

mixture of cinchona and ammonia, an ounce to be taken three times a day; carbolic acid lotion (1 to 60) to be used as an injection every four hours. To have a diet of mutton, strong beef-tea, and milk, and half a point of porter daily.

Feb. 14th: Patient much the same. Discharge very profuse. Complaints of much pain. Ordered half a grain of opium pill three times a day. Only one slight occasional hæmorrhage. Temperature ranges between 99.2° and 101.8°.—19th: Same condition. Mixed with the discharge have been a few walnut-sized irregular masses of white fibrinous-looking material (she passed one or two of these before her admission). One of these was examined under the microscope and was found to be identical in appearance to the fibroid tumour, only that no bloodvessels could be detected in it. As she complained of feeling sick, she was ordered a mixture containing bismuth and soda.—23rd: Sickness gone. Still passes flocculent masses about every other day. Size and external outline of uterus remain about the same; discharge still very fetid. Ordered half a drachm of iodoform and glycerine to be used with the injection. Temperature on two mornings below 99°, at night between 100° and 102°.

March 2nd: Irrigated uterus by means of uterine douche, iodoform being used in the injection; douche used for the next two days.—5th: The following was noted to-day: Sound only goes in for about three inches and a half; fundus uteri two fingers' breadth below umbilicus; not half so much discharge, and not so fetid.—8th: Discharge still further lessened in quantity. Ordered some ergot and nuxvomica.—11th: Discharge odourless. The uterine douche, which had been used every other day, was now discontinued on account of difficulty of introduction. During the last seven days one or two fibrinous masses have been expelled. Temperature normal in the morning, and only occasionally rising at night.—25th: Got up to-day. Regaining colour. Still a slight inodorous leucorrhœa. Ordered some steel.—29th: Catamenia commenced, ushered in with characteristic and normal prodromata. This discharge was lighter than usual, and continued always very moderate in amount for five days.

April 8th.—Getting fat. Walks in the garden daily. Uterus normal. Ordered some tincture of steel and nuxvomica.—12th: Went out to-day well.

July 18th.—Has been seen several times since her discharge. Has had her usual monthly periods with only an average loss. Has gained flesh, looks well, and has regained her natural colour.

A CASE OF

EMPHYEMA WITH CEREBRAL ABSCESS.¹

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THE subject of the following communication was a young man aged twenty, who came under my care in the Middlesex Hospital on Dec. 17th, 1884. On admission his temperature was 99.6° F.; pulse 80, of good force, and regular; respiration 24; tongue clean and moist. He was described as fairly well nourished, but rather anæmic, with clubbed finger-ends, and complained of a discharge from an opening in the left side. On examination of the chest the left side was markedly retracted, and did not move in respiration; the right front moved more freely than normal. Resonance and breath-sounds over the right front were excessive. As regards the left front, the resonance was marked as far down as the third rib and as far out as an inch and a half beyond the vertical nipple-line. Past these limits resonance was rather abruptly replaced by absolute dullness, which extended right round to the back. Over this dull area the breath-sounds and tactile fremitus were wanting, while both, together with vocal resonance, were rather exaggerated over the resonant area above the nipple. There was a small opening discharging pinkish-coloured pus in the fourth interspace of the left front in the parasternal line. The discharge was small in quantity and not offensive. Turning to the back, there was impaired resonance on the left side from the spine of the scapula

downwards, and the breath-sounds were wanting, except towards the spine, where they could be faintly heard. Over the right back the breathing was harsh; there were no adventitious sounds to be heard anywhere. The heart's maximum impulse was apparent in the third interspace immediately to the right of the sternum. The first sound was accompanied by a blowing murmur in this situation, the second sound was clear and sharp. The patient had no cough and no sweating at night. The urine had a specific gravity of 1015, was faintly acid, and contained no albumen or sugar. The family history was quite satisfactory, and he had enjoyed fairly good health up to the present illness, which began in an attack of pleurisy in July, 1883, about eighteen months before his coming under observation. He had been tapped three times at weekly intervals, and after the lapse of a month his side was incised and irrigated daily. Under this treatment the discharge had gradually diminished and he was sent to the seaside as cured; but it had become more profuse again, and had continued so for a year or more, being variable in quantity but showing no tendency to dry up. It should be noted that before being incised the empyema had pointed, and the skin over it was, as he described it, "as thin as paper." There was nothing abnormal in the abdomen.

