

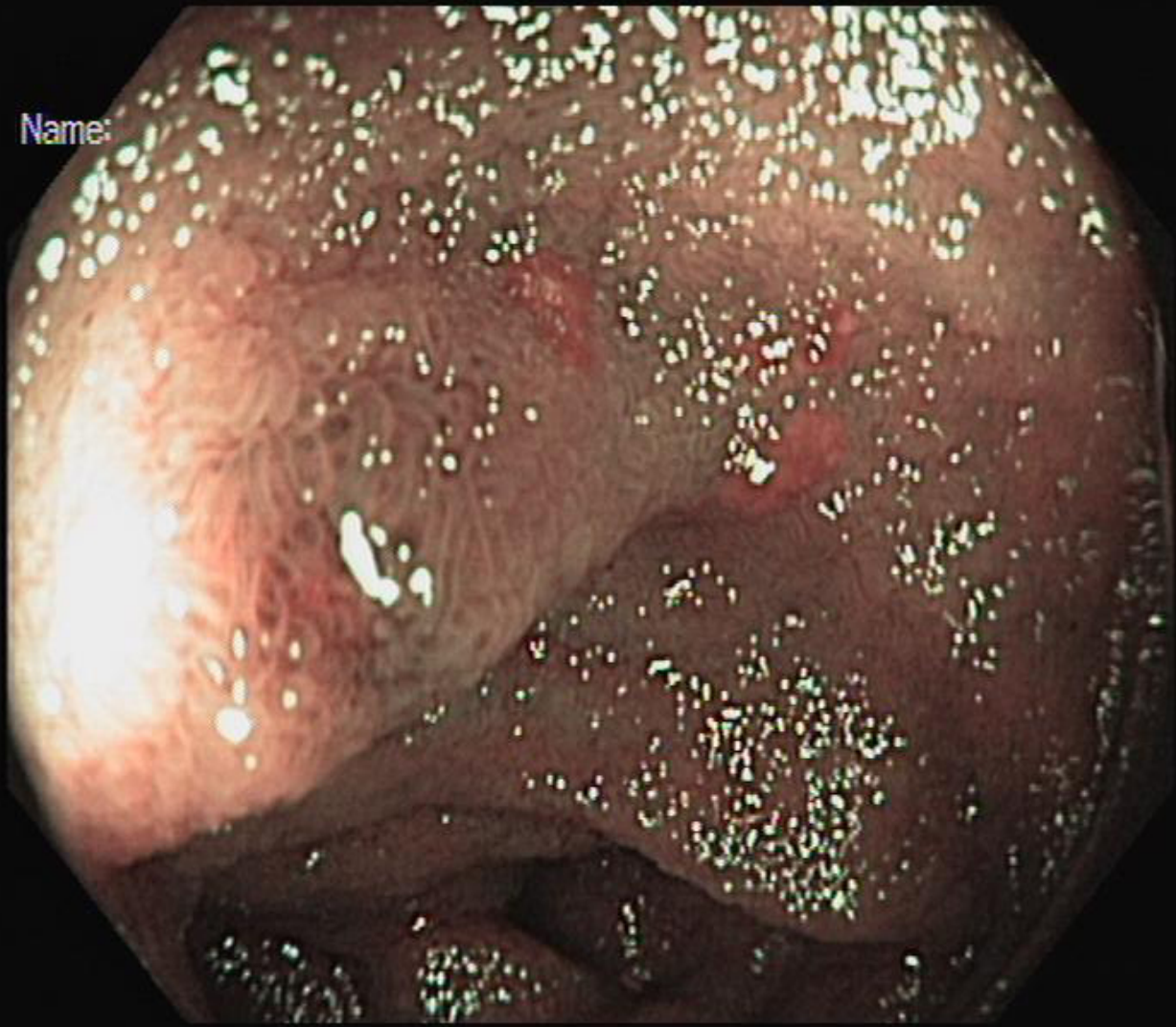
# October 2012

Screening colonoscopy of an asymptomatic 51-year-old male with positive family history for Crohn's disease shows minute erosions within the terminal ileum.

