

OPERATIVE GYNECOLOGY

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OPERATIVE GYNECOLOGY

CHAPTER I

MYOMA OF THE UTERUS

Hysterectomy and other operations on the uterus occupy such a major place in gynecologic surgery that it seems advisable to begin with that central organ of the pelvis. Uterine myoma is the lesion most frequently requiring typical hysterectomy—i.e., the basic maneuvers for hemostasis and tissue division which enable safe removal of the uterus. Hysterectomy for cancer requires the addition of certain special steps for the removal of involved lymphatics, and hysterectomy for chronic inflammation usually involves also the removal of one or both adnexa.

Structure.—Myoma of the uterus is a tumor composed of muscular and fibrous tissue. It is often spoken of as “fibromyoma” and as “fibroid.” As Mallory has pointed out, it is a true tumor of muscle tissue, and the term “myoma” is the correct technical designation.

Uterine myoma occurs more frequently than any other tumor in women. It is found at all ages, and the incidence increases with age up to the menopause, being found in about 40 per cent of women aged forty. It may occur as a single growth or there may be many growths of various sizes scattered through the uterus.

As a myoma grows it pushes aside the surrounding tissue, condensing it into a capsule. This tendency to push aside adjacent tissue and grow toward either the inner or outer surface of the uterus, causes the tumors to occupy different relations to the uterine wall, as shown in Figs. 5 and 6. Most myomas are in the corpus uteri, as indicated in the various illustrations, but about 5 per cent occur in the cervix.

Fig. 7 shows a sectioned submucous myoma and gives a good idea of the disturbance of the uterine mucosa which causes the congestion and bleeding. Figs. 8A, 8B, 9, and 10 show progressive stages of the extruding process which submucous myomas undergo and indicate the various conditions with which we must deal, and Fig. 9 shows one of the dangers to be avoided in removing such tumors.

In addition to the ordinary encapsulated myoma, there is a special kind containing glands and hence called adenomyoma. In its relation to the uterine wall the adenomyoma differs radically from the ordinary myoma in that it is not encapsulated. The glands penetrate the surrounding uterine muscle, thus fusing the margins of the growth with the uterine wall, as shown in Fig. 11. This penetration makes enucleation (myomeectomy) very difficult, and it produces diffuse myomatous growths such as shown in Figs. 12 and 13, which condition is sometimes referred to as adenomyosis or diffuse myoma.

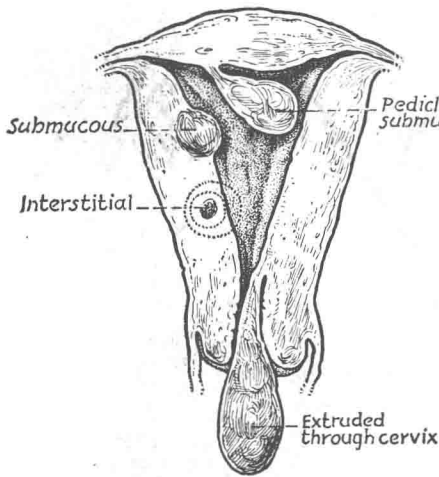


Fig. 5.

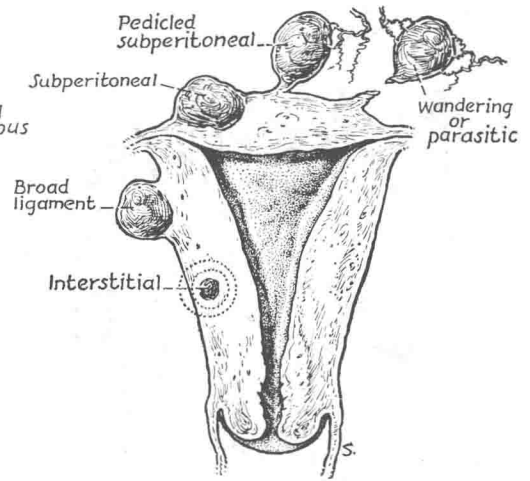


Fig. 6

Fig. 5.—The development of different types of submucous myoma.

Fig. 6.—The development of different types of subperitoneal myoma.

