

by the indirect influence of the vaso-motor nerves. The local circulation of the blood is increased; and where there is a tendency to venous stagnation, the bluish color is removed, the skin resuming its natural appearance. The vertical frictions promote the circulation in the venous and lymphatic vessels, and by a combination of these methods of manipulation absorption is increased. Massage also aids in breaking up and dispersing about any deposits or effusions of blood that may exist, and thus promotes their absorption. Moderate compression, it is true, does the same, but by acting upon the subcutaneous veins it brings an œdema of the parts below.

In acute and chronic *synovitis serosa*, vertical are more applicable than horizontal frictions, as in addition to the effusion we have to deal with infiltration and hyperæmia of the synovial and peri-synovial tissues, while the vascular network which surrounds the joint is dilated, and the circulation in the blood and lymphatic vessels is correspondingly sluggish. By the use of massage, absorption can be hastened, and the retarded circulation rendered free; that is, the disease can be cured while, in the meantime, a moderate use of the joints may be allowed. According to Mezger, the average time required for the treatment of acute synovitis is two weeks, and for a chronic case six weeks. He recommends both in acute and chronic cases a moderate use of the joint—only limited, indeed, by the pain this produces. Passive movements of the joints are also employed.

In several hundred cases treated by Dr Mezger in this way during fourteen years, he has never seen any harm result from the moderate use of movements; and he is of opinion that many cases pass into the suppurative stage in consequence of the absolute rest which is enforced by the forms of treatment in common use. Dr. Kier, writing after close observation of Mezger's mode of treatment, considers that his great merit lies in his having separated massage from the therapeutic gymnastics, of which it formed a part, and, by a thorough investigation of its influence on disease, raised it into a principal means in the treatment of diseases of the joints. He adds that no one who has practically observed it can deny that his system of manipulation constitutes one of the most powerful remedies for combating synovitis, whether acute, chronic, serous, or hyperplastic.

Dr. Winge, at a meeting of the Copenhagen Medical Society, gave an account of Dr. Mezger's method of treatment as observed during a three weeks' visit to Bonn, where that practitioner now resides. He describes it as essentially consisting in kneading, rolling, percussing, and rubbing the parts. When these are hairy they are first shaved, or the manipulations cause irritation. The operator sits on a low stool in front of the patient, and begins with anointing the part with perfumed lard.

He rubs strongly whether indurations, infiltrations, or effusions have to be dealt with, and follows from below upwards the course of the lymphatics. When the knee is the part, he works across the joint with the fingers of one hand, on both sides, below the patella, pressing inwards with more or less force; while the fingers of the other hand work in the same manner upwards along both sides of the patella, over the capsular ligament, or any ligament which is felt to be swollen. This process is continued from three to five minutes. He then grasps the joint with his left hand, and, pressing firmly, rubs upwards over the patella as high as the superior insertion of the investing ligaments. This is repeated a number of times, according to the circumstances of the case, the applications being made once or twice a day.

In *synovitis hyperplastica*, both horizontal and vertical frictions are employed, especially over those parts where the peri-synovial tissue is felt to be much thickened. The more acute the inflammatory process, the more gentle must the pressure be, as also is the case when chronic synovitis takes on a subacute form. In this form of synovitis there is hyperplasia of areolar tissue in the synovial membrane and the peri-synovial tissues, together with a more or less plentiful serous exudation. At the same time there is a development, in greater or less abundance, of newly formed vessels, and perhaps also of new formations in the system of canals from which the lymphatics take their origin. The combined use of both varieties of frictions in such cases produces, in the first place, an effect upon the peri-articular tissues, and diminishes the tumefaction. Not unfrequently this alone is sufficient to cause the subsidence of the inflammatory process in the synovial membrane, and the disease is cured. But usually more protracted treatment is necessary, the peri-synovial tissues being gradually restored to their normal state, although occasionally remaining thickened. Or, after the effusion has been absorbed, it is found that the newly formed areolar tissue has become cicatricial, thickening the peri-synovial tissues and the membrane, and by its contraction diminishing the calibre of the newly formed vessels, so that their walls contract and atrophy. The dilated vessels, under the manipulations, become more or less completely emptied, and their walls are thus enabled to contract by their own elasticity. At first, however, they dilate again between the applications of the treatment, but gradually regain their proper tone. By the stronger frictions the thinner vessels are ruptured, and blood is effused into the cellular tissue, when it is absorbed, and then the vessels atrophy. When care is taken to prevent the effusion of blood becoming excessive, no bad results ever follow.

In *synovitis pannosa*, the cartilages of the joint present a vascular development, the vessels chiefly originating from the newly formed vessels in that