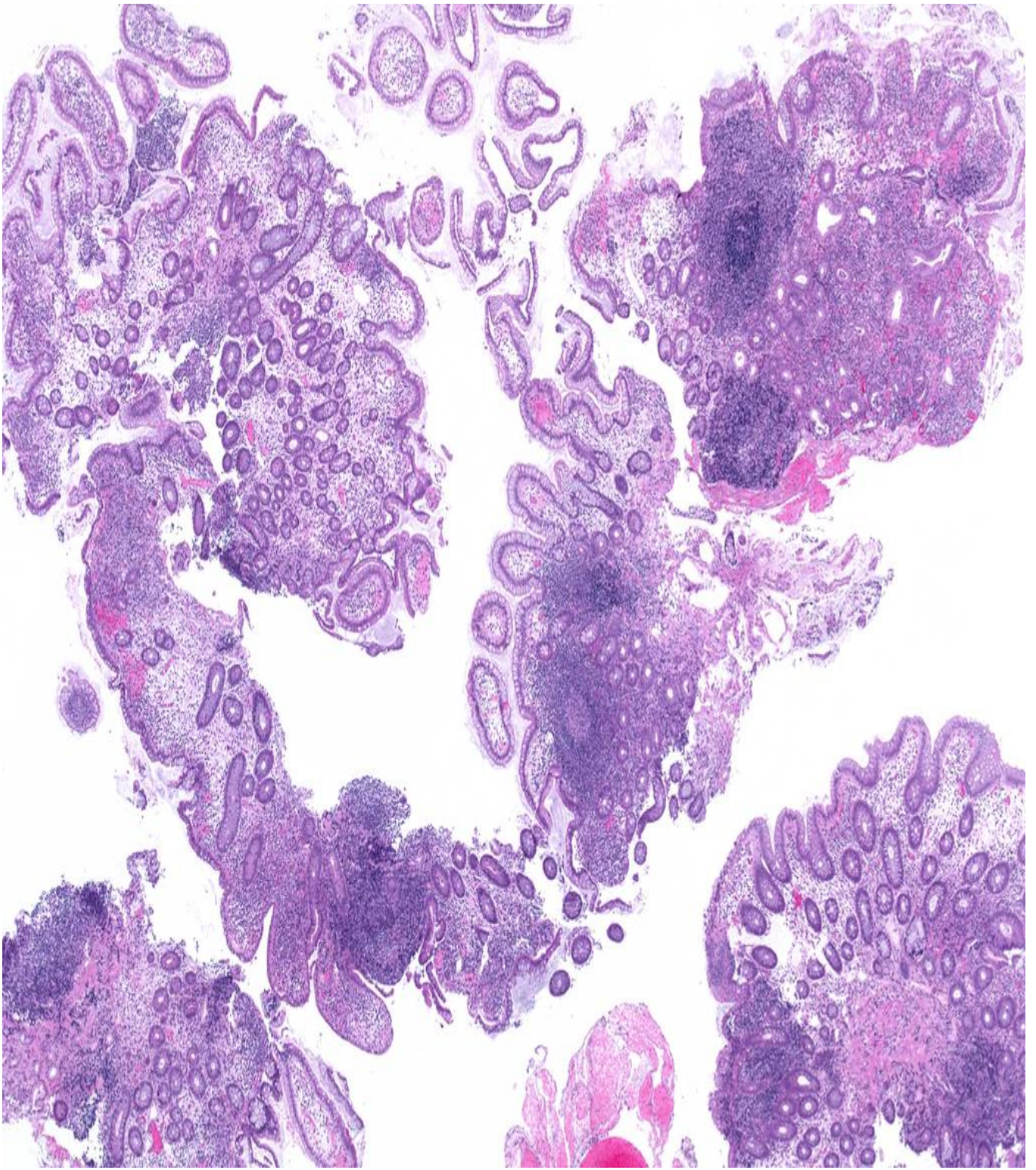
What is your diagnosis?



