

- (5) Appendix adheres to iliac fossa.
- (6) Appendix adheres to omentum.
- (7) Appendix adheres to the anterior abdominal wall.

(8) Occasionally the cæcum and appendix are found high up in the cavity lying over the kidneys, or just below the liver. Rolleston thinks this to be a *developmental* fault, the cæcum having not descended from its foetal position. Kelynack, on the other hand, favors the idea of an *early peritonitis* anchoring it, as it were. In the early foetal position the appendix lies to the right or outer side of the cæcum, and is dragged into its normal adult position by the descending cæcum and ileum, a rotation of the large gut occurring as it descends. Incomplete rotation may account for those cases in which the appendix lies to the outer side of the cæcum, although no signs of disease are present (No. 3 of "Normal Variations").

The records of some writers show that in a certain number of cases the appendix is extraperitoneally placed. One gives about thirty-nine per cent. of cases as the proportion. We have not yet found what we could justly term an extraperitoneal appendix. It has always been distinctly inside the cavity.

The structure of the appendix vermiformis is grossly the same as that of the intestines, showing serous, muscular, submucous and mucous coats. The marked peculiarity is the large amount of lymphadenoid tissue present in the mucosa and beneath it. Bland Sutton compares it on this account to the tonsil, using the term "abdominal tonsil," and remarks that such tissue is always peculiarly open to infection, especially in the young. Its length varies considerably, from one-half inch to nine inches. Kelynack gives, as his average, three and one-half inches; Treves, average four inches, limits one to six inches; Fitz says his longest was "nearly six inches." Our own measurements show an average of 3.835 inches.

At the opening into the cæcum is often seen a small fold of mucosa, known as the valve of Gerlach. This is, at most, a very imperfect valve, and probably has no such function.

A perfect lumen is generally seen in the appendix, varying considerably in diameter in different cases, and modified greatly by circumstances, *e.g.*, cicatrization, at one point giving rise to dilatation, at another, etc. Rolleston found one hundred and eighty-three out of two hundred and thirteen pervious throughout; in sixteen, partial obliteration and, in four, complete obliteration. Fitz, on the other hand, says that more or less obliteration is common; we have not found it so. The seat and length of obliteration may vary greatly, and the results will vary also. A contracted outlet is thought by some to be the most dangerous change