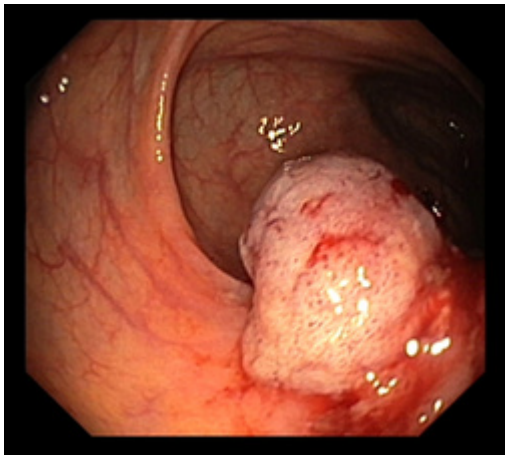
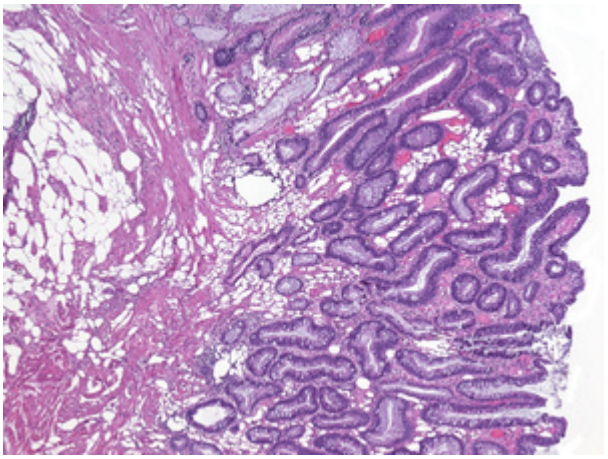
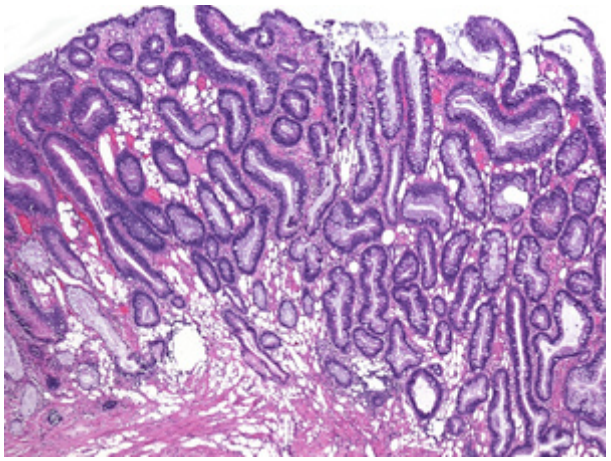
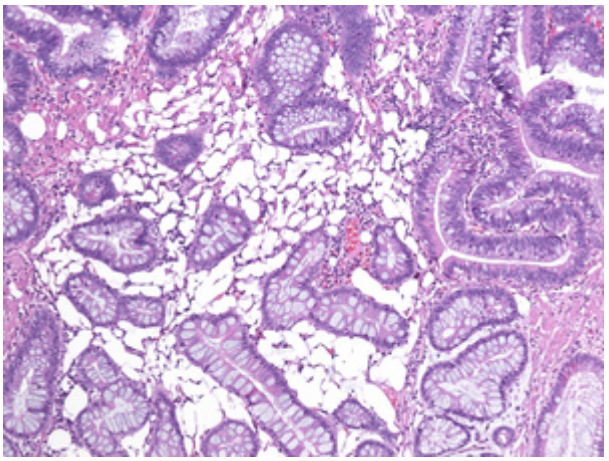
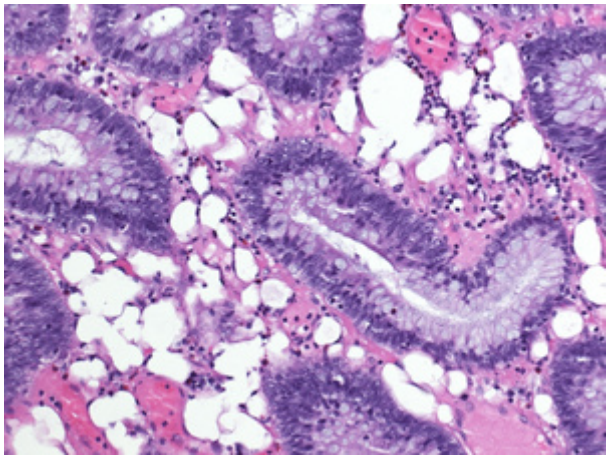
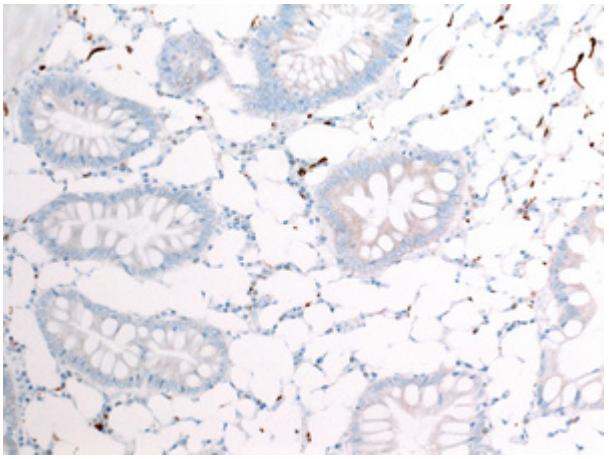
November 2015