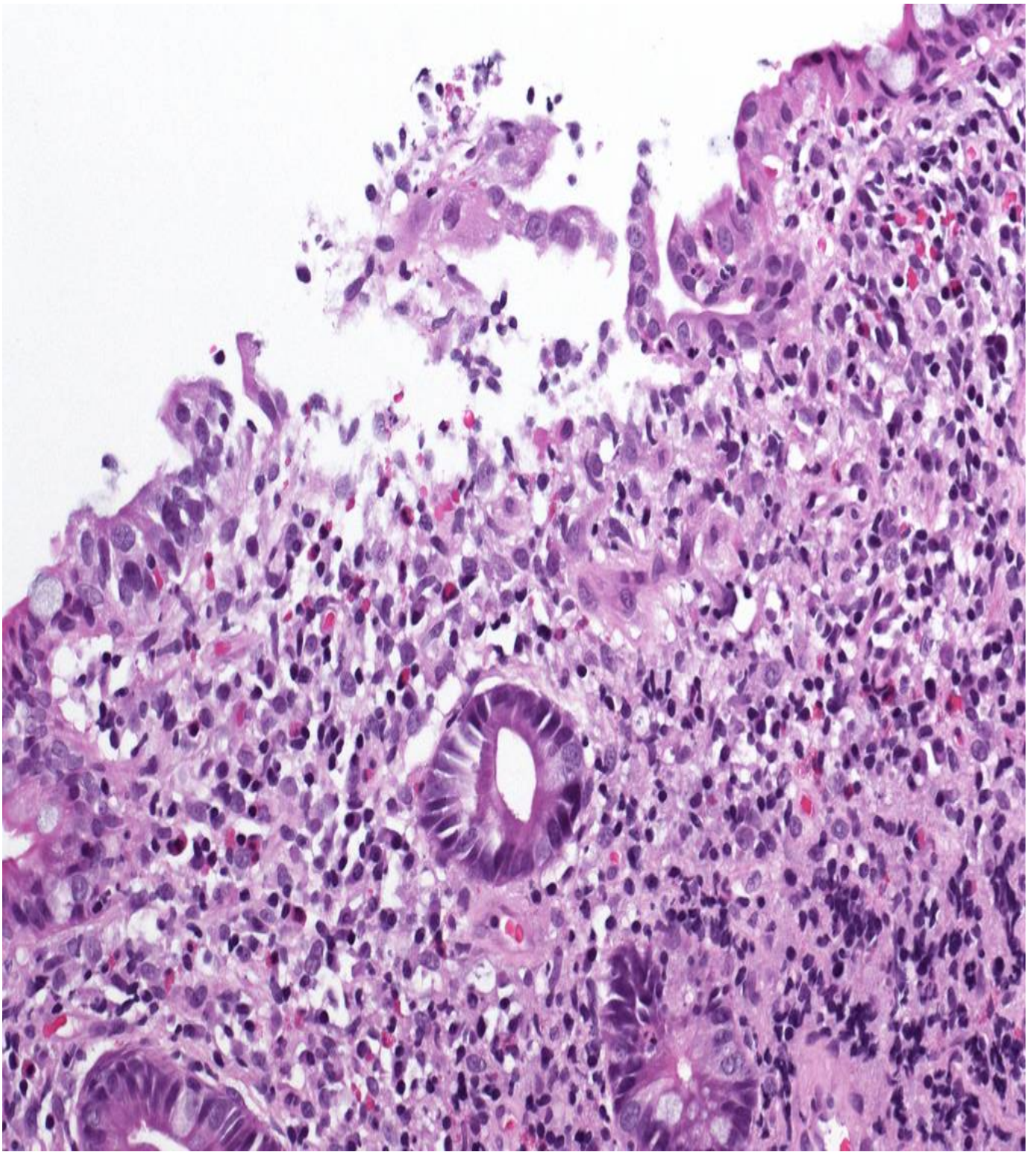
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