

ON
INJURIES OF THE PELVIS,

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COMMUNICATED BY

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CASE I.

MR. BEECHAM, about twenty-five years of age, fell from his horse, and fractured the right os pubis. There was no alteration in the appearance of the extremity, but there was a very distinct crepitus when pressure was made on the right side of the pelvis; and he could move the limb in a considerable degree. He was very faint for some time, and, indeed, I may mention, that there never was the least reaction in the system. He lost eight ounces of blood from the arm two hours after the accident, and the same quantity in the course of the evening. He made water about an hour before he fell, and I therefore hoped the bladder had not been injured; but about an hour and a half after the accident, on attempting to make water, nothing came from the penis but a few drops

of blood ; he said he felt as if he had made water, and he then had a very painful sensation in the perineum, as if the water had escaped. He made the same attempt a short time after with the same sensations. On attempting to pass a catheter I could not succeed, for it always appeared to escape from the urethra on the injured side ; but on the following morning, when the bladder was very much distended, and he was in great pain, on an attempt being made, the catheter slipped into the bladder, which was evacuated of much urine. He was much relieved, and the urine was allowed to pass off, as it was secreted. On the third day an incision was made through the integuments in the perineum, as there was a slight appearance of urine having been extravasated there. On the fourth day he became worse, and, in the evening, the symptoms were very distressing. He had vomiting and hiccup, which irritated the injured parts exceedingly. Opiates did no good, but the Seidlitz powders afforded him much relief. As the urine did not flow freely, the catheter was withdrawn ; and whenever he had an inclination to make water, it was introduced ; but it was always about half a minute before the urine flowed. After withdrawing the catheter, and using it in this manner, all the distressing symptoms disappeared, so that, on the fifth day, it was hoped he might recover ; but on the evening of this day he began to wander a little in his conversation, and on the sixth he was almost constantly insensible ; he appeared

to get much weaker, but he continued to the middle of the seventh.

Examination.

On opening the abdomen, every thing appeared natural except the liver, which was purple and enlarged. The peritoneum, stomach, and all the intestines appeared healthy, except the cæcum, which had blood extravasated between its peritoneal and muscular coats; and this appearance was found to extend as far as the arch of the colon. The kidneys and ureters were sound. The pubes were separated at the symphysis, and the body of the right bone was broken through; its ramus was also fractured just about the place where it joins the ramus of the ischium, so that a considerable portion was completely detached, and this was entirely denuded of its periosteum. Much blood and urine were extravasated amongst the muscles in the upper part of the thigh. Two inches of the urethra were completely torn away; the inside of the bladder had a healthy appearance.

When the urethra or bladder is wounded, and the bones of the pelvis at the same time are broken, it appears to me that there can be no chance for the recovery of the patient, unless an incision is immediately made to give a free discharge to the urine; for if any of it is detained, it must destroy

the bones, and prevent their union, or, at least, must give rise to extensive exfoliations. At the same time, any loose portions of bone should be removed, as it is most probable the urine will have prevented their re-union. Besides this, if possible, a catheter should be kept in the bladder, so that as little urine as possible may be in contact with the bones. I have said, loose portions of bone should be removed: but, as I did not know whether such an opinion was correct, especially if the fragments were not very small, I made the following experiment.

Experiment.

On the 26th of March, 1821, I divided the skin over the symphysis pubis in a rabbit, and laid bare the right testicle, which I turned aside to prevent its being injured. I then separated the origins of the muscles from the bone, and passed one blade of a pair of strong scissors behind the symphysis pubis, which I divided quite through, and afterwards cut out a portion of the right os pubis, about one-twelfth of an inch broad, in the direction of the symphysis. The edges of the wound in the skin were then brought together by one interrupted suture.

The animal appeared to recover very well; but its hind legs were ever after much separated.

It was killed on the 4th of May, 1822, when the divided portions of bone were found separated from each other full three quarters of an inch, and the space was filled up only by a strong membrane.

CASE II.

Elizabeth Newton, aged twenty-six, received an injury of the left hip on the 22d of July, 1821, in consequence of being overturned in a gig. I saw her on the following day, with Messrs. Sharpe and Smith, surgeons of Fulbeck. She did not complain of much pain when she lay still. She could raise herself in bed a very little. As she lay in bed, the knee and foot were turned outwards. On pressing on the ilium, and moving the limb at the same time, a crepitus could be felt; and though motion could be made in any direction, considerable pain was produced by it. She complained of pain near the pubes, and particularly when she made water. When out of bed the foot could be put flat on the floor; and when she was supported, standing with her heels close together, there was the least possible difference in the appearance of the nates. She could sit without much inconvenience when put in this position. The crepitus was best felt by pressing on the anterior and superior spinous process of the ilium with one hand, and the tuberosity of the ischium with the other. The fracture began about two inches from the an-

terior and superior spinous process of the ilium, and, as far as I could judge, extended into the acetabulum. The exact place of the fracture could be ascertained, as it produced an unevenness of the crista of the ilium, which remained ever after.

