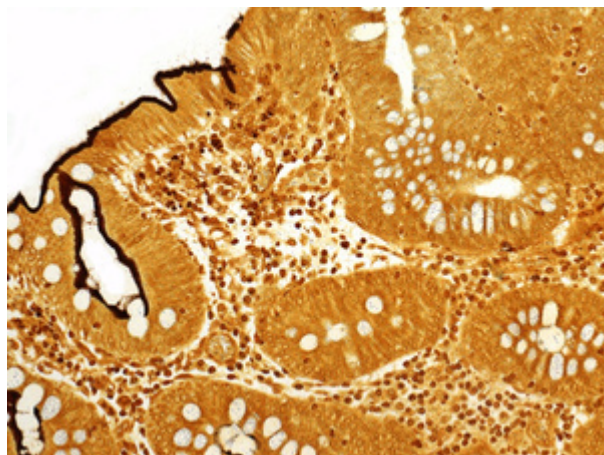
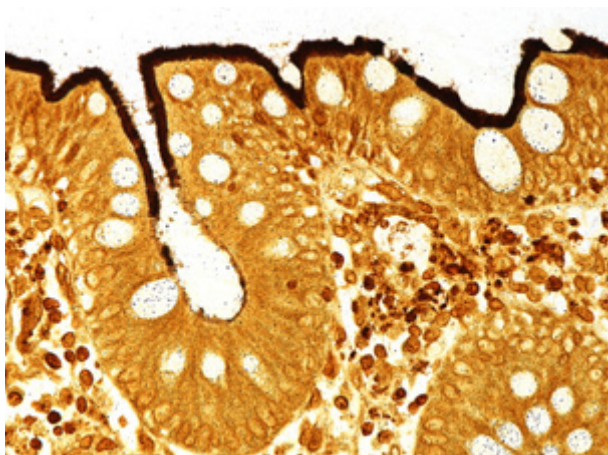
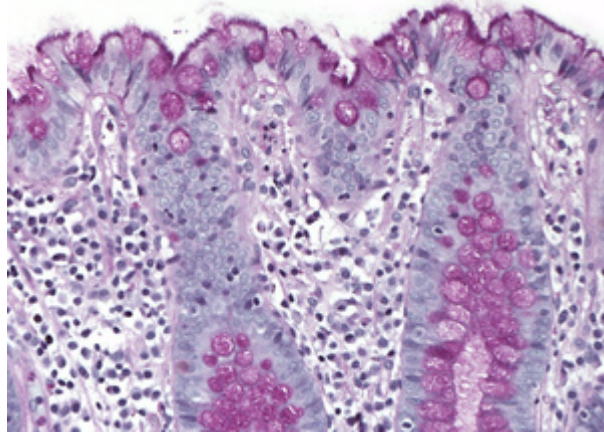
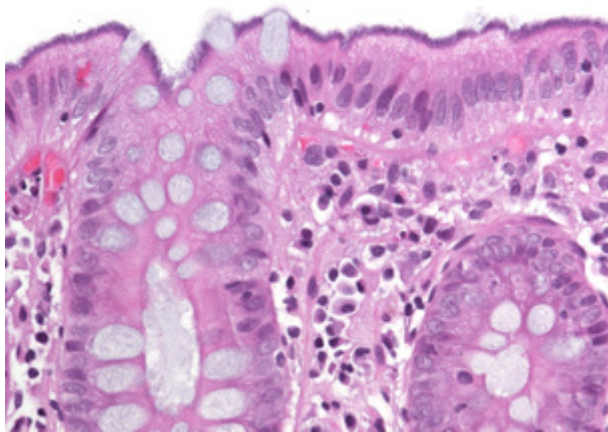
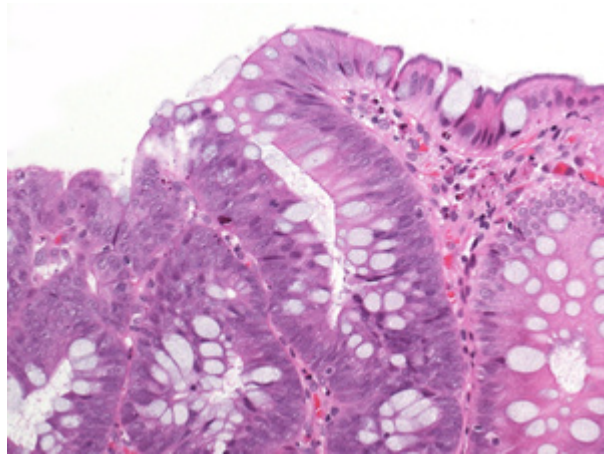
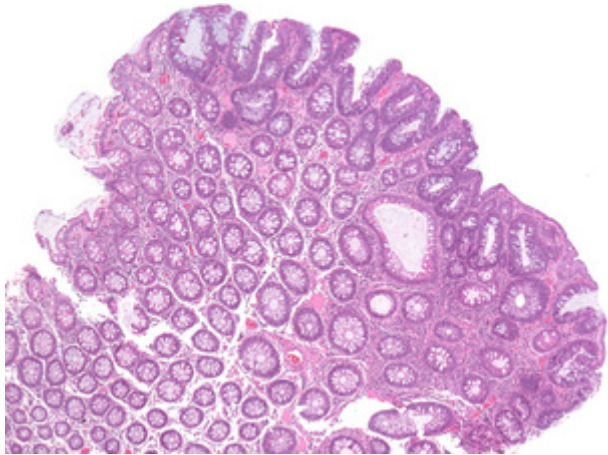