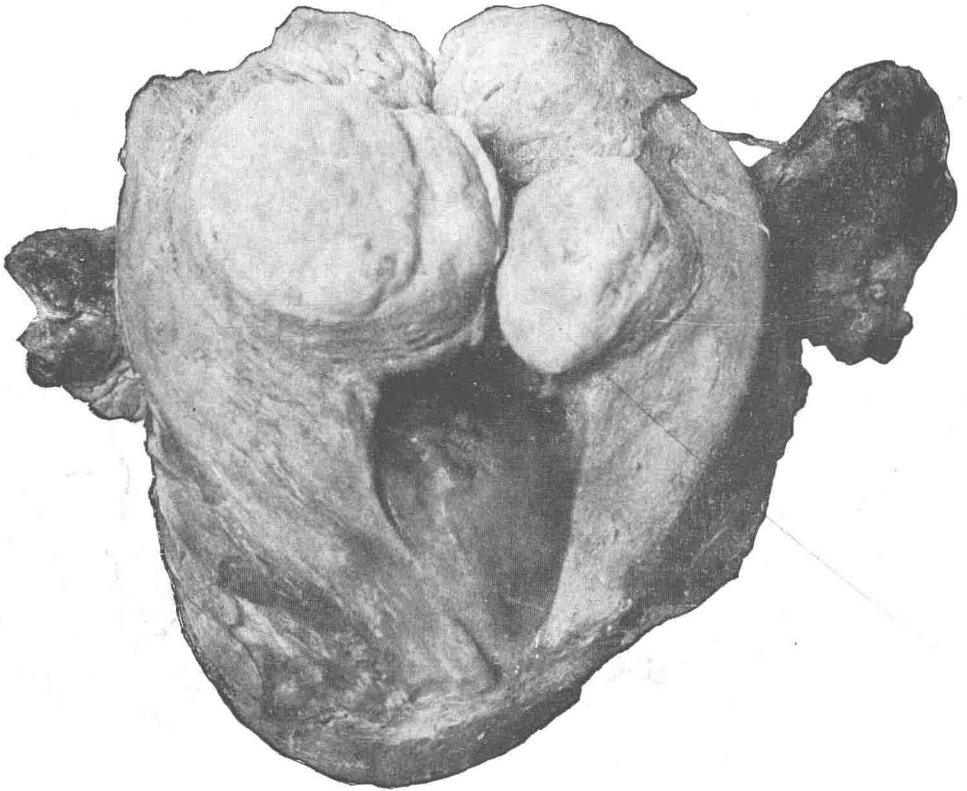


Fig. 7.—A myomatous uterus laid open, showing submucous myomas encroaching on the uterine cavity and distorting it. Gyn. Lab.



Fig. 8A.

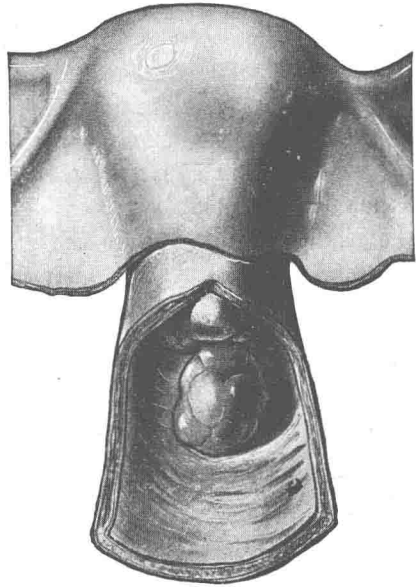


Fig. 8B.

Fig. 8A.—Two small myoma nodules in the uterine wall. There is also a polypoid mass becoming pediculated, which is shown against the white paper slipped behind it.

Fig. 8B.—A small pediculated myoma of the uterus, projecting into the vagina. (Montgomery—*Practical Gynecology*.)

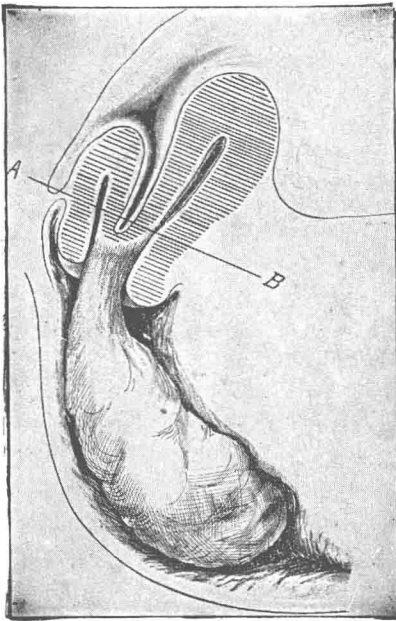


Fig. 9.

