Video capsule diagnosis of intestinal duplication in a 15-year-old patient

The use of video capsule ileoscopy in pediatric patients is becoming more common. The technique has been used in cases of obscure small-bowel bleeding, polyposis, Crohn's disease, and, occasionally, to investigate the anatomical anomalies of the gastrointestinal tract that are typically encountered in this age group [1,2].

We report here the case of a 15-year-old patient with symptoms characteristic of intestinal bleeding and severe anemia, who required repeated transfusions. The hematochemical parameters (erythrocyte sedimentation rate, CRP (c-reactive protein), antineutrophil cytoplasmic antibodies, anti-*Saccharomyces cerevisiae* antibodies (ASCA), antiendomysium antibodies, and the transglutaminases), and esophagogastroduodenoscopy and colonoscopy examinations, including histology, were normal.

Suspecting a Meckel's diverticulum, a scintigraphic evaluation was performed, which showed an accumulation of tracer in the gastric area, anomalously located at the level of the hypochondrium on the right side. Video capsule endoscopy revealed a small umbilicated mass projecting into the lumen at the level of the mid-ileum (Figure **1**). At surgery, the young patient was found to have intestinal duplication associated with intestinal malrotation (Figure **2**), and the diagnosis was subsequently confirmed histologically (Figure **3**).

Ileoscopy using a video capsule is a well-known technique for the investigation of adult patients, but it can also be used in the pediatric age group. It is a very useful tool for the diagnosis of jejuno-ileal disease (e.g. polyposis, Crohn's disease, Meckel's diverticulum) due to its high sensitivity and specificity in comparison with traditional radiological techniques. A uniform iconography should be adopted for a better endoscopic definition of these diseases, which, though rare, can be clearly detected using the video capsule technique [3].

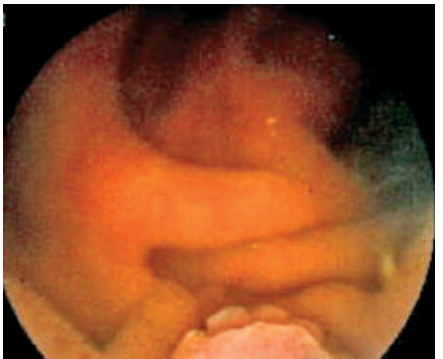

Figure **1** A video capsule image showing an umbilicated mass projecting into the lumen at the level of the mid-ileum.

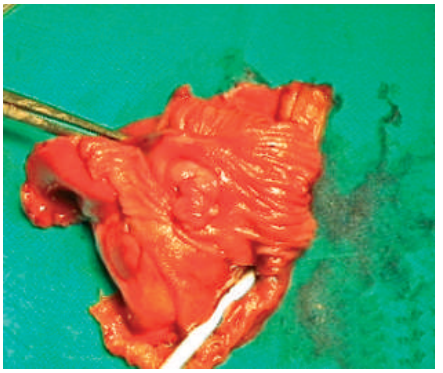

Figure **2** The surgical specimen, showing an intestinal duplication. The communication between the intestinal lumen and the duplication is clearly visible.

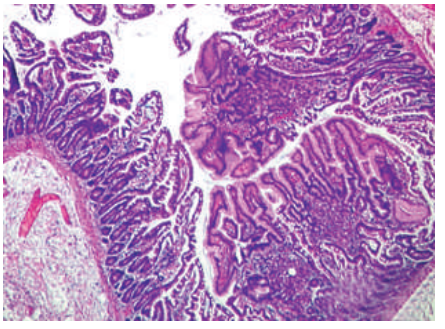

Figure **3** Histological view showing intestinal mucosa, with typical villi, on the left-hand side, and gastric mucosa on the right.

References

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