no longer albuminous. The fluid rapidly reaccumulated in her abdomen; but she declined any further operation for its relief. On March 23rd, she died.

The appearances found after death were as follows. The pericardium, which was enormously thickened, was firmly attached by tough connective tissue to both lungs, the diaphragm, anterior chest-wall, and lower dorsal vertebræ; it was so closely adherent to the heart as to completely obliterate all trace of pericardial cavity. The heart was a little enlarged; the left cavities and valves were normal; the right ventricle was somewhat dilated, and the tricuspid orifice more patulous than usual; the muscular substance of the heart was palish in colour, but it was not examined microscopically. There was apparently no diminution in the lumen of any of the large vessels. Both lungs, besides being tightly attached to the pericardium, were more or less adherent by their lower lobes to the chest-walls; there was some fluid in the right pleural cavity. Both lower lobes of the lungs were somewhat congested and oedematous. I could find no trace of tubercle anywhere. The peritoneal cavity contained several quarts of greenish yellow serum. The omentum was studded with miliary tubercle; the liver was enlarged, and presented a nutmeg appearance upon section; the spleen was of natural size; its capsule was thickened. The kidneys were healthy. The other organs were not examined.

This case, both in its clinical features and in the appearances disclosed on dissection, tallies exactly with the description given by Bauer. In all these cases, the physical signs have been increased area of cardiac dullness, indistinct apex-beat, muffled heart-sounds, a small feeble pulse, weakened, and, in some cases, completely extinguished by a full inspiration—the "paradoxical pulse". I may remark that diminution, amounting in some cases to complete extinction, of the radial pulse

was pointed out by Dr. C. J. B. Williams, in the *London Journal of Medicine* for April 1850, as present in advanced stages of pericarditis and adhesion of the pericardium. Lastly, and what may be considered perhaps the pathognomonic sign of all, there was swelling of the cervical veins during a full inspiration.

CASE OF HYDATID TUMOUR OF THE LEFT KIDNEY SUCCESSFULLY TREATED BY ASPIRATION.*

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CASES of hydatid tumour of the kidneys are of such rare occurrence, and their diagnosis and treatment are often attended with so much difficulty, that the following case appears worthy of being brought before the Medical Section of this Association.

Henry Whitbread, aged 8, living at Gamlingay, in Cambridgeshire, was admitted into Addenbrooke's Hospital, on July 5th, 1876, under my care. He was a sharp intelligent looking boy, and rather thin. His only complaint was of an enlarged abdomen. A large tense elastic swelling occupied almost the whole of the left half of the abdomen, which was absolutely dull on percussion. No distinct edges could be felt to the tumour, which was not, however, perfectly smooth and regular, since two slight localised swellings were found on its anterior surface. Superiorly, the percussion-dullness reached to within one inch and a half of the nipple in the nipple-line, and, tracing it to the right, it became separated from the liver-dullness (right lobe) by a band of well marked resonance. It then passed down, about one inch and a half to two inches to the right of the mesial line, and lost itself below in the dullness of the (full) bladder. On tracing it to the left, the dullness reached as high as the seventh rib in the axillary line, but at this level it did not quite extend to the spine. The whole of the left hypochondrium was filled with the tumour, and there was complete dullness down to Poupart's ligament. The percussion was tympanitic over the rest of the abdomen not occupied by the tumour. At the upper part of the tumour, the "repercussion thrill" could be obtained.

The heart's apex beat immediately beneath the nipple, just under the fourth rib. The heart- and lung-sounds and the urine were normal. The liver was also normal. On July 6th, I introduced the needle of an aspirator into the tumour, and drew off forty-four ounces of hydatid fluid. No hooklets were found in the fluid. After the operation, the boy vomited several times, his pulse became quick (140 to 150), and the following day he had an eruption of urticaria, which lasted till July 8th. The temperature on July 7th was 102.4 deg. Fahr., but at no time did it exceed this point. On July 10th, the boy was progressing favourably; there was no tenderness over the tumour, but the urine was found to contain albumen, due to the presence of pus.

July 13th. The descending colon was found to be displaced towards the right side, and to run obliquely from the neighbourhood of the xiphoid cartilage to the left iliac fossa.

