

In weakened and debilitated subjects on the other hand, stimulants and tonics are indicated, and should the pain be sufficient to prevent rest and sleep, anodynes may be given with advantage. The joint is immobilized by splints or by sandbags and a cradle is placed over it to keep away the bed-clothes. Most surgeons place the limb in the position of comfort (semi-flexion). Others in severe cases, place it in the most useful position should ankylosis occur. Having placed the limb at rest, the next step is to check the inflammation and relieve the pain. Of all agents the best and most easily applied is cold. Heat also relieves the pain but does not so readily check effusion but rather promotes it. Cold is applied preferably in the dry form until the inflammation subsides. The part is covered with a layer or two of flannel, then a rubber bag or a bladder filled with ice, or, a Leiter's coil (cold water) is placed over the part. Cold constricts the vessels, assists absorption and relieves pain. It is not well borne by the old or very feeble. Wet cupping, leeches, etc., are also useful at this stage, but are not so satisfactory.

If cold is not available, the pain may be relieved by hot fomentations. Flannels are wrung out of hot water, a few drops (15 or 20) of turpentine or other rubefacient placed upon them: the joint is enveloped and the whole covered with oiled silk, or waxed paper. When cool it is removed and another put on. In the absence of a better remedy I have found hot fomentations of ordinary vinegar and water do very well.

Having relieved the pain and checked the inflammatory process, which may take a day or two, the next step is to promote absorption of the effusion. The means at hand are compression, counter-irritants, massage, the douche, and intermittent heat. The first three are those usually employed, either singly or combined. Compression greatly promotes absorption and is found to give the best results. It is applied by adhesive plaster, a rubber bandage, or, by plaster of Paris direct.

In the knee-joint, (which is the one affected in about 90 per cent. of cases), the joint is carefully covered with a thick layer of cotton batting for 6 inches above and below. The popliteal space is padded so as to cover the ham-string tendons. Strips of rubber or adhesive plaster are then placed over this, beginning 4 or 5 inches below and overlapping each strip by about one-third till the same distance above is reached, the ends of each strip are brought together or overlapped behind; in this way pressure as firmly as can be borne is made over the swelling. Over all place a muslin bandage. When the swelling goes down apply more on top, or better, remove and apply a fresh one. Plaster of Paris, as ordinarily applied, also gives excellent results. Of astringents, counter-irritants, etc., Lead and Opium, Iodine, Ichthyol