

For parenchymatous injection and other small abscesses a metal-mounted glass syringe is recommended, holding about 15 c.cm. General anesthesia is not used except sometimes in children. The injection of cocaine is not employed for fear of introducing sepsis. The fact that tubercular joint cavities are apt to be subdivided into separate compartments is met by injecting the joint in different places, as it is believed that the action of the iodoform is confined to the part to which it is applied and that its dissemination is limited. In carrying out parenchymatous injection various parts of the joint are attacked in succession. The needle is plunged deeply in, and firm pressure exerted upon the piston of the syringe till the point of the needle feels loose. It is then withdrawn a little and the same is done again. Before taking out the needle, it is thrust in a new direction, and the same procedure is adopted till the required quantity has been used. The next time another part of the joint is selected, and so on till the whole of the affected tissues have been overtaken. Neither massage nor passive movement is employed by Mikulicz to hasten the distribution of the iodoform, but the expected swelling and tenderness are provided for by loosening the bandages, lightening weights, and steadying limbs, previously free, with sandbags.

The injections are made at intervals of from eight to fourteen days as a general rule, sometimes much longer, but never under five days. Where simple spaces are being injected, as in joint cavities or abscesses, the interval is longer because the drug is generally brought into contact with the whole surface at the first injection. At first the fluid distension in an abscess or joint is increased by the injection, but this swelling gradually subsides. Many abscesses are cured by a single injection. Where an abscess complicates pulpy degeneration the two forms of treatment are combined, that is, the abscess is injected at long intervals and the synovial thickening receives parenchymatous injection at shorter intervals. In certain cases tubercular foci and granulation tissue are scraped away, and after the hemorrhage is arrested the wound is closed with sutures, with the exception of a narrow interval left for the subsequent injection of the iodoform emulsion. Cases coming for treatment with fistulæ already in existence, are less satisfactory to deal with. Sometimes the sinus is first scraped out, but in some cases the injection of the emulsion under pressure is trusted to, these injections being repeated two or three times a week. In combination with the application of iodoform, Bier's treatment is employed. The limb is first bandaged firmly to within a few inches of the joint. Above the affected joint a rubber tube or bandage is then wound sufficiently tight to produce a bluish-red discoloration of the skin of the unsupported parts below. The congestion is maintained for from fourteen to eighteen hours out of the twenty-four, the remaining time being employed to get rid of the edema by the use of elastic pressure applied over the joint itself. As improvement goes