



Chapter 2

Polyps Adenomas Lipomas

Case 8	Pseudopolyp
Case 9	Polyp after intravenous administration of contrast medium
Case 10	Two polyps (rectum/sigmoid colon)
Case 11	Pedunculated polyp (ascending colon)
Case 12	Pedunculated polyp (sigmoid colon)
Case 13	Adenoma in the sigmoid colon
Case 14	Tubulovillous adenoma and small polyp
Case 15	Large tubulovillous adenoma
Case 16	pT1 carcinoma
Case 17	Submucosal lipoma
Case 18	Large lipoma

Pseudopolyp

Indication/Clinical symptoms

This woman had undergone sigmoid resection because of recurrent episodes of diverticulitis. The colon is massively elongated. The patient has repeated bouts of constipation. She has a positive family history of colon carcinoma and had undergone conventional colonoscopy on two occasions. At these investigations the examiner had not been able to extend farther than the left flexure. The general practitioner referred the patient for additional investigation.

CTC findings

Although the patient has undergone sigmoid resection, she has an extremely elongated colon (approx. 150 cm). A few pseudopolypoid lesions are found; these can be easily classified due to fecal tagging.

All portions of the bowel are unfolded well. No significant polypoid or tumorous formations are found. Notably, the cecum on the right side extends into the lesser pelvis.

The surrounding structures are normal on the non-contrasted series.

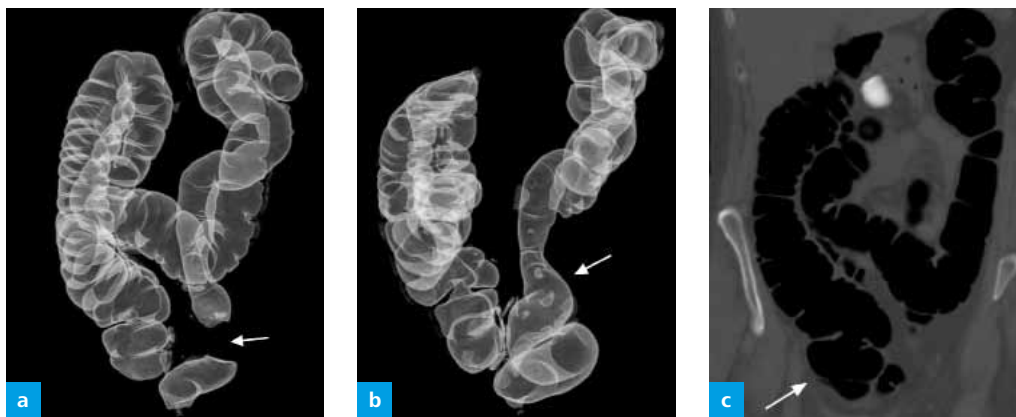


Fig. 1: The overview image reveals elongation of the colon despite sigmoid resection. Distension of the postoperative section does not occur in supine position (arrows) (a); good distension in prone position (arrows) (b). The entire cecum is in the lesser pelvis (arrow) (c).

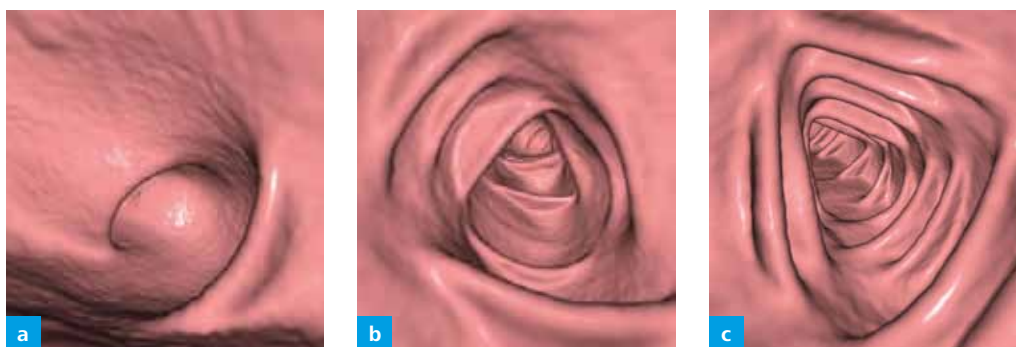


Fig. 2: Endoluminal 3D imaging: normal conditions in the rectum (a), transverse colon (b), and ascending colon (c).