At first, leeches and evaporating lotions were used. A tight bandage was put round the pelvis, and the legs were tied together, so as to keep them even. As the foot still turned out a little, a long splint was placed, so as to reach from the ilium to the foot.

She got up a month after the accident. At first, she moved about on crutches, and then attempted to walk without them, and the use of the limb appeared to improve for some time. She returned to her situation, where she was continually moving about, and, for some time, did not appear to get better. She complained of a rocking sensation, as if the injured parts were loose, whenever she attempted to walk; and, as I was afraid some disease might be produced or kept up by exercise, as in the following case, I recommended her to rest. A short time after a broad leather girdle was made to buckle firmly round the pelvis, and she is now quite recovered.

When the pelvis has been shaken in a fall, a chronic inflammation of the ligaments is apt to be produced, especially in a scrofulous person; but

the same disease will come on without injury, as in the following case.

CASE III.

Mrs. H., about thirty-five years old, had complained, for a long time, of weakness of the lower extremities, and, as her health had become bad, she was desired to take as much exercise as possible in the open air, but under this management she became worse. When I saw her, she complained of pain in her hips, and felt as if they would break asunder whenever she attempted to walk. She walked with the greatest difficulty, and frequently in doing this, her limbs were so weak as to cause her to fall down.

She was kept in an absolute state of rest for many weeks, and took tonic medicines. Under this treatment, her general health began immediately to improve, and she got quite well.

CASE IV.

George Millson, æt. 24, was brought into the County Hospital on the 21st of August, 1822, about four, p. m. He was intoxicated, and the only answer which could be obtained from him, was that he was full of pain all over. Having ac-

cidentally observed a little blood on the bed, I was led to inquire from whence it proceeded. I found that it came from the penis, when I immediately suspected that the pelvis was fractured. On pressing the symphysis pubis with one hand, and the ischium with the other, a distinct crepitus could be felt. He could raise himself in bed, but could not stand. When pressure was made on both ilia at the same time, the pelvis did not appear firm. I afterwards learnt that a loaded waggon had passed over him.

As he was very outrageous, I did not think it safe to attempt to examine the urethra, I therefore waited until eight o'clock, when I passed a catheter into the bladder, but only a very small quantity of bloody urine came through it. I introduced a finger into the rectum, when I could distinctly perceive a rupture of the urethra, and it was only by raising the point of the catheter with my finger, that it could be made to enter the bladder. The perineum and scrotum, and the right thigh, had become much swelled, and, as I was certain urine escaped amongst the injured parts, and he could pass none by the penis, there appeared to be no other chance of saving his life than by making an incision in the perineum. This was done on the right side, and bloody urine immediately escaped. Before the operation, he was very faint and appeared to be dying, but soon after he became better.

22. Ten, a. m. He has had a tolerable night. Pulse 120. So much urine has passed by the wound that it ran quite through the bed to the floor. There is some tenderness of the lower part of the abdomen. The right thigh is less swelled, and the scrotum is quite settled. He feels hungry.

Eight, p. m. He complains of much pain in the abdomen, and is very restless. The pain comes on by fits like the colic, and he passes air continually both by the mouth and anus. Pulse 126. The whole abdomen is tense and very tender, especially over the bladder. Eight ounces of blood were taken from the arm, and, as he had not had a stool since the accident, a common aperient mixture was ordered.

23. Ten, a. m. The tension of the abdomen is less, and he is much easier. He has had a purging stool. Pulse 126. The right thigh feels hard. He has had a restless night, but is now more composed.

Eight, p. m. Pulse 126. The abdomen is quite easy, and he can bear pressure over the bladder. He has purged more, and had a great discharge of urine. He feels hungry, and wished for bread and milk. He has had some sleep. He is still thirsty.

23. Ten, a. m. Pulse 132. His tongue is furred and rather brown. He has had a very restless

night. His appetite is good. A proper quantity of urine has been discharged.

Eight, p. m. Pulse 120. He appears quite easy, but has some difficulty of breathing. The abdomen is tense. His appetite is good, and he has not much thirst. He has no pain except in the right thigh.

24. He died at one, a. m.

Examination.

On opening the abdomen nine hours after death, the peritoneum was sound, but blood had been effused behind it as high as the superior parts of the kidneys. A very small quantity of serum was in the abdomen, otherwise every part, covered by the peritoneum, was perfectly healthy. The arch of the pubes was quite broken off, and was only kept in its place by Poupart's ligaments. Several other portions, both of the bones of the pubes and ischium, were broken off. The acetabulum of the right side was opened, and matter was contained in it. The mischief was the greatest on the right side. The right sacro-iliac symphysis was fractured. Blood and urine had escaped to the lower part of the thigh, especially about the sciatic nerve. A very large rent was found in the anterior part of the bladder; the urethra was torn completely through.

The wound in the perineum looked very well, and no sloughing had taken place in any of the injured parts.

Had the fracture been confined to one side, there is every probability that it would have re-united, as the fractured portions of bone appeared as if the restorative process had begun in them.