

destroyed some of the cases, in examining them ; but there are enough left in their original situation, to shew how they are contrived and disposed.

I am, S I R,

Your most obedient

humble servant,

F. H. Eyles Styles.

LXXV. *An Account of a Case of a luxated Thigh Bone reduced ; by Mr. Charles Young, Surgeon, at Plymouth : Communicated by John Huxham, M. D. F. R. S.*

Read June 12,  
1760.

**A**S John Down, a middle sized man, aged about forty, was, on the 21st August 1759, harnessing his master's horses, they suddenly took fright, and ran away with the chaise. He had his back towards the chaise, the wheel of which, as it rolled very swiftly along, struck him on the upper and hinder part of the right thigh. He fell to the ground, and was unable to rise again, and complained immediately of a violent pain in his right hip. I came to him soon after the accident, and caused him to be put to bed ; when, on examination, I found his only complaint was the violent pain about the articulation of the femur with the ischium, which was increased by any even the least motion of the limb.

limb. The toe was turned in toward the heel of the left foot, and the heel of course outward; and the whole limb, from the head of the femur to the toes end, distorted in proportion.

I thought it was very evident, at first sight, that there must be either a fracture of the femur, or a dislocation of its articulation with the ischium. The former, I think, would have been easily discoverable. But as by laying my hand on the great trochanter, while an assistant turned the foot inward and outward alternately, I could perceive, that the motion of the great trochanter corresponded exactly to the motion of the lowest end of the femur, I concluded, that, had there been a fracture, it must have been between the great trochanter and the head of the bone. And, had this been the case, I expected to have been able to discover it, by the grating, that is always to be felt, when the two broken ends of a bone are moved against one another. But no such thing being perceivable, and yet the limb so much distorted, and the pain so violent, and confined to the parts about the joint, I took it for granted, and pronounced the case to be a dislocation of the femur; and consequently endeavoured to reduce it, by the usual method of extension. To this end, two men extended the limb, by pulling on napkins tied round the ankle, while others counteracted them, by pulling on a sheet passed between his legs, and secured at the bed's head, turning the foot outward as they made the extension. This gave him great pain; but the limb soon became, in every respect, parallel to the other. It appeared as long, and, on laying it down on the bed, the great toes and heels of both feet

feet lay exactly in the same position; and the only difference, which I could perceive in the two limbs, was, that there was a little flatness about the hip of the right side. In short, the difference between the two limbs was so little, that I began to think I had been mistaken in my opinion of a dislocation (for it was evident there was no reduction made by the extension, for that could not but have been perceived, both by the patient and myself), and that the distortion of the limb was owing to nothing else than an involuntary contraction of the muscles, occasioned by the violence of the blow. I therefore bled him, confined him to lie on his back, and charged him to move as little as possible; imagining, that rest would be his most effectual remedy. He continued in much pain for some days; but by degrees grew tolerably easy, except when the limb was moved; and at about twelve days after the accident, he could suffer the limb to be lifted to and fro gently, with little or no pain at all. Notwithstanding which, he could no more lift it of himself than at first, when it was much more painful. This embarrassed me a good deal. I was convinced there was no fracture of the limb, in any part; and I thought, from the circumstances above related, there could hardly be a dislocation. I therefore desired the opinion of two other surgeons, who, on seeing the position of the limb, and inquiring into all the circumstances, which did and had attended it, agreed with me in opinion, that it was no fracture, and that it was equally unlikely, under these circumstances, there should be any dislocation. For the right leg, when placed by the side of the other leg, as I have said already, was exactly

parallel

parallel to it, and continued so, unless the patient, either when asleep or at any other time, moved his body, so as to drag his leg: in that case, the toe was always found inclining inwards, and the heel outward; but never so, but that it might be replaced, without the least difficulty or pain to him, but just so as one might have done by a limb that was paralytic. We therefore recommended rest, hoping that farther rest and time would recover the perfect ease and strength of the limb. But some days passing without any alteration, I gave him a strong purgative, and repeated it every other or every third day, for several times, in order to reduce the muscles, that I might the more plainly feel any thing through them. For though he was, in point of height, but middle sized, he was pretty fleshy, and the glutæi muscles consequently too thick to suffer any thing to be felt with any degree of distinctness through them. This answered my expectation fully; for, by repeating the purgative often, and at short intervals, his living sparingly, and being confined to his bed, he became much emaciated, insomuch, that the head of the femur was plainly felt through the muscles, dislocated backward, and lying in the space between the os ischium and os sacrum.

Of this I acquainted the gentlemen, who had examined it before, and desired them to examine it a second time; which they did, on the 15th September, and were immediately convinced, that the os femoris was dislocated, and that it was the head of the bone we felt through the glutæi muscles, in the space between the ischium and sacrum.