As it was quite obvious that the only chance of curing the empyema lay in establishing a free exit for the pus and endeavouring to get the side to contract, so as to abolish the abscess cavity, he was taken into the operating theatre five days after admission (Dec. 22nd), and had a free opening in the chest made, at my request, by Mr. Gould, who removed a piece of the fourth and fifth ribs at the seat of the discharging sinus. An abundant escape of rather fetid pus took place; a large drainage-tube was inserted and the usual dressings applied after the pleural cavity had been irrigated with a warm solution of permanganate of potash. This irrigation was continued daily, and he went on perfectly well for a time, the quantity of discharge gradually diminishing. He had a good appetite, slept well, and had no rise of temperature or other untoward symptom. On Dec. 30th, however, eight days after the operation, he was seized at three o'clock in the afternoon with a convulsion of an epileptiform character, which lasted with more or less severity for about fifteen minutes. The fit was repeated six times within the next twenty-four hours. I did not see him in any of the attacks, but the following was the description of them given to me by those who did. The first thing observed was clenching of the teeth and spasm of the muscles of the neck, and this was followed by rigidity of the muscles of the trunk and extremities, the legs being extended and the arms flexed. His head was turned to the right, to which side the eyes also deviated, and there was twitching of the lips and eyebrows; the face became cyanosed, and he bit his tongue. When the spasm passed off, the patient lay in an almost collapsed state, with slow stertorous breathing. During the attack the pupils were contracted, but dilated afterwards, and were inactive to the stimulus of light. The urine was passed incontinently. All the other fits were stated to be similar to the above, only lasting longer. He was very drowsy and stupid between the fits, and after they passed off he complained of headache. When these attacks finally passed away, it was noticed (Jan. 2nd) that the tongue was protruded to the left and the face drawn to the right, and that he complained of shakiness of the left arm, in which there was considerable loss of power, the grasp of the left hand being also very feeble. Otherwise, on this day he was improved; the pupils were equal and active; he had slept well, and taken his food well; there was very little discharge from the wound, which looked healthy. He was brighter as to his mental condition. On ophthalmoscopic examination the optic discs appeared quite normal. I should have stated that the irrigation of the pleura had been discontinued on the first appearance of the convulsive attacks.

I need not take up time by tracing his condition from day to day. It will be sufficient to say that the face remained paralysed, the paralysis of the arm increased (particularly as regards the muscles of the forearm), and was followed in four days by progressively deepening paralysis of the left leg. With all this the pulse was slow, about 60; frontal headache was complained of, and the temperature was rather subnormal. On January 9th he had an attack of vomiting, and he was noted to be becoming duller in intelligence; he could not be made to understand or answer questions. On this day also another ophthalmoscopic

¹ Read at the meeting of the Medical Society of London, Feb. 8th.

examination was made, but nothing abnormal discovered. From this point onwards his stupor gradually deepened; he had a slight return of the vomiting, became profoundly comatose, and died quietly on January 13th, at 12.45 A.M.

The necropsy was made by Dr. Fowler, sixteen hours after death, and the following was the condition of things:—There was the opening of a sinus in the fourth left interspace in the mammary line, admitting the little finger, and leading to the sac of an empyema, which

FIG. 1.



Lateral view, showing seat of abscess.

occupied the lateral and posterior aspects of the left side of the chest. The side was much contracted, the lower intercostal spaces being almost obliterated by the coming together of the ribs. The pleural layers were converted into dense fibrous walls nearly half an inch thick, enclosing a space about seven inches and a half in vertical measurement, lined by a soft and highly vascular membrane. This contained scarcely any pus, but on pressure of the chest-wall

FIG. 2.



Vertical section from upper part of fissure of Rolando to optic commissure, showing seat of abscess.

above the external opening, about half an ounce of pus oozed out. This was found to come from an abscess sac situated over the third interspace. As for the lung itself, both lobes were collapsed posteriorly, but the anterior part of the upper lobe was crepitant. The right lung was crepitant throughout, but presented some adhesions posteriorly, and slight oedema of the base. The heart was found displaced to the right; the pericardium was normal; the heart's valves were also normal in appearance and competent; the muscular substance was rather soft. There was nothing noteworthy found in the abdomen. The right side of the brain on removal of the membranes was seen to be much enlarged, bulging towards the left, with much flattening of the convolutions of the surface. (Fig. 1.) There was no meningitis. After being hardened in spirit, the brain was divided by vertical sections, one of which is shown in diagrammatic form in Fig. 2. The abscess was found to begin at the middle of the anterior border of the ascending frontal convolution immediately beneath the grey matter, extending backwards in the centrum ovale underneath the fissure of Rolando into, but not beyond, the ascending parietal convolution. It was nearest to the surface just in front of the fissure of Rolando, where it encroaches upon the grey matter. The abscess cavity was widest from side to side immediately beneath that

fissure, where in the hardened brain it measures two inches, extending inwards to a point just above the lateral ventricle, and about a quarter of an inch from the caudate nucleus. The whole brain measured seven inches and a quarter in length, the length of the abscess being three inches. The abscess had no limiting wall or lining membrane, the cavity presenting a rough and ragged surface.