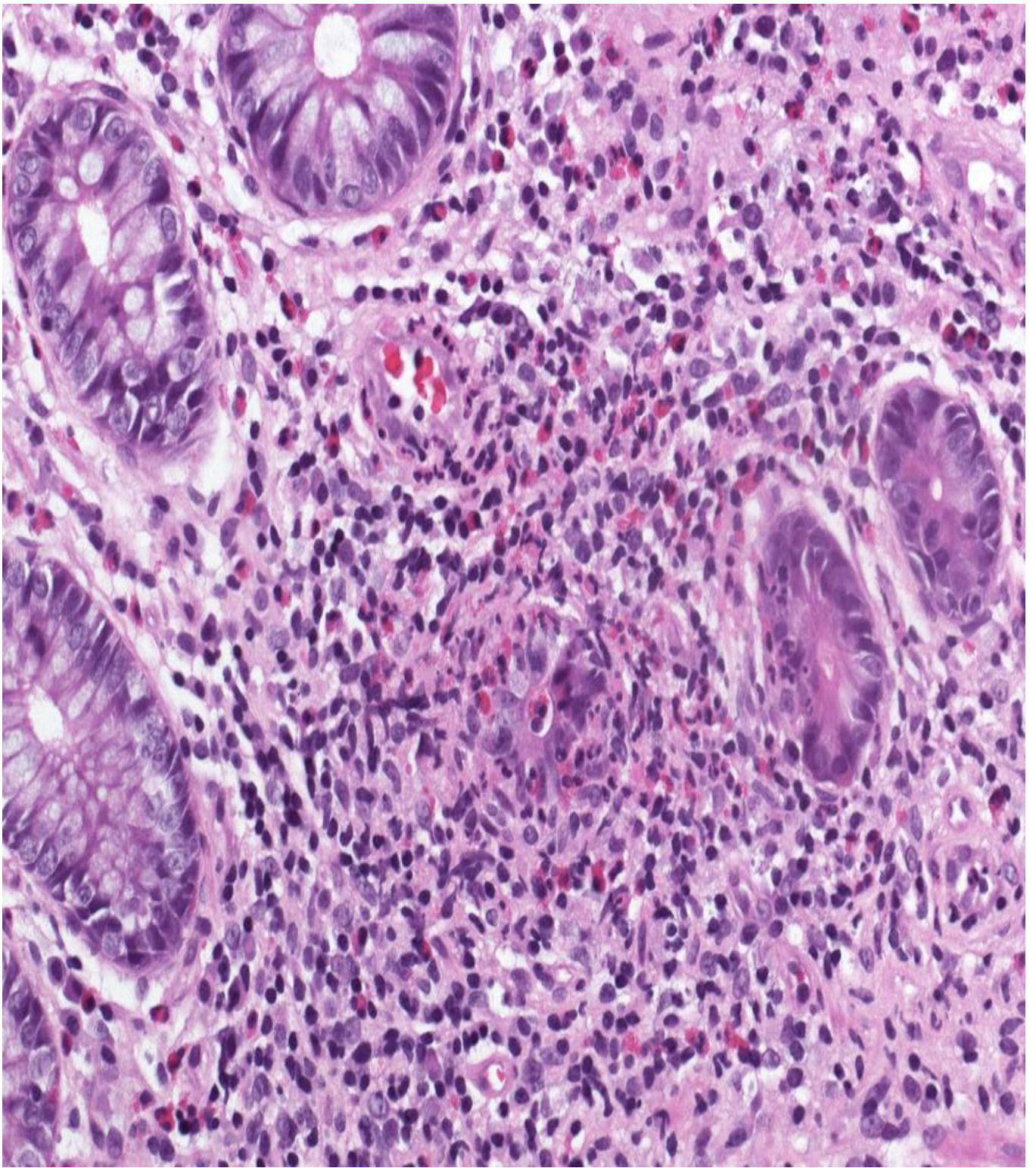




