Hospital, London, in 260 suppurating cases, 33½ per cent. died; 42 per cent. were cured. Hebern\* classifies results obtained in his hands. Of those not operated upon in three years, 19 per cent. recovered, and 15 per cent. died; 66 of the remainder were not well in four years; 26 per cent. had recovered; 17 had died; 57 were not well. In five years 24 per cent. had recovered; 21 died; 55 not well.

Taking all the cases, those operated upon and those not, at the end of five years, 13 per cent. were without operation; 37 cases were resected, with a mortality of 51 per cent.; 11 per cent. had been amputated, with a mortality of 60 per cent., and 29 per cent. had remained not well.

Senn, in his work on "Tuberculosis of the Bones and Joints" (page 448), says: "A suppurating hip-joint in the adult warrants a grave prognosis. Anæmic patients and patients suffering tuberculosis of other organs, or from other serious complicating disease, are bad subjects for operative interference." And again (page 449): "The more conservative operations on the hip-joint, in the operative treatment of tubercular affection, that are now gradually displacing typical resections, will yield more satisfactory functional results, while the thoroughness with which osseous foci, the disease capsule, and infected para-articular tissue are now being removed, will be less frequently followed by local recidivation."

Lovett and Goldthwait† say that in every case of abscess of the hip treated in the Children's Hospital of Boston, from 1883 to 1887, that had been subjected to aspiration, whether followed by injection of iodoform or not, subsequent free incision became necessary. In the same hospital from 1884 to 1888 inclusive, there were 370 cases of hip disease, of which number 70 were suppurating.

Dr. R. H. Sayre‡ says: "It seems to me that the cases reported as dying of amyloid disease and general tuberculosis are an additional argument in favor of more thorough removal of diseased tissue before the general system has become exhausted beyond hope of recovery."

The procedures that I have found to give the most satisfactory results are those by free incision,

extending the entire length of the abscess, evacuation of the contents, and sealing of the wound. The day prior to the operation the field is as scrupulously prepared as is customary in surgical procedures. The incision is made at first only large enough to permit the contained pus to slowly escape; as soon as it has ceased to flow, the incision is increased to the full extent of the cavity. Peroxide of hydrogen (medicinal) is now thrown in in a small stream until ebullition almost ceases, and the accumulation of detritus is then thoroughly washed out by means of a stream of warm 1 to-1000 bichloride of mercury solution, from a fountain syringe. By the use of the Barker-Willard irrigating curette, the entire pyogenic membrane is carefully and thoroughly scraped, and any shreds of fibrous tissue remaining are removed by scissors. It is now possible to trace the site of the original ostitis, and when found, if not too extensive, its removal is frequently easily accomplished with a gouge.

The difficulty experienced in obtaining a sterile, and at the same time an efficient emulsion of iodoform in olive oil, has induced me to dust powdered iodoform over the entire surface after it has been carefully dried with gauze sponges. The edges of the wound are brought in contact and so held by silkworm-gut sutures, and the entire surface is covered with a thick fold of aseptic gauze, the incision having been covered with protective.

Enforced immobilization is secured with a long, padded splint reaching from the axilla to the malleolus, and retained in position with plaster-of-Paris bandages applied to the leg and the trunk, or by some form of portable bed or fixation apparatus. At the expiration of one week to ten days the stitches are usually removed, if primary union has been obtained. The external dressings and fixation apparatus are re-adjusted and maintained for a period of three weeks more. The subsequent procedure is enforced mechanical immobilization of the joint, either in bed or by apparatus, as the individual requirements of the case may indicate.

While the statistics I have to offer cover a comparatively small number of cases, they may be of use when added to others, and I therefore give them. The cases operated upon by me by the method described number 24. There were 16 girls and 8 boys. Eighteen were upon the left side and 6 were upon the right. The abscesses had been

<sup>\*</sup>Bradford & Lovett: Orthopedic Surgery, p. 325. †Transactions of American Orthopedic Association, vol. ii., p. 83. 

†Op. cit.