ENDGAMES

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CASE REVIEW

Odynophagia and vomiting eight years after laparoscopic adjustable gastric banding

A 51 year old woman presented with a two day history of odynophagia, followed by two days of vomiting after eating solids and subsequently also after drinking liquids. These symptoms were not accompanied by dysphagia, reflux symptoms, or change in bowel habit. A laparoscopic gastric band insertion eight years earlier had resulted in 10 kg weight loss. However, she had experienced similar symptoms four years ago, and these had resolved after deflation of the gastric band through aspiration from the subcutaneous port. She had no other medical history of note.

On examination she was tachycardic (104 beats/min) but normotensive, and she had a temperature of 37.0ºC. Her abdomen was soft and non-tender with no abdominal distension. Blood tests showed mild neutrophilia (white cell count 11.15×10^9/L (reference range 3-10); neutrophils 7.54×10^9/L (2-7.5)) and a raised C reactive protein (30.4 mg/L (0-5)), but normal liver function, renal function, calcium, and amylase. Erect chest and abdominal radiographs were performed (figure).

1. What abnormality does the abdominal radiograph show?
2. What are the potential risks associated with this complication?
3. What immediate management should be implemented to reduce the risk of complications in these cases before transfer to a specialist bariatric unit?
4. What definitive treatment options should be considered?

Submitted by Sara Renshaw and Borzoueh Mohammadi

Patient consent obtained

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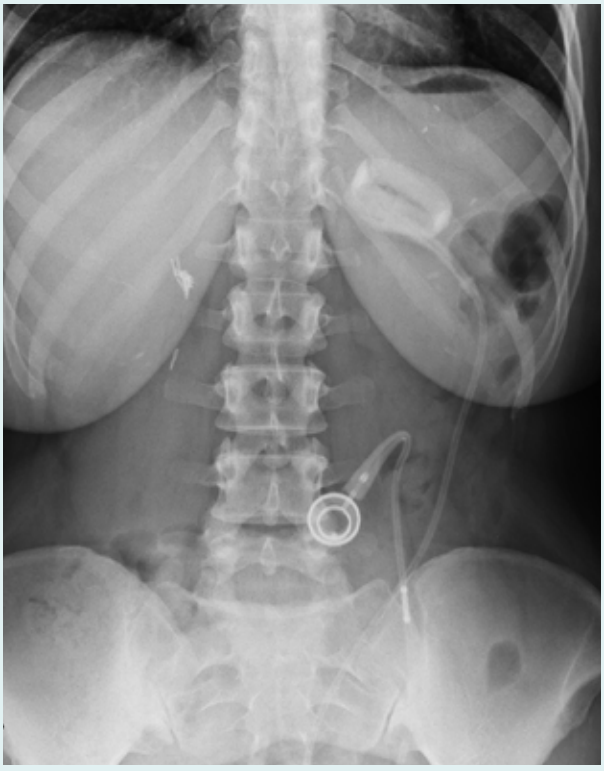

Abdominal radiograph Reproduced with permission from Dustin Simpson, SAMMC, Texas, USA

STATISTICAL QUESTION What are the odds?

Researchers investigated the effects of adding an oxytocin infusion to bolus oxytocin on blood loss during elective caesarean sections. A double blind placebo controlled randomised trial was performed. The intervention was bolus oxytocin (intravenous slow 5 IU oxytocin bolus over one minute) and infusion oxytocin (additional 40 IU oxytocin infusion in 500 mL of 0.9% saline solution over four hours). The control treatment was bolus oxytocin (5 IU oxytocin bolus over one minute) and placebo infusion (500 mL of 0.9% saline solution over four hours). The setting was five maternity hospitals in the Republic of Ireland. Participants were women aged over 18 years with a singleton pregnancy who were booked for elective caesarean section at term. In total, 2069 women were recruited and randomised to the intervention (bolus and infusion; n=1037) or control (bolus and placebo infusion; n=1032). Of those women allocated to the intervention, 1007 completed treatment, as did 994 of those allocated to control.

The primary outcome measures included major obstetric haemorrhage (blood loss >1000 mL) and the need for an additional uterotonic agent. In the intervention group, 158 (15.7%) women experienced a major obstetric haemorrhage, whereas 849 did not. In the control group, 159 (16.0%) women experienced a major obstetric haemorrhage, whereas 835 did not. The unadjusted odds ratio for the occurrence of a major obstetric haemorrhage for the intervention compared with the control was 0.98 (95% confidence interval 0.77 to 1.24; P=0.85). When adjusted for hospital and previous caesarean section, the odds ratio was 0.98 (0.77 to 1.25; P=0.86). The need for an additional uterotonic agent was significantly lower in the intervention group than that in the control group (12.2% (n=126) *v* 18.4% (n=189); adjusted odds ratio 0.61, 0.48 to 0.78; P<0.001). It was concluded that the addition of an oxytocin infusion after caesarean delivery reduced the need for additional uterotonic agents but did not affect the overall occurrence of major obstetric haemorrhage.

Which of the following statements, if any, are true?

a) The odds of major obstetric haemorrhage for the intervention group were the absolute probability of the outcome occurring (158÷1007=0.157)

b) The odds of major obstetric haemorrhage for the intervention group were the ratio of the number of women that experienced the event to the number that did not (158÷849)

c) The treatment (intervention *v* control) was independently associated with major obstetric haemorrhage

d) The sample odds ratio of a major obstetric haemorrhage is an estimate of the population relative risk of the outcome occurring

Submitted by Philip Sedgwick

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