Detection of a polypoid lesion inside a Meckel's diverticulum using wireless capsule endoscopy

A 24-year-old man was referred for further evaluation of obscure-occult gastrointestinal bleeding. He had presented 5 years earlier with an episode of acute iron-deficiency anemia at 9.7 g/dL without overt hemorrhage. He was treated by oral iron supplementation, but a low ferritin level persisted at 35 µg/L. He was asymptomatic and used no medication. He was twice explored unsuccessfully by gastroscopy, colonoscopy, and small-bowel follow-through.

A first capsule endoscopy (Pill cam SB 2; Given Imaging, Yoqneam, Israel) showed a sessile polypoid lesion at three-quarters of the small-bowel transit time (● Fig. 1). A second capsule endoscopy confirmed the presence of the same lesion at the same location. This time the lesion was visualised inside a cavity (● Fig. 2) and a double lumen was seen, suggesting a Meckel's diverticulum.

No double-balloon enteroscopy was performed due to the need for surgical treatment.

The patient underwent single-port laparoscopy and a Meckel's diverticulum with a palpable lesion inside was detected (● Fig. 3).

After resection of a 5-cm-long segment, the diverticulum was opened and a 2-cm sessile polypoid lesion with three superficial erosions was revealed. Histologically, the lesion corresponded to a hypervascularised epithelium of gastric fundic and antral mucosa, with superficial ulcerations, without *Helicobacter pylori* infection (● Fig. 4).

In the era of capsule endoscopy, a few cases of Meckel's diverticulum have been reported where the diagnosis was suggested either because of active bleeding [1,2] or by the endoscopic aspect of a double orifice [3,4]. In our patient, we had the additional finding of a polypoid lesion inside the Meckel's diverticulum that corresponded surprisingly to an ectopic gastric mucosa. There is one more case of an ectopic gastric mucosa detected by capsule endoscopy [5]; however these are the first images where close visualization has been achieved.

Fig. 1 First capsule endoscopy showing a polypoid lesion at three-quarters of the small-bowel transit time.

Fig. 2 Images recorded by the second capsule endoscopy revealed that the polypoid lesion was inside a cavity.

Fig. 3 The diagnosis of Meckel's diverticulum was confirmed by single-port laparoscopy.

Fig. 4 The polypoid lesion corresponded to an ectopic gastric mucosa with exulcerations (arrowhead). The mucosa and submucosa were congestive (C) with patchy interstitial bleeding (arrows). The asterisk shows the transition between the ectopic fundic mucosa (left) and the intestinal mucosa (right) (hematoxylin and eosin staining; original magnification × 20).

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