

bestows far greater care upon the antiseptic scouring of everything which could in any way come in contact with the wound from without. In the case of the hip, the child is washed with soap and water first, and then the part to be operated upon is wrapped for an hour or two in a towel soaked in 1 in 20 carbolic solution. The incision he makes is that proposed by Hunter, or as it is often called, Parker's incision. It commences in the thigh one-half inch below the anterior superior spine of the ilium, and runs downwards and a little inwards for three inches. The knife passes between the tensor vaginae femoris and glutei muscles on the outside, and the sartorius and rectus on the inside, until it reaches the neck of the femur. This incision avoids all muscles, vessels and nerves of importance. As soon as an abscess is opened up a stream of sterilized hot water is turned into it, and this is kept up during the whole of the operation thereafter. The neck of the bone is divided by a small saw in the line of the wound, and the head lifted out. Wherever diseased material is felt it is cut away by means of a flushing gouge or scoop which Mr. Barker has devised for the purpose. The stream carries away the *debris* as fast as it is produced and with it all the blood, while the heat tends to arrest bleeding from fresh-cut surfaces. When all the diseased tissue, whether soft or bony, has been scraped away, and the water runs away clear, the cavity is dried out and stuffed with carbolic sponges, which are left in the wound till the stitches are in place. They are then removed, the cavity is filled with iodoform emulsion, and the sutures are tied, as much of the emulsion as possible being squeezed out at the last moment. No drainage tube is inserted in most cases. After dusting the wound with dry iodoform the whole joint is covered with salicylic wool so adjusted in strips that evenly graduated pressure is brought to bear upon every aspect of the field of operation. The limb is fixed in an abducted position, and when the wool is compressed by a spica bandage the walls of the whole clean-scraped cavity are brought into contact, and the remainder of the neck of the femur is thrust into the acetabulum and secured there. There is thus no actual cavity to drain, and assuming perfect *asepsis*, there is no reason

why all these surfaces should not unite by first intention. The patient is then placed upon a double Thomas' splint.

In operating upon the knee joint he makes one-half of the well-known U shaped incision of Moreau, commencing above the joint and reaching to the margin of the patellar ligament. Or, if necessary, the two halves may be made as far as the margins of the ligament, but without dividing it. If exploration reveals a limited amount of disease and shows the rest to be healthy, the necessary gouging is done and the wound closed up. If, however, there is evidence of disease in the *cul de sac* above the patella or in the condyles of the femur, the formation of the U-shaped flap is completed by removing the tuberosity of the tibia with a chisel and leaving it attached to the ligament, in order that it may be subsequently wired into position again, after the "erosion" or excision of the joint, as the case may be. By means of these incisions the various synovial pockets and the epiphysary lines of the tibia and femur may be examined. Any tubercular foci are gouged or chiselled away—keeping wide of the disease; unhealthy synovial fringes are clipped away, and the wound dressed as in case of the hip. Other joints are treated in a similar way.

In cases of excision or amputation the limb is exsanguinated by elevation instead of by using Esmarch's bandage, for fear that the pressure might break up some caseating focus, and thus force some bacilli into the circulation.

The principles already laid down with regard to tuberculous joints will apply to all other diseased parts so situated as to be within reach of the surgeon. A tubercular tongue or testicle should be cleanly removed; caseating glands and anal fistulae should be thoroughly scraped out with strict antiseptic precautions, and healing induced as quickly as possible. Lesions of the nose, fauces, soft palate and larynx should be vigorously treated, owing to the liability of tubercular foci of these parts to affect the alimentary canal. Weigert's hot air treatment promises well for these lesions.

According to Volkmann, it is extremely doubtful whether nephrotomy or nephrectomy is ever of real benefit when the kidney is affected.