

6. Lipoma of the rectum is a rare form of benign tumor, originating in the submucous or subperitoneal fat, and, according to Thomas, incapable of giving rise to malignant disease unless first converted into fibroma or myoma.

7. Other forms of benign growths, such as angioma, lymphoma, myoma, chondroma, are seldom met with in the rectum or large intestine.

It is to be noted that there are certain characteristics common to the group of benign tumors of the rectum and serving to differentiate them from the malignant growths about to be considered. These features of the benign tumor are :

- (1) The pedicle.
- (2) No invasion of the deeper tissues.
- (3) No tendency to break down *per se*; ulceration or sloughing usually caused by mechanical pressure.
- (4) No metastasis.
- (5) A tendency to encapsulation.
- (6) No constitutional effects.
- (7) No tendency to return when removed.
- (8) Of the malignant neoplasms of the rectum the one most commonly met with is

(1) Adeno-carcinoma or malignant adenoma. It is sometimes the result of cell changes in the benign growth and may develop primarily from the lymphatic tissue of the bowel. Under the microscope the constituent parts of benign and malignant adenoma are seen to be practically identical. The difference appears to be in the arrangement of the cells and follicles and their relations to surrounding tissues. In adenoma the new elements are circumscribed and often encapsuled, not extending beyond the basement membrane, while the essential characteristic of the carcinoma is the irregularity in the arrangement of the new elements and their invasion of the deeper tissues. While the benign growth tends to invade the lumen of the bowels while attached to its wall by a pedicle, the tendency of the carcinoma is to remain sessile, invading the deeper structures of the bowel wall. This is well shown in the specimen presented to-night. The surface of the carcinoma tends to break down and ulcers appear upon its surface, sometimes very early in the disease. A catarrhal condition of the bowel above the new growth leads to a mucous diarrhoea which, after a time, is not controlled by the invaded sphincter. The glandular cavities of the growth become distended with mucoid material, leading to degenerative changes in the deeper tissues; and at the same time there is an increase in the