July 15th. The urine still contained pus. The abdomen was enlarging again. When the boy was made to sit up in bed, he complained of pain in the loins, and four of the lumbar spines were found to be prominent, and the skin over them reddened. They were very painful on pressure. The pain in the back continuing, it was decided to aspirate the tumour again on July 16th, and this was done by Dr. Humphry under the influence of chloroform. Thirty-one ounces and a half of a greenish opalescent fluid were withdrawn, which, in the latter stage of the operation, was flaky and apparently purulent. After standing, the fluid deposited two ounces of pus. Under the microscope, pus-cells and the heads of numerous echinococci armed with hooklets were detected. He vomited again several times after the operation, but no urticaria followed the second puncture, as is invariably the case so far as my experience goes. There was a slight fall of temperature after the second aspiration, which was permanent, the temperature only on one occasion exceeding 100 deg. Fahr.

On July 25th and 26th, small cysts with hooklets were found in the urinary sediment. From this time, the patient became gradually better. The pain in the loins and tenderness over the vertebræ became less and less, and the urine deposited less pus. The descending colon also assumed its normal position. On several occasions, echinococci were found in the pus, and also a few hyaline casts. The boy was made an

* Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

out-patient on November 4th, and was kept under observation for some months. When last seen, he was quite well, the abdomen being perfectly normal and the urine free from either pus or albumen. For some months, he took Parrish's chemical food and cod-liver oil.

REMARKS.—Hydatid disease is not uncommon in Cambridgeshire, probably owing to the quantity of surface-water drunk, in which sheep-dogs have deposited the ova of the *tania echinococcus*. During the last few years, I have seen ten or twelve cases of hydatids of the liver, and I have noticed that, when cases have occurred elsewhere, many of the patients have at some time resided in Cambridgeshire. The case I have related is the only one of hydatid of the kidney which I have seen, and is interesting in several points. In the first place, the colon did not run in front of the kidney, but was pushed to the right, thus rendering the diagnosis more difficult. As no sharp edges and no notch could be felt in the tumour, but perfect roundness everywhere, it was concluded that the organ implicated must be the kidney. Secondly, the enlargement was thought to be due either to hydatids or to hydronephrosis, and the hydatid fremitus conclusively proved that it must be the former. Thirdly, a curious feature in the case was the appearance of pus in the urine after the first aspiration, thus showing that the cyst had effected a communication with the urinary passages, most probably the pelvis of the kidney. This was a fortunate event in the case, and contributed in no small measure to the ultimate favourable result. The swelling and great tenderness over the lumbar vertebrae made me at one time feel rather apprehensive of serious mischief; but, after the second aspiration, these gradually subsided. So far as I know, this is the only case in which a hydatid tumour of the kidney has been aspirated. I think I was justified in performing the operation, as the tumour was rapidly increasing, and might have burst into the lungs or elsewhere if it had not established a communication with the pelvis of the kidney. There being no colon in front of the tumour rendered the operation less dangerous.

EXCESSIVE CAUTERISATION OF THE CERVIX UTERI AS A CAUSE OF PAINFUL CICATRICES, ATRESIA, AND LOSS OF SEXUAL DESIRE.

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THE occurrence of several cases in my practice has drawn my attention to these subjects, and induced me to make the following observations.

Now-a-days, the speculum vaginae is used more frequently by specialists and general practitioners than twenty or thirty years ago, and the public have so overcome their objections to it, that there is reason to fear that its use may degenerate into routine, with consequences so injurious that the instrument may be brought into disrepute. This would be a misfortune for the patient, and a crippling of the resources of the practitioner. Nevertheless, if, as a matter of routine, it be passed once or twice a week for months or years, for the purpose of cauterising "an ulcer of the womb", this danger is apt to arise. I know not whether this practice arises from the fact that students are not taught gynaecology, and hence become practitioners with this branch of their art still to learn, or from a want of due consideration of the circumstances which surround this special branch; but whichever it may be, I feel sure that, to obviate all this, the licensing bodies ought to extend the term of study and increase the number of lectures, in order to promote the knowledge of obstetric medicine and surgery.

Excessive and Prolonged Cauterisation.—What are the immediate pathological results of weekly or bi-weekly application of the nitrate of silver, which is the agent in most favour with practitioners, to the os tincæ? Inflammation and ulceration, lit up again and again by each application, followed in some instances by atrophy, and in others by hypertrophy of the cervix, with hard painful cicatrices and more or less contraction of the tissues and closure of the os, or even complete obliteration; endocervicitis and endometritis, the mucous lining of the cervical canal being more or less destroyed, and an ulcerated irregular surface remaining instead. Secondary functional derangements of the uterus follow, manifested first by dysmenorrhœa of a metrorrhagic character; and as the obstruction increases, regurgitation of the menstrual fluid takes place through the Fallopian tubes, setting up ovarian, perimetritic, and general pelvic inflammations, with all their subsequent miseries.

