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Case of the Month Answer – September 2008

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These septa in the appendix are examples of appendicular diaphragms, associated with signs of remote appendicitis, rather than acute, with accumulation of mucin in the lumen and subsequent flattening of the mucosa. Appendicular diaphragms are extremely rare. There is only one reported case in the literature of a 19-year-old man with acute appendicitis thought to be due to a developmental appendicular diaphragm.[1] Developmental mucosal diaphragms occur elsewhere in the gastrointestinal tract, having been reported in the pylorus, duodenum, and cecum.[2] Several series and case reports[2,3] have suggested that diaphragm disease in the small intestine and colon, but not the appendix, is induced by non-steroidal anti-inflammatory drugs.

Diaphragm disease should be considered as an explanation for anemia, abdominal pain, change in bowel habit or occult blood in the stool, especially if the patient has a history of NSAID use. Endoscopy is likely to identify most lesions and prevent unnecessary surgery. Appendicular diaphragms, though rare, seem to present with superimposed appendicitis and should be considered in the differential diagnosis.

1. Chou ST, Hall J. An Appendicular Diaphragm: A Unique Case. Pathology. 1978;10:83-5.
2. Lang J, Price AB, Levi AJ, Burke M, Gumpel JM, Bjarnason I. Diaphragm disease: pathology of disease of the small intestine induced by non-steroidal anti-inflammatory drugs. J Clin Pathol. 1988;41:516-526.
3. Smith JA, Benoit P. Endoscopic therapy of NSAID-induced colonic diaphragm disease: two cases and a review of published reports. Gastrointestinal Endoscopy. 2000;52(1):120-5.