

pylorus, and thus occasion obstruction, and (2) at operation these hypertrophied folds may readily lie in the way of nice suture should pyloroplasty be attempted, and (3) they may easily be damaged if an attempt at the Loretta operation is made. Damage to these folds of mucosa might cause ulceration leading later to stricture of the pylorus. Occasionally there has been described a fibrous hyperplasia of the submucosa.

Careful measurements have been made of the varying thicknesses of the several layers of the pylorus, and in every instance the circular muscular fibre has been found increased in thickness. Measurements have been made also of the pyloric lumen to determine, at least for the pathologist, a standard of size for this lumen. It is an interesting fact in this connection that the degree of the stenosis is in no way proportioned to the degree of the hypertrophy. In all cases measurements have been made in the presence of the tumor, and narrowing of the lumen has been determined.

There are certain secondary changes present in the stomach which are of interest. Muscular hypertrophy of the wall of the pyloric segment has been described. In certain cases of long duration a dilatation of the stomach wall has been found. In all of my personal cases the hypertrophy was present, the process not having gone on to dilatation. The stomach is larger than normal. The cesophagus is found dilated, caused by the back pressure from the stenosis. The intestine is collapsed and empty. There is little or no evidence of a catarrhal process in the mucous membrane of the stomach. At operation the surgeon finds the pyloric tumor and sees the secondary changes in the stomach and the collapsed intestine. The biopsy confirms the findings of the necropsy.

Fortunately, in those cases which have come to autopsy and to operation, the clinical story is known in whole or in part. You are doubtless familiar with this story. It cannot be repeated too often. It should be indelibly fixed on the mind of the medical man, whether he be internist or surgeon. This is the picture, viz.:

An apparently perfectly healthy child is born; it is breast-fed; upon the third or fourth day it vomits. There is perhaps noticed a little lack of appetite. The child does not nurse as vigorously as he should. The lack of appetite is often overlooked. Upon the third or fourth day after birth the mother's breast milk appears in quantity. This may be the occasion for the vomiting of the baby having an obstruction at the pylorus. In some 52 cases of pyloric stenosis the average time of the