Magnetic resonance enteroclysis for Peutz-Jeghers syndrome

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A 21-year-old male reporting melena over one week is presented. Laboratory testing revealed severe anemia (Hgb 7 g/dL). Hyperpigmentation spots were present in the patient's bucal mucosa and lower lip that arose during infancy. Three years ago, these lesions had raised the clinical suspicion of Peutz-Jeghers syndrome (PJS) and the patient had undergone an upper gastrointestinal (GI) endoscopy and barium study of the small bowel, however no lesions were demonstrated.

An urgent upper GI endoscopy was performed demonstrating a largely distended stomach, full of non-hemorrhagic content, suggestive of high intestinal obstruction. Two gastric polyps of ~1.5 cm diameter and multiple small duodenal polyps were also revealed. A second upper GI endoscopy with a PENTAX HD i-scan colonoscope (Pentax EC-3890Li, Pentax, Japan) revealed a large polyp nearly obstructing the enteric lumen after the fourth part of the duodenum (Fig. 1). Histology

Figure 1 The jejunal lesion as seen in endoscopy with i-scan

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Conflict of Interest: None

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findings were consistent with hamartomatous polyp. The clinical diagnosis of PJS was therefore established [1]. An MR enteroclysis (MRE) was performed revealing ten polyps in the patient's small bowel, the larger one located in jejunum measuring 3.5 cm (Fig. 2 A, B).





Figure 2 The two larger polyps, marked with numbers 1 (A) and 5 (B), as demonstrated in MR enteroclysis

A variety of investigations can be used for small bowel screening. Barium follow-through is not favored due to radiation exposure and video capsule endoscopy's (VCE) greater sensitivity in detecting small bowel polyps. VCE has been shown superior to MRE at detecting small polyps [2]; however, VCE cannot be used in the presence of obstructing lesions. In a recent study it has been shown that polyps of 10 mm and above are detected equally with both modalities [3], whereas location of polyps and determination of their exact sizes are more accurate with MRE [2, 3]. MRE seems to be a non-interventional reasonable option for small bowel study and surveillance in PJS patients.

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