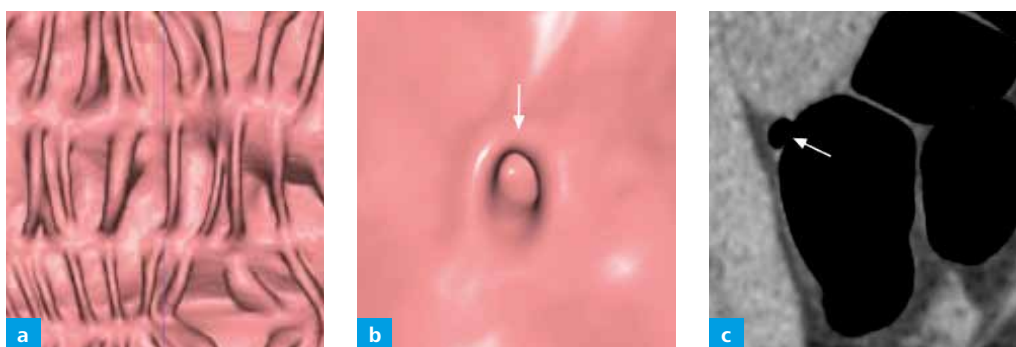
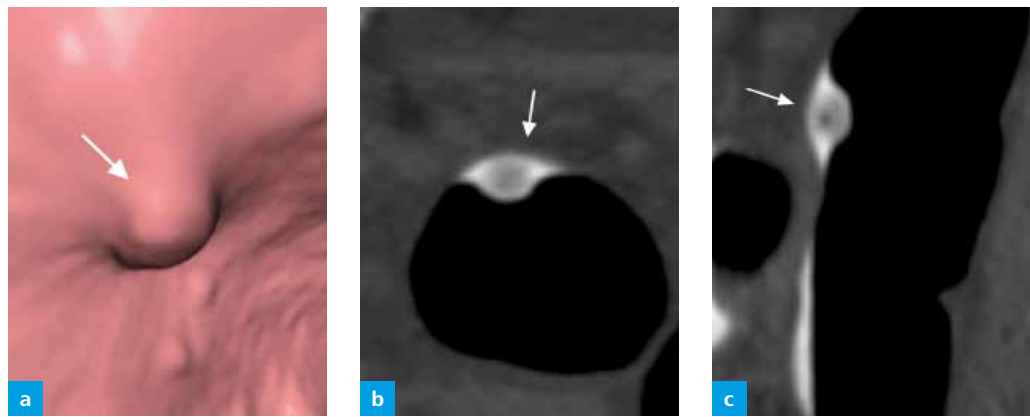


Fig. 3: Normal haustration in the virtual dissection – right colonic flexure (a), diverticula: on the 3D view (arrow) (b), typical air-filled protrusion on the corresponding axial section (c).

Case 8

Fig. 4: Pseudopolyp: not identifiable on the 3D image (arrow) (a). The axial and sagittal views reveal stool residues surrounded by contrast medium, with no connection to the colon wall (arrows) (b, c).

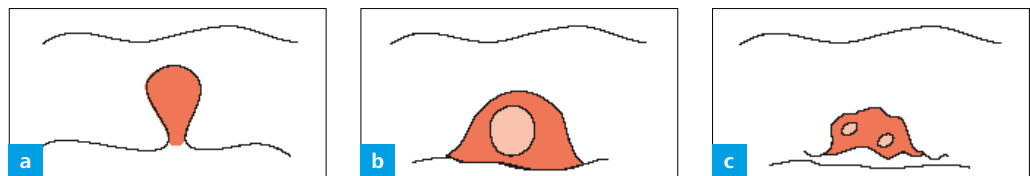


Summary

Good preparation includes fecal tagging with oral contrast medium. 30–50 ml is sufficient. The use of oral contrast medium permits the volume of bowel cleansing to be reduced to 2 liters, because many patients find it difficult to ingest more than 2 liters of fluid for preparation.