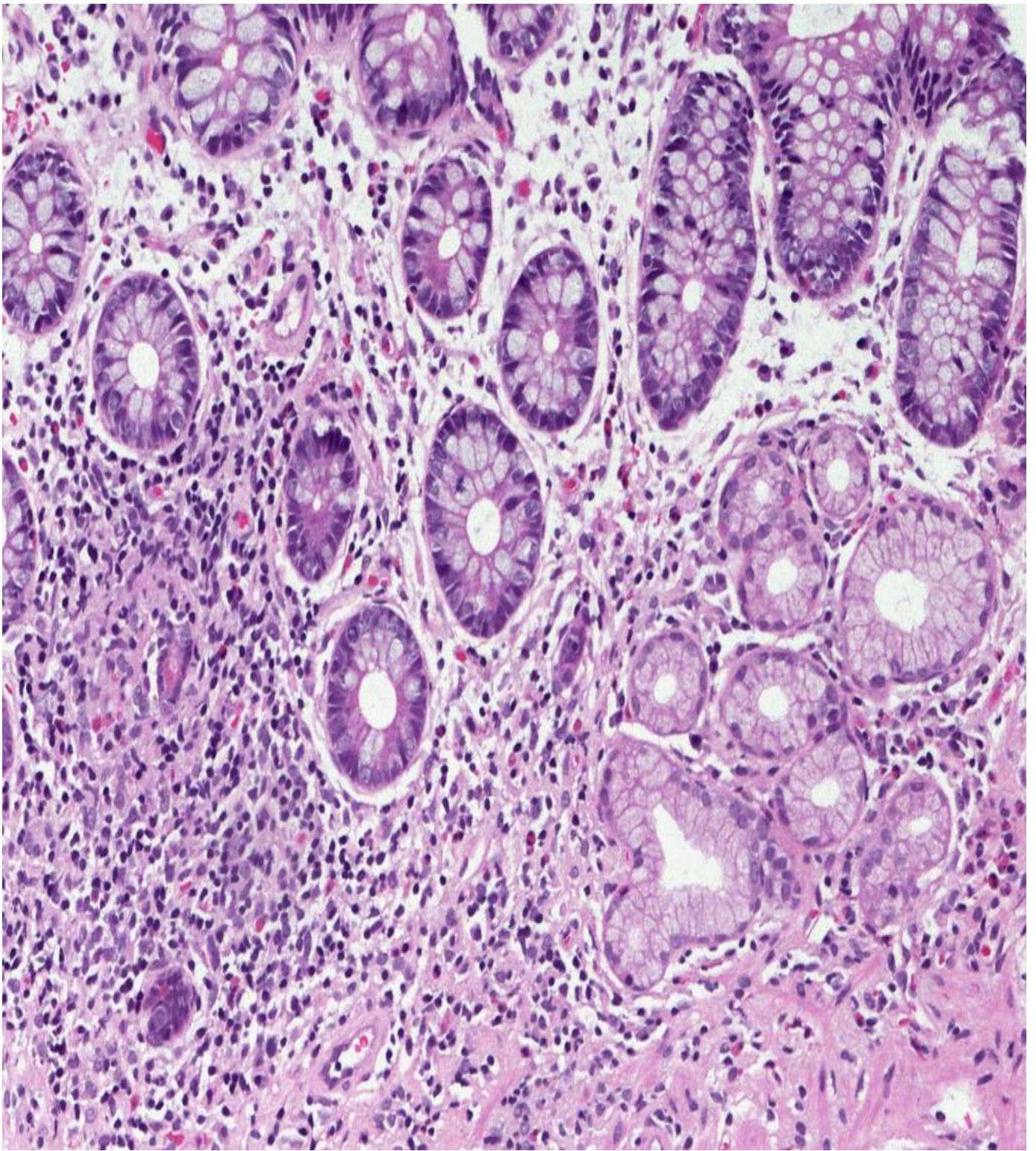




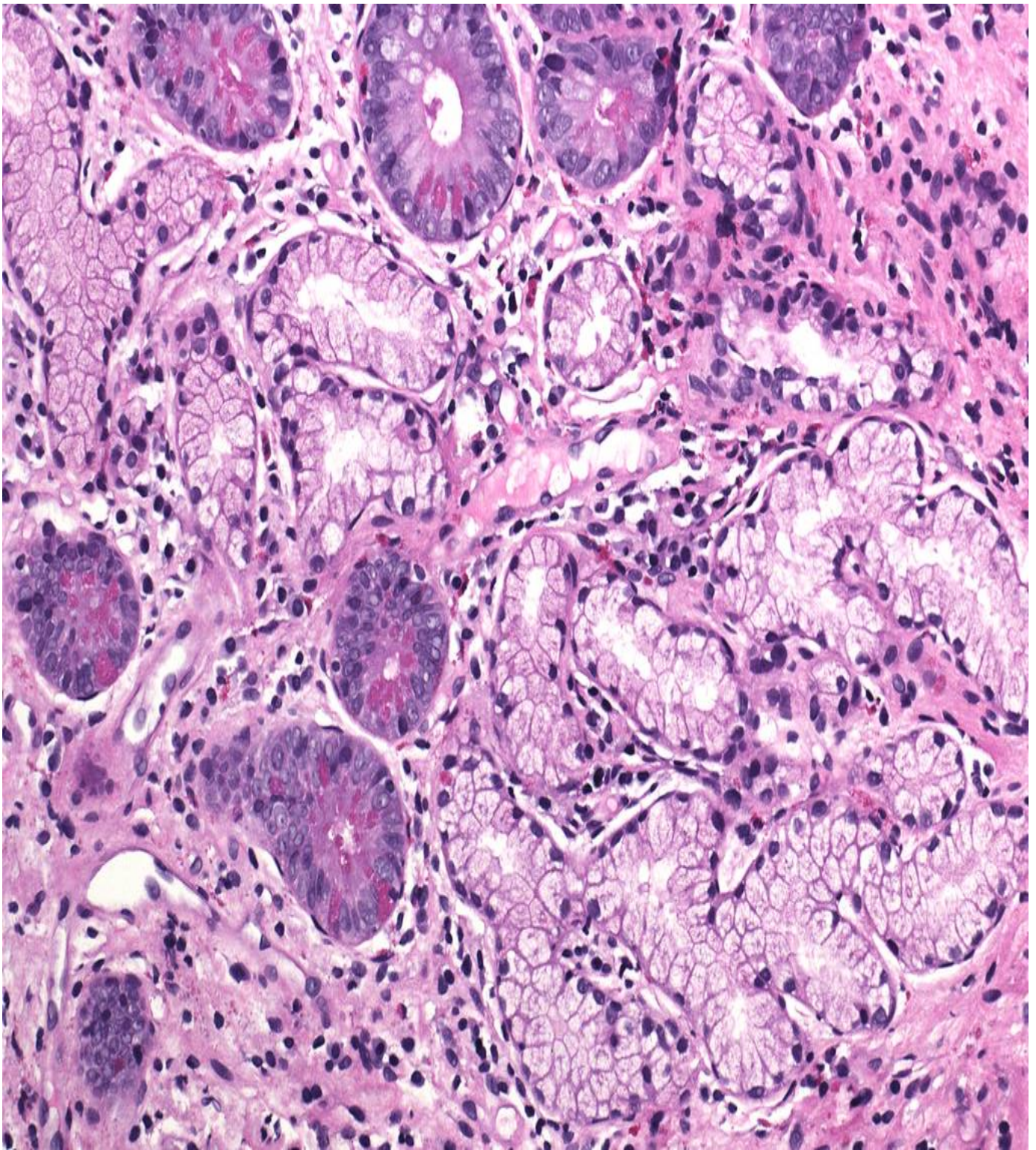












## Diagnosis

Crohn's disease with superficial erosion and pyloric gland metaplasia.

## Comment

Histology shows small bowel biopsies with mild alteration of the mucosal architecture. There is active discontinuous inflammation with polymorphs infiltrating the crypt epithelium and superficial erosion. Aggregates of pseudopyloric mucous glands are seen in the lower half of the mucosa, i.e. pyloric gland metaplasia (PGM).

By definition, metaplasia represents a reversible change in which one differentiated cell type is replaced by another differentiated cell type, usually meant as an adaptive substitution by cells better able to withstand an adverse environment. PGM of the terminal ileum, also referred to as pseudopyloric gland metaplasia or mucus gland metaplasia, is a feature indicative of chronic mucosal inflammation, commonly related to mucosal ulceration and repair. The lesion can be observed in 2-27% of ileal biopsies from patients with Crohn's disease and is common in ileal resections. In addition, PGM may be found in patients with ileal pouch-anal anastomoses, in this setting indicating Crohn's disease or chronic antibiotic-refractory pouchitis. Of note, PGM has so far not been identified in ileal biopsies from patients with ulcerative colitis, with or without "backwash" ileitis. Thus, PGM remains to be a sensitive indicator of persistent ulceration with inflammation in the terminal ileum, particularly in Crohn's disease.

### For further reading

- › Goldstein N, Dulai M. Contemporary morphologic definition of backwash ileitis in ulcerative colitis and features that distinguish it from Crohn disease. *Am J Clin Pathol.* 2006;126:365-76.
- › Kariv R, Plesec TP, Gaffney K, Lian L, Fazio VW, Remzi FH, Lopez R, Goldblum JR, Shen B. Pyloric gland metaplasia and pouchitis in patients with ileal pouch-anal anastomoses. *Aliment Pharmacol Ther.* 2010;31:862-73.

### Presented by

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