The portio vaginalis uteri in some cases is so destroyed by caustics, that a hard depressed cicatrix alone remains of it, and this is generally painful to the touch; the os is small, but not sufficiently so to account for the severe dysmenorrhœa, which I have heard described by in-

telligent patients as "awful agony which sent them delirious". In such cases, the mucous membrane of the cervical canal is disorganised, and covered with uneven granulations which bleed on the most gentle touch of the sound, and are so acutely sensitive that I have frequently found it necessary to give chloroform before it was possible to examine the condition of the uterus. In a case under my care lately, the canal was tortuous from these excessively sensitive granulations; yet, on passing the speculum, the mucous membrane of the cervix seemed free from all inflammatory irritation, and it was only by a minute examination of the canal of the cervix that it was seen to be denuded of healthy membrane, while a careful digital examination revealed to the touch irregularities marking the different cicatrices. Sexual intercourse could not be tolerated; uterine pain was ever present; and although she had been cauterised externally and internally by various practitioners during a period of several years, no relief was obtained. The cicatrices were clearly seen with the aid of the duck-bill speculum. This uterus had never been impregnated, yet it measured fully two and a half inches, although its vaginal portion had been destroyed to more than half its extent. Relatively, it was enlarged from menstrual obstruction. Free division of the cervix cured this case.

Painful cicatrices are also frequently seen upon a hypertrophied cervix, accompanied by the same pathological degeneration of the mucous lining of the canal as in cases of atrophy, and they may exist where the conditions are apparently normal. Such cases as the latter are the opprobria of gynaecologists. They go the round from one practitioner to another, unrelieved and ever complaining. I saw some time ago a patient of this sort, who had been almost everywhere, and had suffered everything to be done which had been recommended for her case, yet the uterine aching pain remained as before. The hard and nodulated cervix was painful to the touch, although its mucous covering was smooth. The sound passed with difficulty on account of the tortuous cervical canal; and, although no force was used, free bleeding followed. With the speculum, the os was seen to be small, puckered cicatricial lines radiated from it, and the canal was denuded of its membrane and ulcerated. Although married twelve years, this patient had never been pregnant, and was in other respects healthy. Under various practitioners, she had been submitted to various forms of treatment, but without any abatement of the dysmenorrhœa, metrorrhagia, and leucorrhœa. The canal of the cervix was freely laid open with the uterotomy, and the painful cicatrices removed by excision. She recovered rapidly, and it may be remarked that, as is usual in these cases, the cervix healed in a month without any caustic application whatever; carbolicised water and simple astringent injections used daily being all that the case required. Of course, it was necessary to prevent closure of the os during the healing process by the occasional passage of the sound. This was the first case in which I performed this operation for painful cicatrices; and, as I had the opportunity of watching this patient for six years afterwards, it is interesting to state that she had no return of her uterine disease.

These two cases illustrate the methods of treatment by incision of the canal and removal of the painful cicatrices, where uterotomy fails, or where it may be thought not likely to be sufficient, as in hypertrophy, which I have practised for nearly ten years with almost invariably success, and it has been equally successful in the hands of my friend Dr. Steele, who was induced by me to try it. Some years ago, at a meeting of the Lancashire and Cheshire Branch of the British Medical Association, he read a paper upon this subject, in which he detailed the results of several successful cases.

Another unfortunate condition arising from the application of caustics to the cervix uteri occasionally met with is—

Loss of Sexual Desire, which may be partial or complete.—On several occasions, I have been consulted by patients for this condition, in which sexual connection was only tolerated, and where there was no sexual orgasm whatever. The fear was, lest any unhappy family troubles should arise by discovery on the part of the husband. An inquiry into the causation of these cases has invariably elicited a history of frequent cauterisation, followed by loss of special sensation. Having had my attention thus accidentally drawn to this subject, I availed myself of every opportunity of inquiry which presented itself to me; and now, from having observed a number of cases, one of complete and permanent loss of sensation, one of complete loss remaining for two months, after which the normal condition returned, and several others where the loss was more temporary after each caustic application to the uterus, but still so marked as to be noticed by the patient, I am convinced it is associated with peripheral lesion of the nerves of the mucous membrane of the cervix, cicatrices producing permanent compression and loss of function, and probably with changes in the nerve-centres from sympathetic irritation.

Atresia Uteri may occur at any stage of the caustic treatment. Three