# March 2014

Screening colonoscopy in a 60-year-old male: biopsy material from a polyp at the hepatic flexure.

What is your diagnosis?



## Diagnosis

Intestinal spirochetosis (and tubular low-grade adenoma).

## Comment

Histology shows a tubular low-grade adenoma (Panel A). The adjacent non-neoplastic mucosa demonstrates preserved crypt architecture and normal cellularity within the lamina propria. Here a basophilic band with fuzzy appearance can be seen, covering the mucosal surface, yet sparing goblet cell orifices (Panels B-C). The

band is positive on PAS stain (Panel D). Silver impregnation (Grocott or Warthin-Starry silver stain) identifies densely packed spirillar bacteria within the band (Panels E-F), rendering final diagnosis of intestinal spirochetosis.

Intestinal spirochetosis is an uncommon finding, with male predominance and high prevalence in developing countries. *Brachyspira aalborgi* and *Brachyspira pilosicoli* are responsible for most cases. The disorder can be found in a patchy distribution in any part of the colon (also the appendix), and it is not associated with chronic or active inflammation, with architectural disturbance or with mucosal injury. Differential diagnosis includes prominent glycocalyx and enteroadherent *E. coli*.

The clinical impact is still unclear, especially because the infection often is detected incidentally in patients after a colonoscopy performed for different reasons (like in our case). Koteish et al. noticed two different settings of presentation: children usually have symptoms (such as diarrhoea, abdominal pain or rarely rectal bleeding) while adults are typically asymptomatic. Some cases may be related to HIV infection. Antibiotic therapy leads to a complete recovery.

### For further reading

- › Koteish A, Kannangai R, Abraham SC, Torbenson M. Colonic spirochetosis in children and adults. *Am J Clin Pathol.* 2003;120:828-32.
- › Uhlemann ER, Fenoglio-Preiser C. Intestinal spirochetosis. *Am J Surg Pathol.* 2005;29:982
- › Chopra S, Wu ML. Specimens from biopsies of colorectal polyps often harbor additional diagnoses. *Patholog Res Int.* 2013;2013:570526. doi: 10.1155/2013/570526. Epub 2013 Dec 24.

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