

Medical Matters.

THE MODERN TREATMENT OF FRACTURES.

M. Just Lucas-Championnière, Hon. Surgeon to the Hôtel Dieu, Paris, delivered a very interesting lecture on the above subject at the annual meeting of the Cardiff Medical Society, which is reported in the medical press. After detailing the disadvantages of treatment by reduction and splints and by immovable appliances, and the history of the modern method in which mobilisation is a leading principle, the lecturer described this treatment as follows:—

Let me next explain my conception of what this treatment by movement is, and state the new facts observed by me which give a revolutionary character to my method.

A certain amount of movement between the fragments ensures the best bony repair; this is the corner-stone on which my method is based. Every movement which is not injurious by reason of its amplitude favours repair; but it must be understood that the movement must be measured—dosed, so to say.

The movement which is necessary for the repair of the bones is not less necessary to the vitality of all the constituent parts of the limb, and particularly for all the organs of motion—joints, muscles, ligaments, and tendons.

The relation which the movements have to pain experienced by the patient are not such as is commonly believed; certain kinds of movement help to relieve the pain. Immobilisation, which seems to relieve, only gives momentary relief, for it prepares the way for other pains in the future. Mobilisation, gently performed as early as possible after the injury to the bones is the method which best promotes disappearance of pain.

Massage affords the best form of movement. By simple mobilisation, by massage, and even by his own examination, the surgeon ought never to cause pain, for the pain so caused leads to fresh pain and produces complications.

The reduction of a fracture is only a relative necessity; it should be resorted to only in certain deformations of the axis of the bone which are incompatible with the function of the limb—lower third of the leg, shaft of the humerus. In a large number of cases the manoeuvre of reduction is useless; it is useless in all fractures of the radius with impaction and moderate deformity, in most fractures of the upper extremity of the humerus, and in the great majority of fractures of the neck of the femur. In all fractures in which the displacement is due to muscular contraction any attempt at reduction is useless, as in fracture of the clavicle, of the olecranon, and many fractures of the malleoli. After massage the

fracture is either spontaneously reduced, as in the case of the olecranon, or is very easy to maintain reduced, as in the case of the clavicle and malleolus. Those conditions which favour the vitality of the limb are all more important than those which produce immobilisation of the fragments. The fact that shortening has not the injurious influence on repair which it is said to have should not be lost sight of when considering displacement. A moderate degree of shortening which does not change the static position of a limb is favourable to repair. The muscles surrounding a shortened lever act more rapidly and better than upon a lever on which they are stretched. A certain amount of shortening ought not to be interfered with, as it is favourable to the repair of a broken bone.

Massage has so great an effect in stimulating bony secretion at the site of fracture, that in children, in whom the activity of the production of bone is great, massage ought not to be applied, save with great moderation, for fear of provoking excessive osseous secretion—in fact, a tumour. In their case simple mobilisation is often sufficient.

Mobilisation from the beginning, within the first twenty-four or forty-eight hours, is of capital importance, and at this stage movements of very small amplitude are sufficient; passive or induced movements are the best at the beginning. Active or spontaneous movements ought to be measured and directed by the surgeon; to allow the patient to follow his own fancy with regard to active movements is dangerous—all the more dangerous because with my method the pain caused by movement disappears from the beginning, and therefore does not limit the untimely action of voluntary movement. The pain experienced and the degree of sensitiveness of the callus are the best guides in directing and in permitting movement by the patient.

The secondary treatment of fractures and their supervision ought to be prolonged. Functional use of a fractured limb is the condition most favourable to its regaining active power. Even during this secondary period everything likely to irritate the region of the callus ought to be avoided.

While before my investigations the surgeon contented himself, after having reduced a fracture, by awaiting cure, the modern surgeon should play a much more active, much more personal, and much less simple part. He ought not only to diagnose the fracture but ought to make its exact nature visible by a radiographic picture, and then take action to obtain not only solidity of the limb but also to restore its suppleness, its regularity of action, and its power. He must not merely await the solidification of the skeleton.

[previous page](#)

[next page](#)