

extending through two years prior to the development of a lumbar abscess over the iliac crest. This last was being freely discharged through three sinuses along the iliac crest. A probe passed far up the spine to the last dorsal vertebra. There was no deformity, and little pain. An incision was made alongside the twelfth dorsal vertebra. The transverse process was carious as well as the body of the bone adjacent; and a curette was readily passed into the body of the vertebra, alongside the spinal dura mater, which was readily pushed aside without injury, and an extensive excavation of diseased bone made, one-half of one vertebral body being thus removed. Apparently healthy bone was left on all sides. The entire pus channel was curetted, and douched with sublimate solution, then with iodoform in ether. In six weeks the patient left the hospital, having, at the time, a very slight discharge from one small sinus. Prior to operation he had had three sinuses, an infected tubercular pus-tract, a foot long altogether, leading to the carious cavity. His condition had been one of severe drain, with hectic. His improvement was rapid and satisfactory, the *rationalé* being that he had ceased to auto-infect his system from an extensive suppurating tubercular pus-channel. I believe the greater part of the discharge in these cases comes from the granulation lining the sinuses.

The second class of Potts' disease lesions that we are called on to interfere with is that of paraplegia, the sequel to chronic caries. While these cases are sometimes due to secondary myelitic changes, they are usually produced by, and due to, extra-dural pressure of tubercular neoplastic tissue. The simplicity of the surgical procedure needed to effect the relief of this extra-dural pressure would make it seem desirable that every such case should be speedily operated upon, fearing permanent destruction of the cord if the condition was allowed to run on. But it has been shown, notably by a review of cases by Dr. V. P. Gibney, of New York, that the majority of pressure-paraplegia cases from Potts' disease recover in due time by natural processes. Therefore the surgeon's hand is stayed oftentimes. Such authorities as Israel, Bergmann, and Kraske, discourage interference, concluding that, because the disease

cannot be eradicated, it is useless to interfere. My own feeling would be in favor of interference in the majority of cases, believing, as I do, that thereby the cord may be oftentimes preserved; and the course of the disease simplified.

The orthopedic surgeon is generally rather conservative, and regards the operating surgeon as a man suffering from a continuous and severe surgical fever.

My friend Dr. Gerster operated last year on an old vertebral Potts' paraplegia, and found a subdural abscess with caseous masses, which he curetted away. The patient made a comparatively rapid and entire recovery.

Dr. Wyeth had a somewhat similar experience. The treatment of cold abscesses from carious spines, as well as of the parts about the bone immediately diseased, by the method of Brun (injecting one drachm of twenty per cent. solution of iodoform in olive oil every two or three weeks) deserves attention. It is endorsed by the experience of Krause and Trendellenberg. My own high esteem for iodoform in these cases leads me to endorse it also.

One of the most terrible accidents that man is liable to is a fractured spine—an accident reducing the human body, in the twinkling of an eye, to a state of absolute inaction, indifference, and paralysis. The incidents of the fracture are: the shock; the absolute loss of motion and sensation; and the occasional onset of great pain. The associated train of symptoms will perhaps be as well illustrated by a narration of two or three interesting cases in which I have operated within the last two years as by any general considerations that I might offer. An extensive study of injuries to the spinal cord, made by Dr. William Thorburn, of Manchester, England, has led to the observation that out of twenty-one cases of injury to the cervical region, without fracture of the bone, at least five or six were cases of hemorrhage within the vertebral canal; and that the symptoms, referable as they are to a considerable portion of the spine rather than to one or two nerve-roots, have caused these cases to be usually regarded as fractures, and, later, classified under "concussion." They are not nearly so fatal as fractures and dislocations. Nearly all of the fracture-dislocations of the cervical