

Answers to Medical Quiz

A.1 Figure 1 shows evidence of dilated small bowel loops, which is feature of obstruction.

Figure 2 reveals multiple small bowel loop hernia through the left anterior abdominal wall possibly through laparoscopy port. No pneumoperitoneum or collections seen. Other abdominal structures were unremarkable.

A.2 Small bowel loop obstruction secondary to an obstructed abdominal hernia (post-surgical in origin).

A.3 Other Causes:

- Small bowel obstruction accounts for 5% of acute surgical admissions
- Commonest causes include:
 - Adhesions (60%), these are bands of scar tissue that form after surgery. They may grow between the bowels and can trap the loops.
 - Strangulated hernia (20%), hernias in general are weakness of the wall of the abdomen through which the bowel loop may protrude and become trapped.
 - Malignancy (5%)
 - Volvulus (5%), inflammatory bowel disease, diverticulitis, intussusception or congenital defects.

DISCUSSION

The small bowel may become blocked when it is trapped inside the abdominal cavity in scar tissue or outside the abdominal cavity in a hernia¹.

Adhesions are the major causes of small bowel obstruction. Adhesions are bands of scar tissue that form after surgery. The adhesions grow between sections of the bowel and may trap loops of bowel¹. A hernia is a weakness in the wall of the abdomen through which the bowel may protrude and become trapped¹.

Other causes include:

Inflammatory bowel disease, such as Crohn's disease, inflammation from other abdominal problems, such as diverticulitis, intussusception, which is the intestine folding into itself, cutting off normal flow of partly digested food and eventually cutting off blood flow to the tissues, a twisted or knotted bowel, a narrowing of the bowel that has been present since birth and cancer²⁻⁴.

REFERENCES

1. http://www.med.umich.edu/1libr/wha/wha_sbobstru_crs.htm. Accessed 29.1.2007
 2. Coleman MG, Moran BJ. Small bowel obstruction. In: Johnson CD, Taylor I eds. *Recent advances in surgery* 22. Churchill Livingstone, Edinburgh, 1999;87-98.
 3. Burke M. Acute intestinal obstruction: diagnosis and management. *Hosp Med* 2002; 63:104-7.
 4. Luckey A, Livingstone E, Tache Y. Mechanisms and treatment of postoperative ileus. *Arch Surg* 2003;138: 206-14.
-

* Radiology Resident

** Consultant Radiology

Salmaniya Medical Complex

Kingdom of Bahrain