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To the head of the bone's lying in this space, it was probably owing that we were at first deceived; since its being there allowed a greater latitude of motion, than could possibly have been the case any where else; which may serve to account for the parallelism of the limb to that of the other, notwithstanding a luxation.

But, on turning the foot inward and outward by turns, while an assistant laid his hand on the head of the bone, a grating was perceived, both by the patient and us all. This somewhat surprized us at first; but, as this grating was never to be perceived, without pressing pretty hardly on the head of the bone, at the time the limb was turned round, and as the head of the bone was plainly felt to turn round, whenever the thigh had that motion given to it, we concluded it could be nothing but the side of the head of the femur against the edge of the ischium.

Convinced of this, we determined to make an extension; and, to that end, brought him to the foot of the bed, and placed him on his back, with the bed's post between his thighs, which was wrapped round with cloths, to prevent its galling him. A napkin was tied round his leg, at the ankle, which two assistants pulled on, while a third turned the knee outward, and I had my hand on the head of the bone, pressing it downward. As soon as the extension began, I perceived plainly the bone sink under my hand, which I had hardly time to say, before it gave a snap, which was felt by the patient, and heard by us all, and the bone was reduced.

When he was laid on his back in the bed, the right leg appeared somewhat longer than the other; but

but that might possibly be owing to the muscles not immediately overcoming the effect of the extension sufficiently, to draw the head of the femur to the bottom of the acetabulum.

In about six or seven days he was easy, and able to walk over the room with crutches, and bear a considerable weight of his body on the right leg; and, from this time, he recovered strength very fast, and is now, and has long been, as strong in that leg and thigh, as in the other, without any even the least difference in length, or any other respect.

*To Dr. Huxham.*

S I R,

Plymouth, May 1760.

I Have sent you the above case of John Down; because I know it is asserted by some surgeons, and among those of the greatest character too, that a luxation of the head of the femur is little less than impossible; and that what is generally taken for a luxation of this joint, is a fracture of the bone at its neck.

A fracture of the neck of the bone probably happens more often than a dislocation. But the above case has convinced me, that it may happen, and that without any extraordinary violence, provided the force is aptly applied. Indeed any force applied in the direction of the thigh downward can hardly have any tendency to dislocate it at all; and any force from below upward will be sustained by the head of the femur bearing against the upper part of the acetabulum, till the neck, the weakest part, gives way.

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But though it may not be possible, that the femur should be luxated by any force applied in a direction parallel to that of the thigh, in an erect posture of the body, it is not equally impossible it should be dislocated by a force applied in a contrary direction. For, in the above case, the blow was received on the upper and hinder part of the thigh, in a direction forward, from the wheel of the chaise, which must necessarily have a tendency to drive it round forward, and consequently cant the head of the femur out of the acetabulum, backwards, where it is less deep than it is either above or below. On the fore part of the acetabulum, it is yet more shallow, and therefore less force is required to dislocate it that way, and more especially, as there is on that side less strength of muscles to resist.

It was probably a fortunate circumstance for this man, that I thought myself mistaken in my first opinion of its being a dislocation; for, had that been clearly the case, I should, no doubt, have used every method, and every assistance to be had, in order to have reduced it immediately; and most likely, while the muscles remained in their full strength, and contracting involuntarily, and that violently too, as they will sometimes do, upon attempting an extension of them, and under which circumstance, the muscular fibres oftentimes rather break than give way, should have failed of being able to reduce it; and, in that case, the man must have remained a cripple as long as he lived: whereas now, though five-and-twenty days from the time of the accident, the muscles were so much weakened, by his being confined to his bed, and wasted by his frequently repeated purges,  
that

that they very easily gave way, and the reduction was effected with as little difficulty, as ever I saw in a dislocation of the humerus.

Might not the giving strong purgatives, and frequently repeating them, so as to render the muscles of strong muscular subjects more lax and weak, be a means of reducing luxations of the humerus, which are not reducible by any method of extension, which is often found the case?

I am, S I R,

Your very humble servant,

Charles Yonge.

LXXVI. *Some Observations upon a Samnite-Etruscan Coin, never before fully explained. In a Letter from the Rev. John Swinton, B. D. of Christ-Church, Oxon. F. R. S. to the Rev. Thomas Birch, D. D. Secretary to the Royal Society.*

Reverend Sir,

Read June 19, 1760. **I** Have in my small collection a silver Etruscan coin, of the size of the consular denarii, similar to one published by (1) Fulvius Urfinus, (2) Patin, (3) Vaillant, (4) Havercamp,

(1) Fulv. Urfin. in *Famil. Romanar. num. incert.*

(2) Car. Pat. *ibid.*

(3) J. Vaill. in *Famil. Romanar. num. incert.*

(4) Sig. Haverc. apud Andr. Morel. in *Thesaur. Numismat.*