Haemoperitoneum caused by Meckel's diverticulum

V. Sitaram and J.N. Fox

Department of Surgery, Westwood Hospital, Beverley, UK.

Summary: A case of Meckel's diverticulum presenting acutely with spontaneous haemoperitoneum is presented. This complication has not, to our knowledge, been previously reported.

Introduction

Bleeding complications of Meckel's diverticulum are usually due to intraluminal haemorrhage. We report a patient with acute abdominal pain secondary to intraperitoneal bleeding from a Meckel's diverticulum.

Case report

A 34 year old male presented with a 12 hour history of abdominal pain. The pain was initially central, later localizing to the right side, and was made worse by movement. He had anorexia and his bowels had been loose before the pain started.

On examination he was not shocked or pale and was afebrile. The abdomen was tender in the right lower quadrant but there was no guarding. The haemoglobin was 15.1 g/dl and the white cell count was $13.6 \times 10^9/l$. Serum amylase was 116 units (normal ≤ 82 units, 'ENZYLINE bioMérieux'). Plain abdominal X-ray was unremarkable.

Re-examination showed migration of the tenderness to the right upper quadrant and the development of guarding and rebound tenderness. Ultrasound scan of the abdomen revealed free fluid in the peritoneal cavity and a normal gall bladder. A gastrografin swallow done to exclude a perforated peptic ulcer was negative. He was treated conservatively as a possible case of pancreatitis, as the tenderness was upper abdominal and the serum amylase elevated.

After a few hours his general condition deteriorated. The signs of peritonitis moved down to the right lower quadrant and because of diagnostic uncertainty abdominal exploration was undertaken. Gross haemoperitoneum was discovered arising from Meckel's diverticulum with conges-

tion and bleeding from the tip and along its vascular pedicle. There was no evidence of perforation or torsion. The diverticulum was excised and the patient made an uneventful recovery.

Sections of the diverticulum examined showed marked necrotic changes at the tip with ulceration of the mucosa but no intraluminal bleeding. There was congestion of the blood vessels here with haemorrhage into the surrounding tissues. There was no ectopic tissue.

Discussion

Meckel's diverticulum occurs in approximately 2% of the general population and may give rise to bleeding, intestinal obstruction, inflammation, intussusception and neoplasm.¹ Obstruction and inflammation are the most common presenting features in adults.²

There are only 2 reports of haemoperitoneum associated with Meckel's diverticulum.^{3,4} In the first the haemoperitoneum was secondary to a perforation, the bleeding being essentially intraluminal, and in the second it was traumatic. Our patient was unusual on two counts. Firstly it is unusual for Meckel's diverticulum to present itself for the first time in an adult.⁵ Secondly the bleeding was intraperitoneal and not intraluminal. Diagnosis was made only at laparotomy and this was undertaken on clinical grounds as investigations had been equivocal until then.

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Correspondence: J.N. Fox, F.R.C.S. Ed., Consultant Surgeon, Hull Royal Infirmary, Anlaby Road, Hull HU3 2JZ, UK.

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