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[NEW SERIES.]

Illustrations OF HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

KING'S COLLEGE HOSPITAL.

NECROSIS OF THE UPPER PART OF THE FEMUR AND PELVIS.

Under the care of W. BOWMAN, Esq.

[From Notes by J. WALTERS, Esq., House-Surgeon.]

THE following case is one of considerable interest, from the unusual situation of the necrosed bone, and from the slight symptoms which accompanied so extensive a disease in the immediate neighbourhood of the largest joint in the body, as well as from the success which attended a comparatively slight operation. The latter circumstance shows forcibly the importance of a careful examination of the part, under chloroform, whenever anomalous symptoms or appearances in the neighbourhood of important parts present themselves. The cases are almost innumerable which are sent into London hospitals, either from the country or from metropolitan districts, where a disease has been allowed to progress for a considerable time for want of very slight surgical treatment, and the patient exposed to all the expense and trouble of a removal; and all because no opportunity has occurred for such a thorough and uninterrupted examination as can only be obtained in a state of insensibility. It ought to be more generally known (or more generally believed) that the administration of the quantity of chloroform necessary for this purpose is, when properly conducted, a matter of no danger; and often clears up in five minutes points which months of the most careful and intelligent clinical observation leave doubtful.

W. W., aged 14, living in Bucks, was admitted into King's College Hospital, under the care of Mr. Bowman, in June 1858. About four years ago, some of his fellow-workmen, fancying he was a spy on them, "paid him out" by stretching him, a man taking hold of each extremity; and, in doing this, they injured his left thigh. The boy kept his bed for a few days, and had never been able to walk since without the aid of a stick. In January last, an abscess formed over the left hip, and burst: this kept him in bed until a few weeks before admission, when he began to hobble about on crutches.

On admission, the left leg appeared much shorter than its fellow; but, on measuring, no difference was discovered between them, the apparent shortening being due to obliquity of the pelvis. As he lay in bed, the left thigh was slightly drawn inwards towards that of the opposite side; when in the erect posture, the limb was somewhat everted.

There were three discharging orifices, one of which had existed for a week only; they were situated on the outer part of the thigh, about four inches below the great trochanter, and on a level somewhat anterior to it. They discharged very slightly. The parts around were swollen, but were not painful on pressure. There were occasional pricking pains running up the sinuses. There was slight motion between the head of the bone and the pelvis; but, on flexing the thigh on the belly, the pelvis rolled with it. His general health was good; but he said that of late he had lost flesh, although he was still very stout.

June 14th. Mr. Bowman (when the boy was insensible by chloroform) found that a probe passed through either of the

orifices into a sinus, which ran upwards to the outside of the great trochanter, and there came upon a considerable surface of bare bone. The orifices were laid into one opening; some small pieces of bone were found loose in the sinus; but the finger was prevented from reaching the cavity over the trochanter major by a firm constriction.

The wound was kept open; but, no bone working its way out, Mr. Bowman determined to remove it by an operation.

July 10th. The patient was taken into the theatre, and made insensible by chloroform. Mr. Bowman passed a probe from the wound about six inches upwards to the front of the great trochanter, and made an incision over it about three inches long, in a vertical direction. The finger then passed into a larger cavity above and in front of the great trochanter, in which several loose fragments of bone were lying; these fragments were somewhat rounded, and consisted of cancellated bone-tissue, in size varying from a marble to a pea: these were readily taken out; and then the cavity was found to be in front of the acetabulum, the anterior lip of which was probably destroyed and the joint exposed; but this could not be positively stated from the alteration in the parts. The surface of the pelvis about the anterior inferior spinous process of the ilium, and the horizontal ramus of the pubes, was extensively laid bare, and had lost its characteristic shape, probably by the separation of some loose bone. The cavity did not extend either towards the dorsum ili or the sciatic notch.

Mr. Bowman thought that the disease, in all probability, had commenced in the joint, and had extended to the front of the pelvis and trochanter major. A certain degree of motion was found to exist between the head of the bone and the bed in which it rested.

The operation was followed by little or no constitutional disturbance; and, on July 19th, it is noted that he can bear the thigh to be flexed without the slightest pain; but this is accomplished with very little motion in the hip: also, on sitting up in bed, the pelvis remains almost stationary; and this change of position depends upon the great mobility that exists in the lumbar portion of the vertebral column.

His general health improved much, and the wound healed. On July 25th, when he was discharged from the Hospital, he could walk about very well with a stick.

