

involve both (Fig. 5, p. 35). Where such is the case, we have a uterine cavity lined with a mucosa which is surrounded by a thick zone of myomatous muscle and covered externally with a mantle of normal muscle of variable thickness. The myomatous thickening is diffuse in character, consists of bundles of fibres running in all directions and along the advancing margin gradually merging into the normal muscle, in contradistinction to the condition found in simple myomata, which are sharply circumscribed. Given such thickenings of the uterine wall, we may always suspect the presence of gland elements.

On examining the uterine cavity it is usually found that the mucosa at one or more points extends into the diffuse myomatous tissue beneath (Fig. 1, p. 10). This point is more readily verified by examining with a loup, when a careful scrutiny of the diffuse myomatous growth will discover small, round, irregular, triangular or oblong areas, composed of a waxy, fairly homogeneous tissue, lying between myomatous bundles. These areas correspond closely in appearance with the uterine mucosa, and with the glass one can make out punctiform openings, which are cross-sections of glands. Frequently such areas contain cyst-like spaces varying from .5 to 5 mm. or more in diameter (Fig. 5, p. 35, Fig. 19, p. 69). Other and larger cyst-like spaces are occasionally found. These have smooth inner surfaces and a lining of mucosa often 1 mm. in thickness. They are in reality miniature uterine cavities. Many of these cyst-like spaces contain fresh blood or yellowish blood pigment, the remains of old hemorrhages. The small cyst spaces may readily be mistaken for blood-vessels, but the larger ones are easily recognized. Among the most instructive cases reported are those of Lockstaedt.<sup>1</sup> In his Case 5 there was a diffuse myomatous thickening invading the posterior and part of the anterior wall. At several points the myoma had penetrated the outer muscular covering and sent prolongations as far as the peritoneum. On section

<sup>1</sup> Lockstaedt, Paul: Ueber Vorkommen und Bedeutung von Drüsen-schläuchen in den Myomen des Uterus. *Monatsschrift f. Geburtshülfe und Gynaekologie*, 1898, Bd. vii, p. 188.