

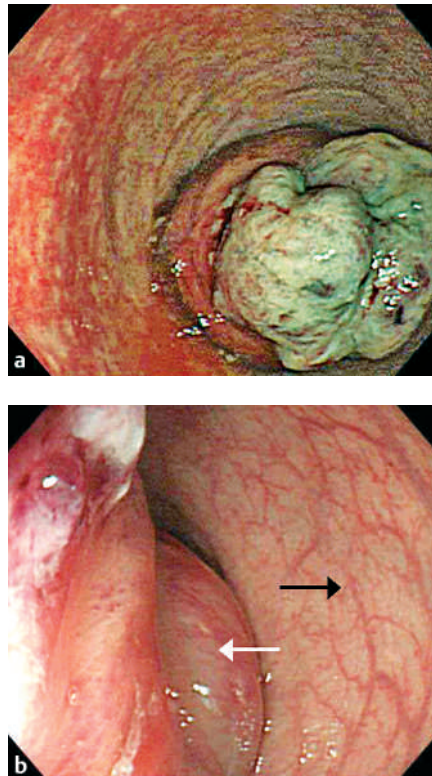
# Sigmoidorectal intussusception caused by a malignant tumor of the sigmoid colon: computed tomography with three-dimensional reconstruction

# UCTN

Intussusceptions in adults are relatively rare but in 70%–90% of cases there is a demonstrable cause, and about 40% of them are caused by malignant neoplasms [1,2]. Diagnosis using conventional diagnostic techniques can be difficult because of the low incidence and consequently a low index of suspicion for intussusception in adults. Computed tomography is now widely used in the evaluation of abdominal masses and nonspecific abdominal pain and these can be the first presenting signs of an intussusception [2]. However, computed tomography is seldom successful in determining the specific causes of the intussusception, because the lead point in many cases is small and often hidden within the intussuscepted mass [3]. We used three-dimensional reconstruction of conventional computed tomographic images in an attempt to better evaluate the cause of an intussusception.

A 49-year-old woman was admitted with a 5-day history of hematochezia and abdominal pain. Examination revealed distension and tenderness over the lower abdomen. A mobile mass was palpable on digital rectal examination. The appearance on a plain abdominal radiograph suggested obstruction of the sigmoid colon, and sigmoidoscopy revealed a large, friable, and hemorrhagic mass in the rectum (Figure 1). Computed tomography images had a target-like appearance that was compatible with a diagnosis of sigmoidorectal intussusception, but the structure of the intussusception, including the lead point, was better visualized after three-dimensional reconstruction of the computed tomographic images (Figure 2). After a low anterior resection, histopathologic evaluation of the resected specimen revealed the tumor to be a mucinous adenocarcinoma.

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**Figure 1** **a** Sigmoidoscopy revealed a large, friable, and hemorrhagic mass in the rectum. **b** The scope could be passed between normal colonic wall (black arrow) and congested colonic wall (white arrow).

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## References

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**Figure 2** **a** Conventional computed tomography showed a target-like appearance, suggestive of sigmoidorectal intussusception. **b** After three-dimensional reconstruction the computed tomographic image revealed much more clearly how the intussusciens (solid white arrow), the intussusceptum (solid black arrow), the lead point (open arrow), and mesenteric vessels (arrowhead) were drawn into the intussusception.

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