

supposed that it shares in the disturbances set up in the intestinal tract by such conditions as constipation, diarrhoea, gastric and intestinal dyspepsias from whatever source,—anything, in fact, producing pathological changes in the intestinal mucosa. The intestinal disturbance being so common, one might be inclined to wonder why appendicitis does not occur with even greater frequency than it does. But the reason is that, ordinarily, the intestinal mucosa is able to overcome the attacking agents and their toxins and the appendix may, perhaps, share in the victory. But if it is hampered by abnormal conditions such as strictures, concretions in the lumen, adhesions etc., the vital resisting power is lowered, it is unable to overcome the septic horde that infest its lumen and appendicitis is the result. Even the anatomical and physiological defects may by themselves be enough to lower the resisting power of the appendix sufficiently to keep it from throwing off the septic organisms and toxins that irritate it.

The cæcum and appendix comprise that portion of the colon that lies below the level of the ileo-cæcal valve. It is a blind pouch two and one half inches in length. Developed in the region of the umbilicus, about the middle of foetal life it descends to the right iliac fossa where it becomes attached by the posterior layer of peritoneum or by meso-cæcum when such exists. Irregularities in its mode of receding from the region of the umbilicus will account for abnormal positions of cæcum. Normally lying on the psoas magnus muscle in the right iliac fossa, it may be found lying as high as the kidney or liver; low, dipping into the true pelvis; near the region of the umbilicus where non-descent has occurred, and in some very rare cases reported, near the

spleen and in left iliac fossa. In the case of a twelve year old girl operated on during last summer, the cæcum was found considerably higher than its normal position, and the appendix lying behind it extended upwards and backwards, its distal end, gangrenous, was lying in an abscess cavity near the lower pole of kidney. In this case the pain and tenderness corresponded exactly to the position of the appendix. It was felt in the loin and well above the superior iliac spine. Drainage was made from behind. There was no pain and tenderness at McBurney's point. The appendix itself is a musculo-fibrous prolongation of the cæcum. It has a lumen about the size of a goose quill, varies in length from 2 to 6 inches and is more or less completely invested with peritoneum. It is lined with a mucous coat which lies on a relatively thick sub-mucosa composed of connective tissue, arterial openings and lymphatic spaces. The appendix is especially rich in a lymphoid tissue, the mucous lining itself being largely made up of lymphoid cells. The arrangement of the muscular fibres is mostly longitudinal, the circular fibres when they exist at all, are not well developed. This, of course, accounts for the feeble expulsive power of the appendix and its consequent inability to dislodge bodies that may work themselves into its lumen from the cæcum. The valve of Gerlach which was supposed to guard the lumen at the appendiculo-cæcal orifice can only occasionally be demonstrated, and when it does seem to be present, faecal matter has sometimes been found in the appendicular cavity, which seems to discredit somewhat the alleged function of this rather inconstant entity. The blood supply of the appendix in the male lies in the small appendicular artery which lies along the free border of the mesentery and