In this case the “shrouding” of residual stool can be identified well and easily distinguished from a polyp. Air pockets are an additional feature of stool residues.

Fig. 5: Polyp (a), stool residue (b), stool residue with air pockets (c).



Take-home message

Oral contrast media (fecal tagging) facilitates differentiation between stool residues and polyps.

Polyp after intravenous administration of contrast medium

Indication/Clinical symptoms

The 66-year-old woman was referred by the internist (private medical office) for a CT colonography. Elongation of the sigmoid colon and diverticulosis were known to exist. As the pancreas could not be properly evaluated by ultrasound, intravenous contrast medium administered.

CTC findings

The rectum is unfolded well and reveals a largely smooth outer contour. The sigmoid colon is markedly elongated with has several loops.

In the transition to the descending colon in the left lower abdomen, there is a polypoid formation absorbing contrast medium and measuring 8 mm in size. It is seen in supine as well as prone position and is most likely a polyp.

The transverse colon is clearly seen. It is also somewhat elongated. The cecum is also elongated. It extends to the lesser pelvis on the right side. Here there is slight contamination with residual stools, but no substantial polypoid changes. Lipomatosis in the valve of Bauhini.

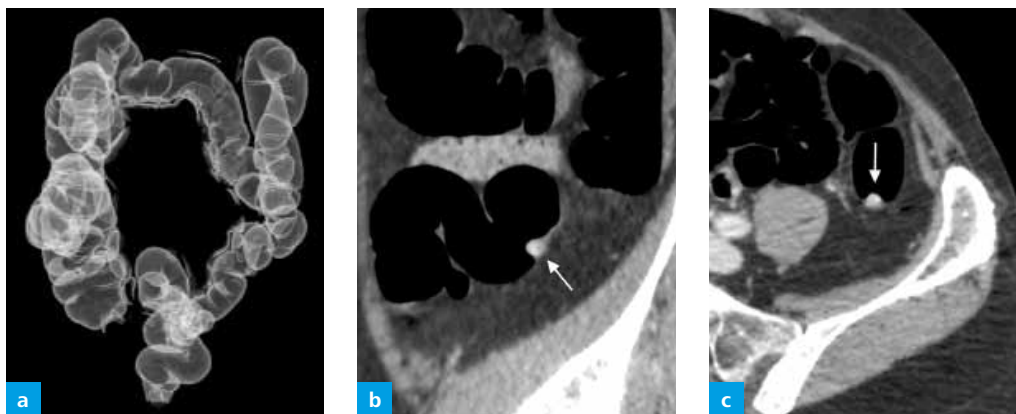


Fig. 1: The overview image reveals elongation of the colon with very good distension (a); sagittal and axial sections in supine position with the polyp absorbing contrast medium (arrow) (b, c).

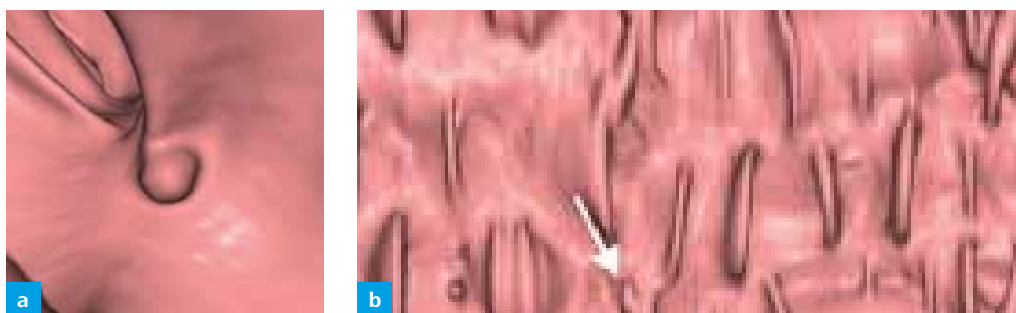


Fig. 2: Virtual 3D image of the polypoid lesion in the sigmoid colon (a); the same polyp on virtual dissection (arrow) (b).



