A CASE
OF
UNUSUAL DISLOCATION
OF
THE THIGH-BONE,
WITH OBSERVATIONS.

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COMMUNICATED BY HIS FATHER.

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Two cases of dislocation of the thigh-bone, in a direction upwards, have recently appeared in the Reports of Guy's Hospital, which bear strongly upon the following narrative. A succession of these injuries, termed unusual, because not hitherto described in any systematic work upon the subject, has induced me to submit to the Society another example of the accident, which occurred some years ago in the practice of Mr. Green, at St. Thomas's Hospital, and by whose permission the case is now presented to their notice. I can only regret that my report is not more in detail.

Nov. 1832. Edward Mecklam, a sailor, æt. 19, states that eight months ago he fell into the hold of a ship, the left buttock striking upon a coil of chain cable. The height might be about twenty feet. The limb on raising him, was immovable, everted,

and shortened; the difference being considerable. A complete retention of urine followed the accident, but the bladder recovered after the lapse of two days, though the secretion remained turbid for some time.

He did not land in England until four months afterwards, when two attempts were made to reduce the limb without success. He has never suffered from cramp, but the left knee was much swollen after the accident. He describes himself as having met with many severe falls on first attempting to move from his hammock, at the distance of eight weeks from the time of injury. He used to slip up and tumble backwards, with the leg of the affected side under him. The left buttock is flattened; the trochanter is felt rather below and to the outer side of the anterior and superior spinous process of the ilium. The neck of the bone lies apparently between the two anterior spinous processes, so that, when the patient is erect, the limb appears slung or suspended from this point. The head of the bone cannot be felt; it is invested by an abundance of bony matter, which extends backwards and inwards over the brim of the pelvis and iliac vessels, occupying in front, nearly the whole space between the inferior spine of the ilium and that of the pubis respectively. There is complete eversion, slight mobility, and imperfect progression with the aid of a crutch.

The above case I conceive, closely resembles that given to the profession by Mr. Morgan, in the Journal before alluded to. Mr. Bransby Cooper's case, (to be found in the same work,) is one of partial disloca-

tion upwards, and the possibility of such an accident would appear to be well established by his interesting memoir. I have carefully inspected the preparation in the museum of Guy's Hospital, and feel satisfied that it differs widely from the instances of complete displacement upwards, above mentioned. It is the place of the trochanter major which marks the distinction: and the case in question well illustrates the effort always made by the muscles to maintain the shaft of the bone, surmounted by this large process, in the direct line of support, or at any rate to permit as little aberration as possible. On inspecting either bone at the point of contact, it will be seen that an extended plane has been wrought upon the summit of the trochanter major, perfectly smooth, and corresponding accurately to the upper border of the acetabulum, where a corresponding surface occurs. To this point were the functions of the former joint transferred.

The progress of our practical knowledge of hip-dislocations has been extremely slow; indeed, for fifty years or more preceding the present era, little or nothing was placed upon record concerning these accidents. It is said, that Mr. Sharpe discredited the possibility of their occurrence. Petit approaches the subject with much ingenuity. He writes like a man who draws his pathological inferences from a survey of the healthy structure, rather than a practical familiarity with the injury. Thus he hints at a necessity which exists for the passing of the head of the bone inwards in the larger proportion of cases,

which he erroneously supposed to be the fact. He declares the displacement upon the dorsum ilii to be rare, and wholly discards the luxation downwards and backwards (sciatic notch) as impossible. It was reserved for Sir Astley Cooper to achieve a work which leaves little to be desired, an instructive digest of all that is generally known upon the subject of dislocation; still, like all human labour, it is open to those additions and corrections which time and opportunity cannot fail to supply. For example, in addition to the instances above cited, there have occurred cases where the head of the luxated bone, taking only a different direction, has assumed an equally new and unusual position. Mr. Stanley, of St. Bartholomew's Hospital, has kindly permitted me to make mention of two very valuable preparations in the Museum of that institution. They both exhibit the possibility of displacement, not merely backwards, but *downwards* also. In the first, which was removed one week after the receipt of the injury, the head of the bone is seen resting upon the sciatic spine and lesser sciatic opening. The lower border of the cervix femoris being partially in contact with the upper and outer edge of the tuberosity, the small rotator muscles at the back of the joint are lacerated. The lesser glutæi and pyriform muscles are entire at their place of insertion. A notable feature of this case is that fracture of the os innominatum traverses the bottom of the acetabulum, terminating where the rami of the ischium and pubis join. The trochanter lies higher considerably than

the head of the bone, encroaching upon the lower and outer segment of the acetabulum.

In the second specimen, the bone had been reduced, but the rent is plainly seen at the back and outer part of the capsule, through which the head of the bone passed. The latter was found during life to be movable upon a spot corresponding to the root of the spine of the ischium. In reply to an inquiry as to the mode of injury, Mr. Stanley favoured me with the following statement.

“ In the case of dislocation downwards and backwards, in which the reduction was not attempted on account of other injury which destroyed life, the man jumped out of a window, at a considerable height from the ground. In the case presumed to have been the same kind of dislocation, the man was riding behind a coach, and his legs became entangled between the spokes of one of the wheels. The consequence was a compound fracture of one femur and the dislocation of the other at the hip-joint.”

In the tenth volume of the Medical Gazette, at p. 19, Mr. Keate has given an account of a case which is, perhaps, on the whole, the most genuine instance of the dislocation downwards yet recorded. Amongst other symptoms, Mr. K. mentions, “ Limb lengthened three inches and a half, flexed and everted. Trochanter much *sunk*. Head of the bone close to and on a level with the tuberosity of the ischium, where it was capable of being moved under the finger.”

In accordance with the above observations, it would

appear that if there be four lines of direction in general, there are six particular dislocations of the head of the thigh-bone. First, as to direction, the displacement may be either upwards, downwards, inwards, or backwards (which also signifies outwards). Secondly, in addition to the four several luxations so accurately described by Sir Astley Cooper, of which two occur internally and two externally, with reference to the acetabulum as a centre, it must, I think, now be further admitted, that the head of the bone may assume a position either directly *above* or *below* the articular cavity. With respect to the dislocation downwards, the classification would be much simplified by referring all cases to this variety, where the head of the bone is found to rest below the plane of the spinous process of the ischium.

This form of the injury is probably of very rare occurrence. The amount of the force applied, no less than the unusual direction in which the bone is permitted to escape from its socket, tends to justify the conclusion that the acetabulum itself is not unfrequently implicated by simultaneous fracture, in the production of such an accident. This, however, is one of many questions which experience alone can decide.