

and are inserted with it into the trochanteric fossa. The action of these muscles must correspond with that of the *pyreformis*, both in the normal and abnormal state of the coxo-femoral articulation; save that the point of their origin being lower than that of the former muscles, their power to elevate the bone will be lessened or entirely abnegated.

The obturator internus muscle arises from all the internal surface of the obturator ligament; from the inner edges of the thyroid hole, and from the bone which surrounds it. Its origin is both fleshy and circular; its fibres converge, and run along the os ischium; turn round that bone between the spine and the tuber ischii, over a cartilagenous pulley like surface; its tendon passing between the heads of the genelli is inserted with them into the trochanter-major. Although this muscle arises within the pelvis, and passes immediately behind the coxo-femoral articulation, yet, as the tendon turns over the ischium, the direction of its action is completely changed, and it becomes allied to the muscles which we have just described, participates with them in the mode of action when the joint is in its natural state, and sympathizes with them in its altered condition.

The next of these small muscles, and placed lowest in the horizontal plane, is the *quadratus femoris*. It is in shape like a parallelogram. It arises from the tuberosity of the ischium, and is inserted into the lower and posterior border of the trochanter-major and intertrochanteric line. Its action is similar to that of the muscles just described. It pulls the thigh directly backwards, and assists to rotate the bone outwards. When the head of the thigh-bone is placed in an abnormal position from injury or disease, the influence upon this muscle must strictly correspond in effect with those just adverted to. Except that when the trochanter is morbidly elevated, the inferior plane of its origin causes it to be more powerfully acted upon, than any of this set of muscles.

The last of this set of muscles which surrounds and moves the hip-joint is the *obturator externus*. It is situated on the outside of the pelvis, and exactly opposed to its namesake on the inside. It arises from the rami of the ischium and pubis, where they form the obturator foramen, from the obturator ligament, leaving room for the passage of the blood-vessels and nerves. It is a short muscle: its origin broad, and towards its insertion narrow, so that it is of a conical form. It is soon gathered into a round tendon which twists under the neck of the thigh-bone, between it and the pelvis, and is inserted into the deepest part of the digital cavity of the great trochanter. From the way that the tendon of this muscle winds around the neck of the thigh-bone, its action must correspond with the small muscles at the back of the hip; for although it arises in a plane anterior to the thigh-bone, still the direction of its power must be changed by the reflection of its tendon, which acts upon