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Abdominal pain in a cirrhotic patient with ascites

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A 45-year-old woman had been treated by our medical service for alcoholic cirrhosis and ascites. She had a reducible umbilical hernia. Frequent large-volume paracentesis was required to control ascites. Two days after one of the periodic paracenteses, she complained of abdominal pain, vomited and was hospitalised. A plain radiograph of the abdomen was performed (figure).

Questions

- 1 What does the abdominal X-ray show?
- 2 What is the most probable diagnosis?
- 3 How would you treat this patient?

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Figure Plain abdominal X-ray

Answers

QUESTION 1

The abdominal X-ray shows an abdominal circular opacity with an incarcerated dilated small bowel loop.

QUESTION 2

Small bowel obstruction caused by incarcerated umbilical hernia following paracentesis in a cirrhotic patient. Physical examination showed high-pitched bowel sounds and a tender, irreducible, umbilical hernia.

QUESTION 3

Emergency surgical exploration is indicated. This confirmed incarceration of umbilical hernia and ascites sequestration localised within the hernia. An emergency herniorrhaphy was required but small bowel resection was not necessary and the patient survived.

Discussion

Umbilical hernias are quite common in cirrhotic patients with ascites. Complications of this condition are mainly leakage, ulceration, rup-

ture, and incarceration.¹ Incarcerated umbilical hernia complicating removal of the ascites (by paracentesis, shunt, or medical therapy) has already been reported.²⁻⁴ Sudden decompression probably leads to decreased tension on the hernia ring which subsequently narrows in size and traps the hernia sac contents.² This unusual complication is potentially fatal.

Since there has been a resurgence of interest in large volume paracentesis,⁵ this case is a reminder that this routine procedure still carries risks and that the possibility of incarceration should be kept in mind. We recommended that before beginning therapy for ascites, patients be examined closely for the presence of umbilical hernias and, if present, should be educated about the possibility of incarceration.

Final diagnosis

Incarcerated umbilical hernia in a cirrhotic patient with ascites.

Keywords: incarcerated umbilical hernia, cirrhosis, paracentesis

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