Lesions.

The actual lesion which occurs when the ankle joint is sprained varies considerably in different cases and is often difficult to determine accurately. The chief effect of the injury always falls on the ligaments, and they are damaged to a greater extent than any other structures of the joint; in fact, the degree of sprain is determined by the extent of injury to the ligaments.

In the mild forms the ligaments are merely overstretched; in others they may be torn from a small amount in the medium to an extensive degree in the severe injuries.

In the severe injuries the ligaments are torn across, or detached from the bone, opening the joint capsule; or portions of the bone, usually the tip of one or other malleolus, may be detached along with the ligaments.

Results.

The results of these injuries will vary with the severity of the lesions. The immediate effect is the occurrence of pain. Then swelling of the joint rapidly follows.

In the milder cases, when the ligaments are simply overstretched, there is comparatively slight swelling immediately after the accident, but a synovitis may subsequently occur and give rise to much trouble. In the more severe cases there is usually considerable effusion of blood at the time of the injury, and this will produce a certain amount of immediate swelling of the joint. This swelling is later increased by the occurrence of synovitis.

The remote effects of sprained ankle result partly from the synovitis and partly from the imperfect union that not uncommonly occurs in the torn fibres of the ligaments. The latter condition is especially troublesome later in the course of the case, and gives rise to that feeling of weakness which is so common a result of neglected sprains.

Unless the synovitis be actively treated it may lead to a permanent weakness of the joint from over-distension or from adhesions between various parts of the synovial surfaces, which, although fibrinous at first, may organize into fibrous tissue, and thus interfere with the proper movements of the joint.

It is also well to bear in mind that when there is considerable hemorrhage the blood is very slowly absorbed from the articular cavity, in which it remains fluid for a considerable time.

All sprained ankles, when the foot has been thrown out or everted, are liable to be followed by a weakened arch or the development of a valgus, so these sprains should be treated with the foot well thrown in, inversion, and later a proper lace shoe with an arch support should be worn.