cient time has not elapsed to be sure. Personally, he felt that at least three, and better, five years, should have elapsed. The operation is an attempt to restore the inguinal canal to its normal condition, and then the placing of an intra-abdominal pad in apposition with the internal surface of the internal ring. It is distinctly and strictly an operation devised and applicable to oblique inguinal hernia. As applied to femoral hernia the operation is incomplete, in that it does not close the crural canal. Dr. Cushing's operation fills this gap.

The intrinsic difficulty in closing a hernial opening is the preservation of the cord and its accompanying vessels; and previous to Macewen's operation he had come to the belief that the only satisfactory way of absolutely closing the hernial canal would be to enucleate the cord and testicle, and close the inguinal canal by a direct attack upon its intra-abdominal surface. This operation he once performed on a priest, but on account of the necessary mutilation it is not applicable to the ordinary patient.

The indications which had governed him in advising Macewen's operation have been: uncontrollable by truss hernia; painful truss hernia; and in one case he operated where there was great mental depression associated with the hernia.

The following points of importance have suggested themselves to my mind as bearing on the technique of the operation: *a*, the finding of the sac; *b*, the isolation of the sac; *c*, the troublesome hemorrhage and manipulation of the tissues; *d*, the introduction of the sutures; *e*, the dressing; *f*, the question of wearing a truss.

a. The finding of the sac. The strictest antiseptic precautions have been attempted. An incision of 2 or 2½ inches is made directly over the extreme ring, great care being exercised to bring the incision directly over the middle of the lozenge-shaped opening and running in its direction. The wound is deepened until he met a rather thick white layer, which, on being divided, showed that he had entered a cavity, when he knew that the sac had been reached. He never attempted to isolate the sac without opening it; for the recognition of the cavity is the distinguishing point. Therefore the whole attention of the surgeon from the time he makes the primary incision should be devoted to the finding of the sac. This saves time. If he cannot readily find the sac he allows the patient to partially recover from the ether and the sac is quickly distended.

b. The isolation of the sac. Once in the sac he prepares it for restoration to the abdominal cavity. When adherent, he fills the sac, through the small opening, with iodoform gauze, and thus distended there is no difficulty in dissecting it from the cord and the adjacent vessels. When, however, the sac is filled with omentum, congenital cases directly on or about the testicle, one has a difficult, tedious dissection to carefully separate it from the testicle and return it to the abdominal cavity. Occasionally he has had to divide the omentum into various parts and return the carefully secured ends to the peritoneal cavity.

c. The troublesome homorrhage and the manipulation of the tissues, both of which may be avoided by the packing of the sac with iodoform gauze.

d. The introduction of the sutures. This is one of the most difficult points in the whole operation, and he has found that he could place them most accurately by a Hagedorn needle in a good holder. After carefully separating the sac the whole length of the inguinal canal and for half an inch around the intra-abdominal surface of the internal ring, he placed a stitch in the very extremity of the sac and transfixed it through and through and brought it out, after traversing the inguinal canal, through the muscles of the abdomen, pulling up the sac inside the abdomen in much the same way that a Venetian blind is raised. This suture is not fastened in position until the end of the operation, but it is temporarily secured by a pair of pressure forceps. Then he carefully attempts to restore the valve-like form of the inguinal canal by stitching the conjoined tendon with strong silk or stout catgut to the aponeurotic structures of the transversalis, internal and external oblique. He usually places two, if not three satures in position and, as he ties them, the assistant introduces his finger in the canal to determine how tightly he brings the parts together.

e. The dressing. The operation proper is finished when the inguinal canal has been closed. Lately he had dispensed with drainage, but after a thorough and effective flushing with a weak solution of corrosive sublimate, the superficial wound is closed with continuous catgut sutures. The dressing proper consists of six sterilized gauze pads 6x8x½ inches superimposed, covering the wound surface and the scroto-femoral cleft. This is held in place by a carefully applied gauze bandage 4 inches wide, just tight enough to steady the dressing in place. Over this is laid a piece of mackintosh with a hole for the penis. This is covered by sterilized sheet wadding. This is secured in position by a cravat gauze bandage 6 inches wide and long enough to form a double spica bandage. Over this is another piece of macintosh with a hole in it for the penis. This is secured in position by safety pins as necessary.

f. The question of wearing a truss. There is little doubt that the wearing of an ordinary truss after hernia operation is open to the objection that pressure on cicatricial tissue is usu-