

into the base of the neck of the Femur, and encloses the whole joint as it were in a shut sack. The thickness of this ligament varies; upon the upper and its outer side it is very dense, and here, strengthened by the addition of ligamentous bands, it is singularly thick and strong; while on the inner and lower side it is so diminished in density that it does not possess one-fifth this strength and toughness. Unlike other ligaments of this character, it consists of fibres which interlace with each other in every direction,—so that the whole forms a structure of great toughness and strength, that must require an immense force to lacerate it; but dislocation cannot occur without its rupture—a fact that must impress the imagination with some idea of the force necessary to produce these accidents. While after some varieties of fracture of the neck of the thigh-bone, it is powerful enough to support the whole weight of the body resting upon the fractured bone.

Again, this cavity of the coxo-femoral articulation is completely lined with a serous or synovial membrane which closely covers the head and neck of the bone; is reflected on the capsular ligament, dips down into the cavity of the acetabulum; covers the round ligament, and is fully reflected over the fatty structure at the bottom of the joint. This structure consists of a basement membrane; is supplied with a system of blood-vessels, and is lined with epithelium cells, which produces the mucous exhalation, that lubricates the whole surface of the joint.

The blood-vessels which supply the several structures of the hip-joint are, no doubt, sufficient to nourish and support it in a normal condition, although all bones covered and surrounded by a serous membrane seem to want the facility of supply, which is not wanting to those covered with muscular tissue: hence, when we find the fracture of the neck of the Femur to occur within the capsular ligament, no blood-vessels can arrive at the head of the bone, isolated at every part, except by the round ligament; and should this have been originally deficient, or accidentally torn, the head would be without nourishment, all vascular communication with the body would cease, and, as a consequence, the bone must die. That such has actually occurred, I have no means of proving; but it is a result which we should do well to keep in view.

The fatty matter or *fimbrice* which lie at the bottom of the socket were once supposed to be a gland of peculiar structure, but are now found to be masses of fat, lurking in a sort of hollow, from whence the round ligament proceeds, doubtless acting, in some degree, the part of a cushion, so as to stop the vibratory influence of a blow upon the trochanter,—it lies hid, as it were, and is scarcely influenced by the motion of the joint,—it is covered with reflections of the synovial membrane,—it seems greatly to increase its extent, and to afford an abundant supply of lubricating fluid. These parts may doubtless be injured by a blow upon the