

Fritsch. He says that the pain is not due to obstruction, but to the resistance which the muscular tissue of the uterus offers to the hyperæmia. He maintains that when we have a uterus bent in itself, there is an obstruction offered to the flow of blood, that the mucous membrane cannot swell up as it does normally, and consequently there is undue vascular tension and compression of the nerve-endings in the uterus which causes the pain. This argument at first sight appears well, but let us look for a moment at the normal circulation of the uterus.

The ovarian artery of each side passes between the layers of the broad ligament, running tortuously toward the upper angle of the uterus; as each artery nears the uterus it divides into two branches. One supplying the uppermost part of the uterus, while the other descends to join the uterine artery. Thus there is, as you will see (Fig. 2), a lateral channel on each side, from which branches are given off, that have a transverse direction over the uterus. These transverse branches anastomose with corresponding branches from the opposite side.

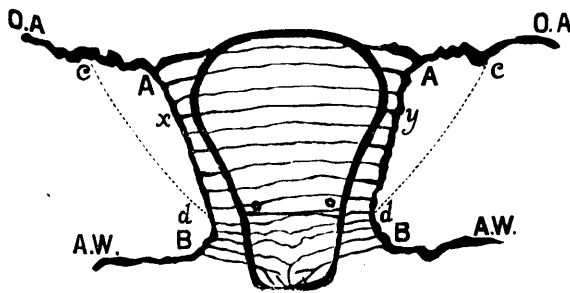


FIG. 2.

O. A. Ovarian artery; W. A. Uterine artery; A. B. Lateral arterial channel on each side; O. O. Indicates the position of the internal os; X. Y. One of the transverse branches given off from the lateral channel; C. D. Position of pressure on each broad ligament when uterus is incarcerated in Douglas' pouch.

From these transverse branches, secondary smaller branches are given off, which run at a right angle to the wall of the uterus and supply the mucous surface. (Fig. 3). The veins have a similar arrangement to the arteries. So it is seen that each transverse section of the uterus has its own vascular supply, and that a flexion cannot offer any obstruction to the circulation. Besides if flexion caused congestion, we should have excessive menstruation in cases of flexion. But cases continually come to one's notice where there is

marked flexion and still we have no menorrhagia. The argument brought forward by Berry Hart is more reasonable. He says that the tissues of the uterus are frequently in a state of chronic inflammation, and there is usually an increase of the connective tissue, making it of less yielding structure. The monthly flushing of the pelvis with blood would, under these circumstances, be accompanied by pain. Cellulitis and peritonitis are often present with ante flexion, and increase of pelvic congestion will, of course, produce increase of pain.

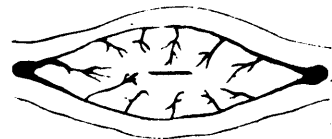


FIG. 3.

Transverse section of the uterus showing the arrangement of the uterine arteries, the arterial circles formed by their primary branches, and the branches of the latter supplying the mucous membrane.

There can be no doubt but that the connection between ante flexion and dysmenorrhœa has been greatly over-estimated. Vedeler found that out of 67 cases of dysmenorrhœa, 25 had well marked ante flexions, or 37.3%, but out of 138 cases without dysmenorrhœa 46 had well marked ante flexions or 33.3%. From this you will notice that ante flexion with dysmenorrhœa only has 4% over ante flexion without dysmenorrhœa.

Another symptom so frequently associated with ante flexion is *sterility*. This symptom is said to be due to the obstruction in the uterine canal produced by the flexion, but as there is practically no obstruction to the exit of menstrual fluid at the so-called angle of flexion, so there should be none to the entrance of spermatozoa. However this may be, the fact still remains that dilatation of the cervix places the patient under more favorable conditions for conception.

*The Surgical Treatment for Retro-displacements of the Uterus*—Dr. T. G. Thomas is a firm believer in the anterior fixation of the uterus to the abdominal wall, by his operation termed *hysterorrhaphy*. After he has broken down the adhesions about the uterus, he denudes the peritoneum covering the fundus, and fastens the organ by silk sutures brought directly through the abdominal wall.