Critical Evaluation of Biopsy Technics for the Diagnosis of Gastritides

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In evaluating gastric suction biopsies, Shiner\textsuperscript{12} came to the conclusion that, in cases in which the gastroscopic diagnosis of hypertrophic gastritis was made, nothing of significance was found microscopically. Benedict\textsuperscript{1} with similar experiences based on gastroscopic biopsies, stated that the disease entity "hypertrophic gastritis" does not exist. However, if hypertrophic gastritis is defined as thickening of the gastric mucosa without destruction of glands, then there is ample evidence that this disease exists.

In the author's book on gastritis\textsuperscript{10} 3 different forms were described and abundantly illustrated by photomicrographs: interstitial hypertrophic gastritis, in which the thickening is due to interstitial cellular infiltration (Fig. 1); proliferative hypertrophic gastritis, where enormous nodular proliferation of the surface epithelium exists, while the glandular apparatus is intact (Fig. 2); and glandular hypertrophic gastritis, in which extensive hyperplasia of the glandular apparatus often triples the thickness of the mucosa (Fig. 3). Neubürger,\textsuperscript{7} Schafer,\textsuperscript{9} and many others have published similar pictures. The thickness of the mucosa may simulate presence of a true tumor, and, admittedly, some findings, especially in the glandular form, may not be true inflammation, but may belong to the so-called gastropathies. None of the 3 forms described above was found by Shiner or Benedict in their biopsy material. The illustrations described above were based on sections through the entire gastric wall, usually obtained at operation without the use of ligatures and clamps; the conclusions of Benedict\textsuperscript{1} and others, that hypertrophic gastritis does not exist, were based on gastroscopic or suction biopsies. The only permissible conclusion would be that hypertrophic gastritis cannot be found in such biopsies.

For reasons to be discussed presently, it is indeed difficult to find hypertrophic gastritis by suction or gastroscopic biopsy; yet, it is not impossible, as evidenced by the first of the following cases.
CASE REPORTS

Case 1

F. E. H., 44 years of age, complained of epigastric pain, diarrhea, and general weakness. At gastroscopy, marked edema of the lower portions of the stomach was seen with a great many superficial erosions. In the upper portions of the posterior wall the mucosa was nodular, as is usual in hypertrophic gastritis. Several suction biopsies were taken with the Australian suction tube. Two of these presented normal mucosa. In the third (Fig. 4), cellular infiltration below the surface epithelium was found (superficial gastritis), corresponding with the edema seen at gastroscopy. In the lower part of the section there was marked patchy interstitial infiltration extending from the muscularis mucosae to the surface, indicating hypertrophic interstitial gastritis.

Fig. 1. Microscopic section of the gastric mucosa in a case of chronic hypertrophic interstitial gastritis. Patchy foci of cellular infiltration extend upward to the surface. Muscularis mucosae thickened and split. Proliferation of the surface epithelium is beginning. (From Schindler, *Gastritis*, Grune & Stratton, New York)

Fig. 2. Chronic hypertrophic proliferative gastritis. The glandular portion of the gastric mucosa and the muscularis mucosae are normal. Only the surface epithelium shows enormous irregular nodular proliferation with infiltration. (From Schindler, *Gastritis*, Grune & Stratton, New York)