Polypoid lesion of the Ileocaecal (Bauhin's) valve.

What is your diagnosis?

Diagnosis:

Tubular adenoma with "pseudolipomatosis".

Comment:

An asymptomatic 68-year-old male was referred for endoscopic colorectal cancer screening. Colonoscopy revealed an irregular sessile polyp of the ileoceacal (Bauhin's) valve, suspicious for malignancy (Panel A). The lesion, measured 1.2 cm in largest diameter, was removed by polypectomy. Histology showed a polyp with

tubular architecture, made up by cells with basophilic cytoplasm and hyperchromatic pseudostratified nuclei, qualifying for low grade dysplasia (intraepithelial neoplasia). In the submucosa, mature adipose tissue was seen. This finding is typical for the site, from which the lesion was removed and does not indicate the presence of a lipoma. Between the dysplastic glands there were vacuoles of varying size and diameter, suggestive of infiltration of the mucosa by adipocytes. In contrast to the submucosal adipocytes, however, there was no clear delineation of these vacuoles, and there were no cell membranes (Panels B-E). The S-100 stain was negative (Panel F). A final diagnosis of tubular adenoma with low grade dysplasia and pseudolipomatosis was made.

Pseudolipomatosis (syn. micropneumatosis) is a rare lesion within the gastrointestinal tract. Its frequency has been estimated 0.02-0.03% in colonoscopy series. Please note, it is a typical finding in autoimmune atrophic gastritis (ENGIP case June 2013 - Panel G). The pathogenesis is controversial. It is believed to be an iatrogenic change, which results from penetration of gas into the mucosa during endoscopy. Gas forming bacteria may be a contribution factor. Upon endoscopic inspection the lesion may appear as whitish or yellowish, singular or multiple, mucosal plaques, but often gross inspection is unremarkable. This is in contrast to pneumatosis (syn. pneumatosis cystoides intestinalis) which generally encounters as polypoid lesions or irregular thickening of the bowel wall. This is due to intramural gas accumulation. In these cases histology shows numerous gas-filled cysts lined by multinucleated giant cells.

Differential diagnosis: Pseudolipomatosis is microscopically similar to mucosal lipomatosis, but not composed of adipocytes. Submucosal lipomas are not uncommon in the gastrointestinal tract, especially in the large bowel. They may extend into the mucosal layer. Significant amounts of adipose tissue in the lamina propria are however unusual. Two cases of "adenolipoma" of the colon have been described. The provided images are not entirely convincing regarding the adenomatous components of the lesion.

For further reading:

- Kunimura T, Ooike N, Sasajima Y, Inagaki T, Morohoshi T. A resected case of adenolipoma of the colon: is it a new entity of the colonic tumor? Am J Gastroenterol. 2001;96:611-2.
- Alper M, Akcan Y, Belenli OK, Cukur S, Aksoy KA, Suna M. Gastric pseudolipomatosis, usual or unusual? Re-evaluation of 909 endoscopic gastric biopsies. World J Gastroenterol. 2003;9:2846-8.
- Di Tommaso L, Damiani S. Colonic adenolipoma with lipoblast-like cells. Histopathology. 2004;44:400-1.
- Brevet M, Chatelain D, Bartoli E, Geslin G, Delcenserie R, Braillon A, Sevestre H, Dupas JL. Colonic pseudolipomatosis: clinical, endoscopical and pathological features in nine cases. Gastroenterol Clin Biol. 2006;30:9-13.
- Koreishi A, Lauwers GY, Misdraji J. Pneumatosis intestinalis: a challenging biopsy diagnosis. Am J Surg Pathol. 2007;31:1469-75.

Presented by:

Dr. Catarina Calle, Portugal, and Dr. Heinrich Leskowschek and Dr. Cord Langner, Austria.