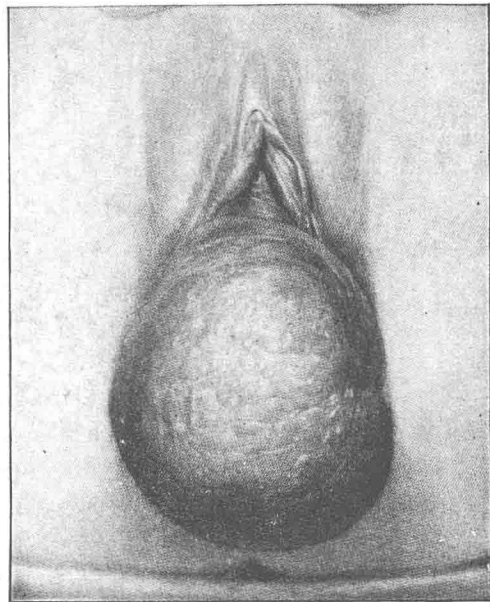


Fig. 10.

Fig. 9.—A pediculated myoma causing inversion of the uterus. This shows also a danger to be avoided in treatment. Amputation of the myoma by cutting across the pedicle at the level of the line A-B would open the peritoneal cavity. (Thomas and Munde—*Diseases of Women*.)

Fig. 10.—A large pediculated myoma of the uterus, projecting outside the vagina. (Kelly—*Operative Gynecology*.)

The origin of the glands in adenomyoma was a mystery for a long time but is now well settled. They are erratic growths of endometrial tissue in various stages of development—glands alone, glands and endometrial stroma, and functioning endometrium which menstruates. The erratic endometrial tissue may come from either one of two sources or from both. In most cases in which the pathologic process involves the inner portion of the myometrium, the glands grow out from the uterine mucosa (endometrium). In a large proportion of the cases in which the outer part of the uterine wall is involved, the glands come from a focus of endometrial tissue in the ovary. As the focus of erratic endometrial tissue in the ovary grows and functions, the resulting collection of blood forms a cyst. The endometrial tissue also penetrates the wall of the cyst and implants itself on surrounding peritoneal surfaces, including that of the uterus. The implanted cells penetrate the peritoneum into the underlying myometrium where they form an area of adenomyosis. The abnormal glandular growth stimulates abnormal muscle growth, causing enlargement (adenomyoma).

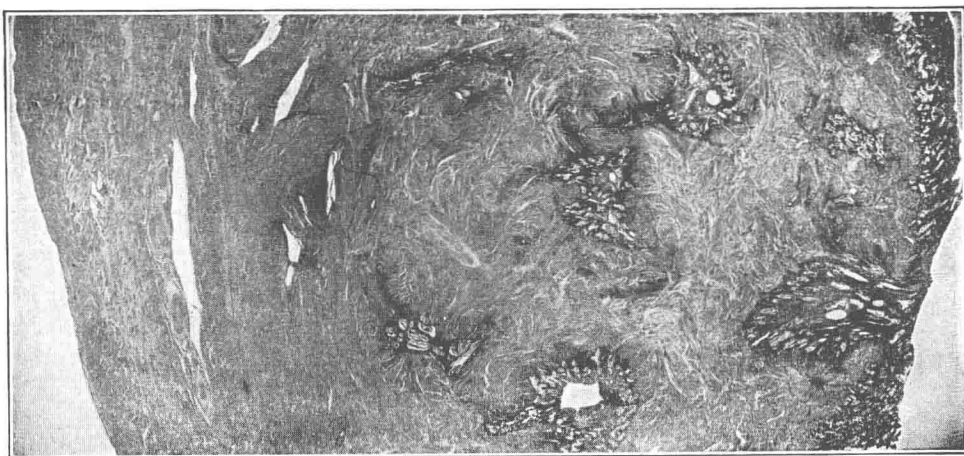


Fig. 11.—Section of the wall of specimen shown in Fig. 12. Notice the large gland areas extending through two-thirds of the wall. There is a peculiar coarseness of detail in these areas that causes the photomicrograph to resemble a drawing. Gyn. Lab.

Secondary Changes.—In addition to its primary structuré, a myoma may present secondary changes which the operator must watch for. One to look for is a noninfective necrobiotic process, probably due to devitalization from local circulatory disturbance, which causes whitish areas scattered through the growth, and later definite *hyaline degeneration*, which still later may progress to liquefaction (*cystic degeneration*). Occasionally, the white necrobiotic change involves a large area, as shown in Fig. 14. Figs. 15 and 16 show examples of extensive cystic degeneration, which may give fluctuation and cause difficulty in diagnosis between myoma and pregnancy.

If the cystic degeneration is not recognized and the differential diagnosis worked out before, there may be some trying moments of indecision when the soft fluctuating uterus is encountered in the opened abdomen. There have been