Regarding the empyema little need be said, the chief interest of the case centring in the cerebral abscess. Nevertheless, I may briefly refer to one or two points.

Irrigation of the pleural cavity has been followed in a number of cases by attacks of an epileptiform character, and speedy death. I can recall very vividly a case of this kind, which occurred in the Middlesex Hospital ten years ago, and which is recorded by Dr. Cayley in the tenth volume of the Clinical Society's Transactions. In such cases, however, the attacks have come on when the pleura was actually being irrigated or injected, and no lesion has been found in the brain after death. In the present case the fit did not occur till about three hours after the irrigation of the pleura; and although, as a precautionary measure, I ordered the discontinuance of the irrigation, I cannot say that I look upon the relation of the two things to each other in the light of cause and effect. At the same time it is conceivable that they might have such a relation, the manipulations necessary during the irrigation possibly loosening a thrombus, which a subsequent movement or coughing on the part of the patient finally detached. And I think it is quite worth while considering whether the washing out of the pleura, except in special cases—those, for example, in which the pus is very fetid—is worth the risk run. I think that if a free exit is provided for the pus, the washing out in the general run of cases is not necessary, and may be mischievous. Towards securing this free exit, I should say that there are few cases in which the removal of a portion of rib can be advantageously dispensed with; and if this course were followed early in cases of empyema, I believe that the results generally would be more satisfactory.

As to the ultimate cure of the empyema in the present case, had the complication of cerebral abscess not cut short the patient's life, the abscess cavity in the pleura was so large, and the bony case enclosing it on one side so absolutely unyielding from the contact of the ribs and thickening of the pleura, that nothing but a very free removal of ribs, and probably not even that, would have availed to produce obliteration of the sac, for it must be remembered that but little help would have come from the collapsed lung. If, however, more than a year had not been practically lost in the effective treatment of the case, I cannot help thinking that the result might have been widely different.

So much for the empyemal side of the case. As regards the brain when the epileptiform attacks occurred, followed by left hemiplegia, it was not difficult, having regard to the empyema, to read aright the cerebral symptoms—there was little doubt that an abscess had formed in the right side of the brain. On the subject of cerebral abscess little, if anything, has been added to our knowledge since the publication of the article by Gull and Sutton in "Reynolds's System of Medicine;" and the present case is chiefly interesting in that it exemplifies one of the rarer conditions under which the disease occurs. Of seventy-six cases tabulated in the article referred to (and this appears a fair number on which to establish a rule of proportion), three only were consequent upon empyema. As to symptoms in the present case, the chief in diagnostic importance, after the convulsions and consequent hemiplegia, was pain in the head, referred mostly to the frontal region; but it was seldom very marked, giving the impression rather of a dull aching than positive pain. Vomiting was present only to a very trifling extent. There was no rigor, and the temperature was almost always subnormal, exceeding 100° F. on one occasion only. This point, the absence of pyrexia in cerebral abscess, has, I think, been noticed by several recent observers.

Regarding etiology, the abscess must be supposed to have owed its origin to some minute coagulum carrying septic infection from the suppurating focus in the chest, or from the divided rib ends. This, of course, is in general only a matter of reasonable inference; but the missing link has in one case been supplied by Boettcher, who is said to have found lung pigment in the cavity of a cerebral abscess, which followed abscess in the lung. But we do not thus

get rid of all difficulty; for to infect the brain the septic material must first have been carried to the right side of the heart, sent through the lungs, returned to the heart, and then propelled to the brain.¹ But how did it pass through the lungs without leaving pyæmic abscesses there to attest the route of its progress? We know that in ordinary cases of pyæmia the lungs are prone to be the seat of metastatic abscesses. Why should they escape in such cases as this? Is it because particles not fine enough to escape arrest in the brain are yet able to pass through without lodging in the lungs, or because cerebral tissue is in some cases more apt to take on inflammatory action? If the latter, it may be that the long-continued suppuration of the empyema may induce a more than ordinary liability to suppuration in the brain. But these are matters of speculation.

Finally, as to treatment. I need hardly say that the question of surgical interference was discussed more than once. One thing in its favour was that there was little difficulty in saying where the seat of the abscess would be found. The symptoms noted during life pointed to the neighbourhood of the fissure of Rolando. But there were other points to be taken into consideration. First, the contents of the abscess might not have been so liquid as to have been readily removed when found, resembling, perhaps, more a diffused softening than completely formed pus. Secondly, the progress and extent of the paralytic symptoms led to the belief that a large area of brain was involved, to which probably permanent damage had been done, and even if the dangers of the operation itself had been safely surmounted, the ultimate prospects were not encouraging. Notwithstanding these considerations, however, I regret that the evacuation of the abscess was not attempted, although, perhaps, the result would have been of more advantage to medicine than to the patient himself.

