PEUTZ-JEGHERS POLYP
WITH IRON DEFICIENCY ANAEMIA
AND INTUSSUSCEPTIONS

Magnus A. Anderberg, Einar Ö Ambjörnsson, and Carl-Magnus Kullendorff,
Department of Paediatric Surgery, University Hospital, Lund, Sweden

ABSTRACT
The case was a teenage boy presenting with abdominal pain and found to have iron deficiency anaemia on two occasions during a period of four years. He was admitted for an abdominal emergency and operated on due to small bowel intussusceptions caused by a Peutz-Jeghers polyp as the leading point.

Key words: Peutz-Jeghers polyp; iron deficiency anaemia; small bowel intussusceptions

Introduction:
The Peutz-Jeghers syndrome is a rare hereditary polyposis syndrome that presents early in life, frequently with complications related to intestinal polyps.

This is a case report on a teenage boy presenting twice during a period of four years with abdominal pain and found to have iron deficiency anaemia. He was later admitted for an abdominal emergency and operated on due to intestinal obstruction. At surgery, a reposition of a small bowel intussusception was performed and a Peutz-Jeghers polyp, as a leading point, was disclosed and extirpated from the small bowel.

Case report
The patient was a healthy boy who underwent an appendectomy at the age of five years. At the age of ten he was admitted to his paediatrician due to abdominal pain and found to have iron deficiency anaemia, with a haemoglobin level of 62 g/L (reference value 110-160g/L). He was treated with iron medication and became free of symptoms. Three years later, he was admitted again due to abdominal pain and once more, he was found to have iron deficiency anaemia with a haemoglobin level of 76 g/L. He was treated with iron medication. A nuclear scan was performed and showed no signs of gastric mucosa outside the stomach or Meckels diverticulum.

At the age of 14, he had macroscopic rectal bleedings and abdominal pain. The haemoglobin level at that time was 127 g/L. Some weeks later, he was admitted to the emergency department due to sudden intermittent abdominal pain. His haemoglobin level at that time was 97 g/L. He had clinical signs of intestinal obstruction, i.e. vomiting, distended abdomen and severe pain. A plain X-ray of his abdomen as well as computer tomography supported the diagnosis by demonstrating heavily dilated small bowels.

At operation, a proximal small bowel intussusception, was disclosed. A reposition of this intussusception was performed without bowel resection. Palpation of his small bowel revealed a 20 mm long tumour located 20 cm below the Treitz ligament. The polyp was extirpated through a small enterotomy. Pathological diagnosis disclosed a hamartomatous or Peutz-Jeghers polyp. The postoperative course was uneventful.

Postoperatively endoscopy of his oesophagus, stomach and duodenum as well as a colonoscopy and a small bowel examination with Given M2ATM capsule (Given Imaging Ltd, Yoqneam, Israel) did not show any additional polyps.

Discussions
The Peutz-Jeghers syndrome is an inherited autosomal dominant disorder characterized by multiple small intestinal polyps or hamartomas. Mucocutaneous pigmentation is also characteristic (1). The latter was not seen in the patient described here. The underlying defect has been defined as a gene mutation responsible for Peutz-Jeghers

Correspondence:
Magnus Anderberg
Department of Paediatric Surgery, University Hospital, Lund, Sweden
Telephone: + 46 46 171000; e-mail: magnus.anderberg@skane.se
syndrome. The genetic locus of this condition is on chromosome 19p (3).

Some of the patients with the Peutz-Jeghers syndrome have symptoms from intestinal polyps in the first decades of life. The intestinal polyps may cause abdominal pain or lead to intussusceptions requiring an operative intervention. An abdominal ultrasound may reveal the diagnosis (2).

Early diagnosis with resection is of importance, since patients with the Peutz-Jeghers syndrome are known to have an increased risk for developing gastrointestinal and non-gastrointestinal malignancies (1).

In our patient the polyp might have caused intestinal bleeding and was certainly the cause of the small bowel intussusception which necessitated emergency surgical intervention. A careful examination and palpation of the small bowel in patients with small bowel intussusceptions are necessary in the search for a leading point even though polyps as a cause of intussusception are rare.

An investigation with endoscopies and Given M2ATM capsule due to repeated unclear iron deficiency anaemia might have disclosed the polyp in our patient earlier. Early and elective operative intervention would then have been possible.

The lesson learned from this patient is, firstly, the importance of a thorough investigation of patients with iron deficiency anaemia including endoscopy and small bowel examinations with a camera capsule. Secondly, it is important to search for a leading point at surgery on patients with intussusceptions.

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**REFERENCES**

