

interesting memoir on this subject. He had performed the operation in three cases during the late campaign on the Loire, removing nine, seven, and six centimetres of the bone; and all the patients did well. In one of these the excision of six centimetres was performed on the upper third of the humerus, below the head, which firmly united with the rest of the bone, and the uses of the limb were completely re-established, the shortening which remained being only twenty-five millimetres.

The cases of gunshot wound of the humerus, M. Ollier observed, in which his operation is indicated are comparatively rare, and expectation should be the general rule. It is in comminuted fracture, with denudation of the periosteum and contusion of the medulla, and especially when the projectile remains amidst or in the vicinity of the fragments, that intervention should take place. At a later period inflammation and pain may also render excision necessary; for one of the immediate consequences of the operation is the disappearance of the pains, to the great relief of the patient. M. Ollier's mode of procedure is entirely different from the old one for the removal of fragments of bone; for, in spite of the comminution, a true sub-periosteal excision should be attempted. Each fragment is successively seized and separated from its periosteum, so that at last a tolerably complete periosteal sheath is obtained, in spite of its lacerations opposite the seat of fracture. The bone, in fact, being a very compact body, is broken into a number of fragments completely separated from each other, while the more supple periosteum resists. It becomes more or less torn, and remains adherent to the soft parts and the fragments, especially in young subjects. The modifications produced in the periosteal adhesions by age are indeed considerable, and are very important as regards operations. When the splinters have been removed, the fragments must be excised to beyond the extent of the fissures. If, however, the fissure extends to the spongy tissue, and the subject is young, it need not be pursued if the soft parts are intact; but when it penetrates to a joint, an articular excision must be executed. After an excision, the ends of the bone should be brought nearer to each other, in proportion as there is little expectation of bony reproduction, which is less in proportion to the age of the patient. The silicated bandage favours the reparative process, and may require to be continued for months. In answer to a question as to the prevention of stiffness of the joints ensuing, M. Ollier replied, that, so long as the inflammation persists, the bandage must be left on, it being indeed the best means of limiting the traumatic inflammation; and whenever it is renewed, movement should be imparted to the elbow and shoulder. The apparatus may, in fact, be left on without renewal for a month or five weeks, and ankylosis will usually be avoided, unless the fracture is too close to the joint. In conclusion, he repeated that expectation is the rule, and that excision is only suited for particular cases. It is especially indicated when, some time after the accident, complications arise; while, when there is intra-articular fracture, it should be performed immediately. The influence of age must also never be forgotten.—*Med. Times and Gazette*, Feb. 24, 1872.

55. *Hydrarthrosis of the Knee in Fracture of the Femur.*—On the occasion of a communication presented by M. Gayet to the Lyons Society of Medicine, "On Hydrarthrosis of the Knee in Fractures of the Femur," M. Ollier observed that he had long observed this circumstance, but did not consider it as peculiar to the knee-joint. Indeed, in the articles "Ankyloses" and "Arthrite," in the *Dictionnaire des Sciences Médicales*, now publishing, he has shown that such swelling may effect various joints, the amount of effusion being proportionate to that of the irritation produced by the fracture. Ordinarily, it is serous in its nature, but it may become purulent, notwithstanding its distance from the seat of fracture, when this is the seat of violent inflammation. M. Ollier refers these effusions to the propagation of irritation through the osseous tissue, and has described them under the name of *arthrites par propagation*, or *secondaires*. What led him to take this view of their nature was that he had observed them to be produced experimentally in other traumatic lesions of the bones, which could only operate by transmitted irritation, as after breaking up and evacuating the medulla through perforations made in

the bone. He is unable, therefore, to agree with M. Gayet's view, that these effusions are a consequence of obstacles to the return-circulation in the vessels of the medulla. The irritation transmitted through the vascular tissues of the bone gives rise to an increase of the normal secretion of the synovial membrane, and the same thing is observed in some forms of coxalgia. M. Ollier does not consider that the effusion in the knee is here connected with the synovitis of the hip-joint, but with the juxta-epiphysary osteitis of the upper part of the femur, which, in consequence of the relation of the diaphysis with the articulation, soon becomes confounded with the true coxalgia. The propagation of the irritation through the femur seems also, to him, to furnish the most general explanation of the persistent pains in the knee observed in coxalgia. With M. Gayet, M. Ollier believes that, in some exceptional cases, hydrarthrosis of the knee may assist in completing the diagnosis of fracture of the femur. But this is only an example of what is met with, more or less, in all joints which form the limits of a fractured bone, being more easily recognizable in the knee in consequence of the extent and superficial position of its synovial membrane. M. Ollier has observed it distinctly, also in the elbow and wrist after fracture of the ulna, and in the instep after fracture of the shaft of the tibia. If femero-tibial hydrarthrosis is less frequent after fractures of the tibia than after those of the femur, this is because the vessels of the synovial membrane and of the articular soft parts have more numerous anastomoses with those of the femur than with those of the tibia. M. Ollier regards the proposition of removing the effused fluid by means of an aspirator as useless, inasmuch as it is generally absorbed in the course of a few days. In removing it we should transfer a serous into a dry arthritis—that is, we should facilitate the production of ankylosis, or at all events the stiffness of the joint, which will take place as long as the synovial membrane is distended with fluid.

M. Delore observed that he had often met with this hydrarthrosis of the knee in fracture of the femur, but he does not believe that it should be employed as a sign of such fracture, as it may be produced by a simultaneous contusion or sprain. He cannot admit the theory of transmitted osseous irritation, as it may supervene very rapidly after the fracture. M. Gayet explains the hydrarthrosis by an obstacle to the medullary circulation only; but it would seem more reasonable to admit an impediment in the circulation in the whole substance of the limb, induced by an extra-osseous effusion of blood which takes place in all fractures. M. Delore also refers to the phlyctenæ which are sometimes produced, containing either blood or more or less coloured serosity, and which, he believes, are due to the same cause as hydrarthrosis. He is certain that the hydrarthrosis is very seldom dependent upon arthritis, and that very rarely can the pain in the knee, observed in coxalgia, be attributed to arthritis. Very often we are able to squeeze the knee without giving rise to any pain, while this immediately appears if we apply pressure at the hip. Moreover, these pains are found not only in the knee but also in the leg, or even in the foot. In his opinion they are sympathetic. M. Ollier added, in explanation, that these effusions are to be distinguished according to the period when they occur. Those which are produced immediately, or rapidly, are due to distension or spraining of the knee, which accompanies most fractures; while those which come on more slowly are the products of propagated irritation. The former result from laceration of the capsule and synovial membrane, more or less blood being always added to the effusion; the latter, which are simply the result of propagated irritation, consist of a more or less transparent serosity, as in any other case of serous arthritis.—*Med. Times and Gaz.*, Dec. 30, 1871.

56. *Ovariectomy during Pregnancy.*—Dr. EUGENE GODDARD, at a late meeting of the Obstetrical Society of London (*Med. Times and Gaz.*, Jan. 6, 1872), narrated the following case of this: The patient was 29 years of age, and in 1870 was found to be the subject of an ovarian cyst, but as there were no urgent symptoms, the consideration of any surgical treatment was deferred. She then became pregnant, and about the end of the second month of uterogestation, Mr. Spencer Wells removed the ovarian cyst. Eleven and a half