DRY DRESSINGS FOR INTERNAL CAVITIES.²

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DRY dressings being now all the fashion, and to my mind most justly so, I wish to draw the attention of the profession to a very simple method of applying, in the dry state, dressings, styptics, &c., to such cavities as the vagina, uterus, and rectum.

The only apparatus required is a hollow cacao-butter suppository, which suppositories are made in various sizes, the largest of which will just about hold one drachm of any ordinary powder. These hollow suppositories are filled with the powder that may be wished to be used as a dressing; the small lid, after being gently heated, is put on; this when cool remains fixed, and the whole apparatus is then ready to be introduced into the vagina or rectum. The heat of the body soon melts the cacao butter, and the powder is then brought, in as dry a state as possible, into direct contact with the parts. During the last six months I have used these suppositories most freely, and have been more than satisfied with the result. I have tried all sorts of powders, and as the result of my own experience strongly recommend the following, either alone or in various combinations as required.

Firstly, as a styptic I most strongly recommend powdered iron-alum. I generally order one drachm of powdered iron-alum and five grains of iodoform, to be well mixed together, the powder to be inserted into a hollow suppository and used as directed. In the treatment of uterine hæmorrhage I am convinced there is no remedy of more universal application, and none on which I could with greater confidence rely. I have used it in severe hæmorrhage from uterine fibroid, from uterine polypus, from uterine cancer, bad miscarriage, and in several cases of menorrhagia at the change of life, and it has never yet failed me. All that is required is to introduce the suppository as high as possible into the vagina, and there leave it. It is as easily applied by the nurse as by the doctor, and is in every way perfectly safe and harmless.

¹ There is always, of course, the alternative previously referred to and preferred by Dr. Broadbent, of thrombus by the direct route of the pulmonary vein; but this would not cover the case of the divided rib-ends.

² Read before the Leeds and West Riding Medico-Chirurgical Society.

Secondly, as a dressing iodoform stands pre-eminent; in fact, I now seldom use anything else. This, when combined with from a quarter to half a grain of morphia, forms by far the best dressing for uterine cancer that I have yet tried.

Thirdly, morphia, either alone, or, as I generally now use it, in combination with either or both of the above, is a great aid to the physician and comfort to the patient.

After attention has once been drawn to this simple mode of applying these various applications, the numerous uses to which they might be put in the various vaginal, uterine, and rectal discharges and diseases will occur to all. I have only very briefly ventured to suggest the use of those which in my own hands I have found deserving of confidence. I have no doubt that hundreds of the profession are at present using this mode of dressing; but, on the other hand, I know that there are hundreds who are not, and it is to persuade those who have not yet tried them that I venture to bring this subject forward.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procmium.

CHARING-CROSS HOSPITAL.

TRANSVERSE FRACTURE OF THE LEFT PATELLA; OPERATION; CURE.

(Under the care of Mr. J. ASTLEY BLOXAM.)

THE question as to the best treatment in cases of fracture of the patella is one which still occupies the attention of practical surgeons: whether to treat the fracture by means of splints, strapping, Malgaigne's hooks, or other apparatus, or to operate, as in this case, sewing the fragments together, using strict antiseptic precautions and drainage. Could the element of danger which follows a compound fracture in which the knee-joint is opened, even under such precautions, be eliminated, as it has not yet fully been, no doubt in healthy subjects this cause of immediate operation would be generally accepted. This patient recovered, with a limb the utility of which is hardly impaired, and the success obtained with close union of the fragments is much better than after the employment of the apparatus in ordinary use, excepting in a few isolated instances.

Walter T—, aged twenty-five, a carpenter, was unloading a van on July 19th, and on getting down he caught his heel between two pieces of wood and was thrown off the cart on to an iron grating in the roadway. He distinctly remembers hearing something snap, and on trying to rise was unable to do so. He was brought to the hospital and found to have fractured his left patella transversely. On admission a back splint was applied, the leg bandaged, and the patient put to bed, an ice-bag being kept applied to the joint, which felt hot, and was somewhat swollen and tender.

July 24th.—This afternoon Mr. Bloxam made an incision two inches and a half in length immediately over the patella, opening up the bursa and clearing out the blood and clots. He then separated the anterior surface of the patella from the aponeurotic tissue, and a hole was then drilled through the upper fragment obliquely from above downwards, and a similar one in the lower fragment in the opposite direction. A piece of stout silver wire was then passed through the holes and tightened, and the edges of the fractured patella brought into close apposition. A counter-opening was made to the outer side of the knee-joint, and a drainage-tube inserted. The edges of the incision were then stitched together with silver wire sutures, another drainage-tube being inserted. The whole operation was performed antiseptically, and the limb placed on a long back splint and slung.

25th.—Patient passed a restless night, and was given a one-grain opium pill at 8 P.M. and again at 12. He has no pain in the knee. Temperature 100° 8'.