ST. MARY'S HOSPITAL.

CROUP: TRACHEOTOMY.

By W. H. BROADBENT, M.B., Resident Obstetric Officer.

THE following case of croup, in which the operation of tracheotomy was performed on a child ten months old, the child dying thirty-three hours after the operation, presents some points of interest.

On Monday, December 20th, 1858, a child, just ten months old, strong and stout in appearance, was brought to me at St. Mary's Hospital, exhibiting all the symptoms of advanced croup. The mother had first noticed that the child appeared ill on the previous Saturday (the 18th), but had imagined it to be suffering from a mere temporary ailment incident on teething. It had become rapidly worse through Sunday, and when I first saw it, about 11:30 A.M., on Monday, the child was struggling for breath, each inspiration being attended by the characteristic sound of croup, while the drawing in of the lower ribs, and projection forwards of the sternum, showed the difficulty with which air was drawn into the chest. No diphtheritic exudation was to be seen in the mouth or fauces. I judged from the degree of dyspnoea, and from the sounds in breathing and coughing, that the disease had already advanced far into the second stage. The time when any good effect might be hoped from medical treatment was long past; I, however, gave calomel and antimony in alternate doses, and ordered the warm bath, but neither leeches nor blisters.

At 6 P.M. I again saw the child. The progress of the disease had been even more rapid than I had anticipated; there was no

longer the strength requisite to produce the croupal sound, or the vocal chords had become too densely coated to vibrate; the child was half-unconscious; and paroxysms of suffocating cough threatened every instant to put an end to its sufferings. I at once proposed tracheotomy; and the parents consenting, I returned to the hospital, and obtained the aid of Mr. A. G. Lawrence, house-surgeon, who undertook the operation in the absence of the surgeons of the hospital. On reaching the house, we again explained the operation, the uncertainty as to the ultimate result, and the possibility even of the child's dying under our hands. The evident and imminent danger rendered any argument on our part unnecessary; the parents consented, and Mr. Lawrence proceeded to operate.

The shortness of the neck, the depth of fat, the necessity of avoiding, as far as possible, the large veins, rendered the operation no easy task; and a further difficulty was caused by the fright and agitation of the old woman, our only assistant, whose duty it was to hold the solitary candle, by the dim light of which the operation had to be conducted. However, the structures being carefully divided, and the veins drawn aside when possible by aneurism needles, used as the most convenient instruments at hand for separating the sides of the wound, the trachea was fairly exposed, and all bleeding having ceased, was seized by a tenaculum, and opened upon it, and the cannula was introduced. The quantity of blood lost was very small, and none entered the trachea. At one period of the operation, impending suffocation rendered a resort to artificial respiration, by pressure on the chest, necessary; when it was over, the child soon resumed its natural appearance, recognised its parents, and took readily a little wine. Before we could complete the arrangements of fixing the cannula, and placing over it, round the child's neck, two or three folds of muslin, the child, as is usual in these cases, had fallen into a sound sleep. The temperature of the room was ordered to be carefully kept up, and the steam from a kettle was directed into the apartment, as far as practicable.

When I saw the child, three hours afterwards, the sleep had been calm and uninterrupted. The mother was allowed to take the child into her arms, and it took the breast eagerly and without any difficulty or regurgitation. Two teaspoonfuls of wine were ordered to be given every two or three hours.

At about 6 A.M., on the following morning (December 21st), word was brought that the child was in convulsions. I instantly went to it, and found that nothing like convulsion had occurred; but the breathing again seemed laboured, and I feared that already the disease had extended below the opening in the trachea. On examination, however, I found the calibre of the tube greatly diminished, the mucus driven to the mouth of the cannula at each expiration, having dried in layers and lined the tube. I removed and cleansed the inner tube, and then, as tenacious mucus still rattled in the lower part of the cannula, I dropped into the opening gradually several drops of warm water, so as to soften this. I then added two or three drops at once, so as to provoke cough, by which the entire accumulation was expelled. After this, the child again breathed freely; and to prevent the mucus again drying at the aperture of the cannula, I moistened the muslin over it, through which the air had to pass: this seemed to have the desired effect.

At 11:30 P.M., the child seemed still to be doing well. The respiration and pulse were, however, rapid. The bowels had been freely moved.

At 5 P.M., it was in much the same condition; but now on suckling, the milk returned to some extent by the nostrils.

