

the intestine which has mesentery and which ends at about the third sacral vertebra; while the Americans name this distal portion the "first" part of the rectum.

Third, the American so-called "third portion of the rectum" is embryologically derived from the proctodæum or skin segment and embraces that muscular portion an inch or an inch and a quarter in length, described by Symington as the anal canal.

Embryologically the English view is the correct one as the rectum proper is derived from the cloaca which afterwards becomes divided into the bladder and rectum.

The sigmoid is only about one-half the calibre of the ascending colon, its sacculations are smaller and the longitudinal bands are greatly increased in width and strength. It receives its arterial supply from the sigmoid vessel, a large branch of the inferior mesenteric, and from the superior rectal, which is a direct continuation of the inferior mesenteric. Above, the sigmoid vessels anastomose freely with the left colic, and below with the middle hæmorrhoidal branches of the internal iliac. The lymphatic glands of the sigmoid are few in number and slow to take offence. This sparseness of lymphatics is, of course, a necessity because of the poisonous nature of the sigmoid contents, but this fact makes cancer of this organ less rapid in effecting glandular metastasis.

The lymph channels follow the arterial supply. The highest gland is the one described by Moynihan at the origin of the inferior mesenteric vessel.

Tumors in the iliac sigmoid are held closely in the iliac fossa. Tumors of the pelvic sigmoid are usually to be felt in the left hypogastrium and may often be moved to the right of the mid-line, or, by bimanual examination be discovered in the pelvis, or possibly directly palpated with the finger in the rectum if intussusception exists. If there is no obstruction there is much less gastrointestinal disturbance than with tumors involving the cæcum and ascending colon. In suspected tumors of the sigmoid, the bowel should be thoroughly cleared out in order to eliminate the possibility of mistaking scybalous masses for tumor. In doubtful cases anæsthesia, or the examination of the patient while in a warm bath to relax the abdominal muscles, is exceedingly advantageous. Tumors lying in the lower sigmoid can often be detected by the sigmoidoscope, and points of narrowing may be discovered by radiographs after introduction of bismuth mixtures.

Among the symptoms of tumor of the sigmoid must be placed disturbance of function causing irregularity of the bowels, and gripings attended by discharges of mucus, blood, and occasionally a little pus. These mucus discharges are not necessarily accompanied by fæces. Very