

Owing to the possible risk of death attending laparotomy for this ventral fixation of the uterus, another more conservative, less dangerous, and, for many cases, much more desirable operation has kept pace with hysterorrhaphy. I refer to *Alexander's* operation for the relief of retro-displacements of the uterus by shortening the round ligaments. His directions for the operation are as follows: "The pubic spine is felt for, and an incision made up and out from it, two inches in length, and in the line of the inguinal canal. The incision passes through the skin, and into the external abdominal ring, known by oblique fibres crossing it and protrusion of fat at its lower end. The tissue now bulging out from the ring (which is the end of the ligament, before reaching the mons veneris), is lifted by an aneurism needle, grasped with the finger and pulled out gently, any bands preventing this being cut with a knife. The other side is treated in the same way, both ligaments being pulled out as far as possible. The wound is then stitched, the sutures being, passed from side to side of the incision, *i. e.* through skin, pillar of abdominal ring, round ligament, pillar of ring and skin." After the operation the patient wears a pessary for some time. This operation is also performed for cases of prolapsus uteri.

I had the pleasure of hearing a paper entitled "A Modified Alexander's Operation," read at the International Medical Congress, in Berlin, by Dr. Edebohls. He makes his incision, and proceeds as Alexander does, until the external abdominal ring is reached. He then passes a grooved director along the inguinal canal, and with a knife or scissors he cuts up the full length of the canal; the round ligament is then picked up with a blunt hook, at the internal ring, and gradually drawn forwards, carrying the anterior layer of the broad ligament with it; the latter is then gently peeled off the round ligament, and allowed to drop back through the internal ring. The ligaments are then secured by passing the sutures through them in re-closing the canal. He claims that by this method the ligaments are more easily secured, less liable to be broken, and, with care, there is no reason why the peritoneum should be opened. After either of these operations, owing to the disturbance of the inguinal canals, there is, no doubt, a slight tendency to hernia, as Alexander himself ad-

mits. There is also a matter of uncertainty about finding these ligaments, and especially if pelvic adhesions, etc., have taken place.

Dr. A. Palmer Dudley condemns both of these operations on the following grounds: He claims that nature never intended that the body of the uterus should ever be fastened to any portion of the abdominal wall. The diaphragmatic action of the pelvic floor is one of nature's safe-guards against intra-abdominal pressure in breathing, in exercise, and, to some extent, in disease. He maintains that if the uterus be fastened to the abdominal wall it will interfere to a great extent with the proper actions of the muscles of the pelvic floor. It will also imprison the bladder to a marked degree, necessitating its expansion in a lateral rather than in an upward direction, thereby bringing into action two opposing forces, one from above forcing the uterus downward, and another from below forcing it upwards; and that this action after a time separates the union between the uterus and abdominal wall. For these reasons Dr. Dudley has introduced a new operation: He denudes with scissors the peritoneum from the anterior wall of the uterus in an oval shape, taking care not to go too near the bladder. Then each round ligament is brought up and a portion of peritoneal covering upon the inner side of it denuded to correspond with that upon the uterus. The three denuded surfaces are now stitched together with a continuous catgut suture, and the uterus allowed to drop back into the pelvis. Dr. Dudley has operated with success in this way on a number of cases, and claims the following advantages for his operation over either hysterorrhaphy or Alexander's operation.

1. It corrects the displacement by utilizing the natural supports of the uterus without sacrificing any of them.

2. The proper diaphragmatic action of the pelvic floor is not interfered with.

3. The bladder is not imprisoned in the least, and its proper action is undisturbed.

4. There is no chance for intestinal adhesions to take place about the line of sutures, for the latter lie in apposition to the posterior surface of the bladder, and adhesions taking place at this point simply elongate the utero-vesical junction.

5. In cases of impregnation the uterus is free to rise in the abdominal cavity naturally.