Femoral hernia causing pneumoperitoneum

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Summary: Richter's hernia, in which only a portion of the circumference of the intestine lies within the sac, is a common complication of femoral hernia. This case report is of a 39 year old female who presented with a pneumoperitoneum and was found at laparotomy to have a right femoral Richter's hernia containing a knuckle of perforated small bowel. This is a previously unreported presentation of femoral hernia.

Introduction

Richter's hernia, in which only a portion of the circumference of the intestine lies within the sac, is a common complication of femoral hernia. The bowel can strangulate and perforate but pneumoperitoneum has never been reported as a complication.

Case report

A 39 year old female presented with a 10-day history of generalized abdominal discomfort associated with bile stained vomiting and gross abdominal distension. Her bowels had opened daily. There was no history of previous episodes, dyspepsia or alteration in bowel habit. She had had no previous operations and was otherwise well.

On examination, she was dehydrated and febrile (37.5°C), pulse rate 90/min. The abdomen was grossly distended and tympanitic, diffusely tender but without guarding or rebound tenderness. The hernial orifices were intact. Bowel sounds were quiet and not obstructive. Rectal examination demonstrated only tenderness anteriorly. Abdominal X-rays showed a massive pneumoperitoneum (Figure 1). The white cell count was $18 \times 10^9/l$.

The patient was initially treated by nasogastric aspiration, intravenous fluids and antibiotics (cephazolin and metronidazole) and observed. Her temperature rose and she developed a tachycardia. She was taken to theatre for a laparotomy. The abdomen was opened through a midline incision. There was a tense pneumoperitoneum. The peritoneal fluid was turbid but without faecal soiling. She had a right femoral Richter's hernia containing a knuckle of gangrenous small bowel about 0.5 cm in diameter with a perforation at the base. The small bowel was

Figure 1 Erect film of the abdomen showing the pneumoperitoneum.

resected. The femoral canal was closed with nylon sutures. She made a rapid and uneventful recovery and was discharged home after 8 days.

Discussion

Femoral hernia is a common problem, but often the diagnosis is not considered or is incorrect (Frankau,

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1931; Ponka & Brush, 1971). Of the 4777 patients with herniae reviewed by Ponka & Brush, 216 had femoral and 4561 had inguinal herniae.

Richter's herniae are found more commonly in femoral than inguinal herniae, 9–11% (Frankau, 1931; Wheeler, 1975) versus 2% (Frankau, 1931). They do not have the features typical of intestinal obstruction. There are to our knowledge no previous reports of pneumoperitoneum. Our patient had a

femoral Richter's hernia with a perforation at the neck accounting for the pneumoperitoneum.

This patient showed several rare features. The length of history is unusual, but most uncommon is the pneumoperitoneum which is usually associated with perforations of the small bowel and femoral herniae. We note particularly the absence of faecal spillage in the peritoneal cavity.

References

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