

CASE I.—*Phthisis ; small ulcers in ileum ; ulcers in cæcum and colon ; an ulcer in duodenum half an inch outside pyloric ring ; cyst of Brunner's gland.*

J. I., middle-aged man, died of phthisis in Montreal General Hospital. No special symptoms. The lungs showed cavities ; the heart valves were normal. There were a few small ulcers in the lower patches of Peyer, and a number of small ulcers in cæcum and colon. Just outside the pyloric ring there was a loss of substance in the posterior wall of the duodenum 1.5 cm. in diameter. The base was smooth, the edges overlapped so that the actual diameter of the ulcer was much greater than was apparent. Not far from this there was a small dark spot, with a little depression leading into a definite cyst-like cavity in the submucosa the size of a large pea, which contained a thick turbid fluid. Brunner's glands were very distinct, but not more so than is often seen when the mucosa is thin, and not deeply congested.

The open ulcer with undermined edges had possibly resulted from the rupture of a cyst of a Brunner's gland similar to the one which existed in its vicinity. One can readily understand that under such circumstances the thin mucosa covering the cyst, undermined and separated from its blood supply, might be eroded, or, after bursting, the acid gastric juice might dissolve the thin edges. In debilitated persons, or in conditions of portal congestion, such a small erosion might not readily heal, but rather increase, and be the starting point of an ulcer. Brunner's glands are not often found diseased, but they belong to the racemose variety in which cystic dilatation of acini is not uncommon. They exist most abundantly on the first portion of the duodenum, the region most prone to the disease.

Duodenal ulcer is not so frequent as the ventricular. I am sure, from my own experience, that it would be oftener found if the stomach and duodenum were opened together, *in situ*, and the mucous membrane examined. If, as is so commonly done, the stomach is cut away just beyond the pyloric ring, the chances are that, if an ulcer is present, the incision passes through it. I have found nine cases in about one thousand dissections.

Males are more subject to ulcer of the duodenum than females.