Fig. 3: Axial and sagittal view of the polyp in prone position. It disappears here in the residual fluid (arrow) (a, b) and is therefore not visible within the lumen (c).

Case 9

Findings on colonoscopy

Exactly at the site ascertained by virtual colonography, above the iliac wing at the junction between the sigmoid and the descending colon, there is a polyp whose size and length concurs with the previous report. It is removed. Otherwise normal conditions up to the cecum on endoscopy. The terminal ileum is also normal.

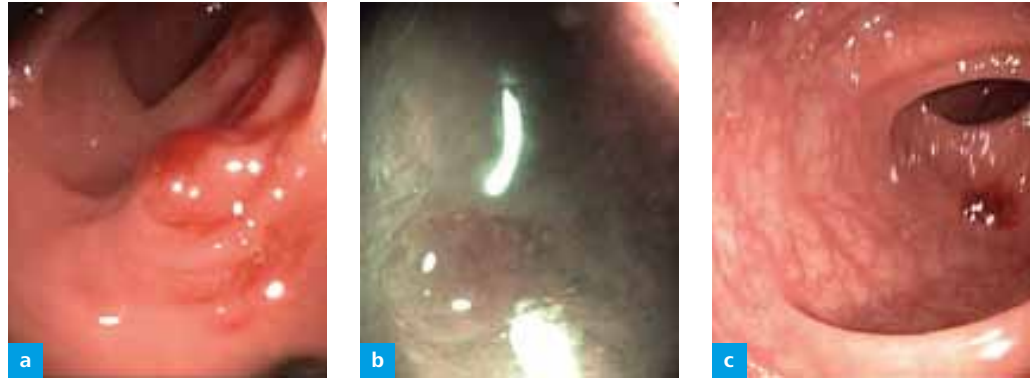


Fig. 4: Polyp on endoscopy (a) and NBI (narrow-band imaging) (b); after endoscopic removal (c).

Histology

Fragments of tubular adenoma of the mucosa of the large bowel with low-grade epithelial dysplasia in the region between the sigmoid and descending colon.

Summary

Polypoid lesions absorb contrast medium. This is demonstrated by markedly elevated density values (approx. 200 HU). As no faecal tagging was performed in this case, the contrasted polyp is also seen in the residual fluid. However, a CT of the abdomen is performed in supine position in order to obtain more reliable information. The radiation burden is somewhat higher in this case, but the surrounding structures can be evaluated much better.

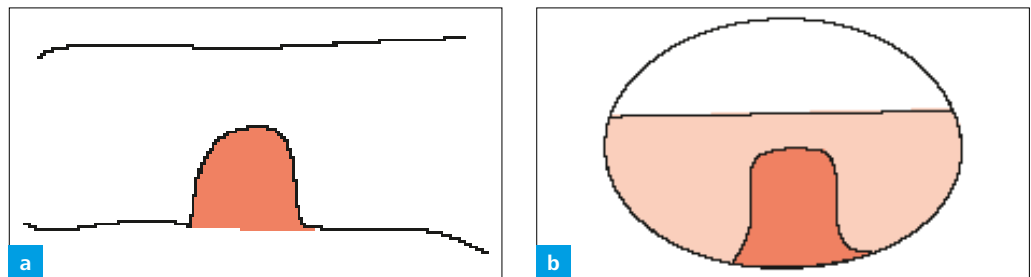


Fig. 5: Contrast polyp with increased density (a), contrasted polyp with residual fluid (b).

Take-home message

Polypoid lesions usually demonstrate marked contrast uptake, but the radiation burden is somewhat higher.