At 7 P.M., the hands were jerked about as if affected with chorea, and there were irregular spasmodic efforts, which I soon perceived to be attempts at vomiting; but the diaphragm, not having a body of air confined in the chest by the closed glottis as a support, could not oppose a firm floor against which the abdominal muscles could compress the stomach; and the stomach could not by its own contractions expel its contents. By pressure on the abdomen, consentaneously with the natural efforts, the stomach was emptied, and I left the child tranquil, and apparently as well as when I had last seen it. I should mention that the inner cannula was removed at each visit.*

At midnight, the convulsive movements of the extremities had returned; but the child was perfectly conscious; the opening in the trachea obviating the effects on the brain of the laryngismus and trachelismus, which, according to Dr. Marshall Hall, cause the insensibility in convulsive affections. About 3 A.M. it died, having survived the operation rather more than thirty-three hours.

At the *post mortem* examination, thirty-six hours after death, hypostasis of the blood was observed to have taken place. On

opening the chest, slight emphysema of the cellular tissue in the anterior mediastinum was noticed. The lungs were somewhat congested, but everywhere soft and crepitant to the feel. A little mucous froth issued from some of the bronchial tubes on section. The trachea was free from false membrane below the opening made into it, and contained no accumulation of mucus. The cannula seemed to have caused no irritation to the lining membrane. The larynx was found lined throughout by a dense false membrane—especially thick and adherent upon and about the vocal chords, whence it could be detached in large firm pieces. The fauces and pharynx were also now found coated by diphtheritic exudation, and the tongue was of a clay white colour, due either to similar exudation or thick epithelial layers.

REMARKS. The points of interest about this case are due chiefly to the early age at which the child was attacked with croup, and the operation of tracheotomy performed. This was, as has been seen, attended with great difficulties; but in spite of these was, by the exercise of skill and patience on the part of Mr. Lawrence, most successfully accomplished, confirming the conclusion I had come to from witnessing the operations, and following the teachings of Professor Trousseau, as to the vast superiority of the cautious and patient method of procedure he so strongly advocates, and which has been so successful in his hands. The loss of blood in bold and rapid operations, when the precautions alluded to are not observed, tells fearfully on the result; and it has occurred that, in despair of arresting the bleeding, the trachea has been opened while this was going on, and, blood being drawn into the air-passages, the cannula, when introduced, has been driven out by the violent reflex cough. The still more ready method would have been utterly inapplicable to this case. The practice of dropping water into the cannula is worthy of a remark. It cannot do harm, and I have seen it result in the expulsion by the cannula of false membranes. The effect may be aided by stopping the cannula at the commencement of the forcible expiration, and removing the finger suddenly, so as to imitate the action of coughing. The return of the milk through the nose, which was first noticed on Tuesday afternoon, was no doubt due to the extension of the disease to the pharynx and velum palati, which, unaffected when the child was first seen, were found at death coated with false membrane, while during the night and the morning of Tuesday, the child took the breast at frequent intervals without any difficulty. The exact cause of the fatal issue is not very apparent; probably the child was too young to withstand the disease and operation. Had it been older, I have little doubt that the result would have been favourable.

SALOP INFIRMARY.

PUSTULAR ERUPTION, AN EFFECT OF THE INTERNAL USE OF IODIDES.

By HENRY JOHNSON, M.D., Senior Physician to the Infirmary.

WITHIN the last two years, on at least three occasions, I have observed a pustular eruption on the face and other parts of the body, following the use of the *iodides*.

CASE I. A man, named W. Beech, was admitted into the Salop Infirmary January 1857, with ascites. He was a coachman in a gentleman's family, and had lived well. There were no signs of diseased heart or kidneys; but the urine was very scanty, and highly charged with urerythrine (*purpurine*). The dropsy was therefore attributed to disease of the liver. In March he was tapped, and fourteen quarts of serum were drawn off.

March 19th. He took five grains of iodide of potassium, which was continued till the 24th.

March 31st. He was ordered iodide of mercury every four hours, which he took at intervals through the day till April 28th; it was then omitted, because he had a disagreeable eruption over the face and arms, and his mouth was sore. These effects of the medicine were soon relieved; the man got quite well, went out, and married.

CASE II. In July of last year (1858), W. Hoggins, aged 25, was admitted under my care. He had diseased heart, oedema of the feet, and his urine was coagulable. He took iodide of potassium in three-grain doses from July 13th to August 4th, when the dose was increased to four grains; and, on August 13th, it was given with tincture of sesquichloride of iron, which he took till August 17th. He was then much better in all respects, but he had a large crop of pimples or small pustules