Bringing up baby (answers on page 33)

Part one

Until he was 14 weeks old Joseph was a healthy and apparently happy baby who was growing well on bottle feeding: he had been breastfed for the first eight weeks. He had taken his routine 3-month immunisations without reacting adversely to them. However, four days later his mother brought him to the doctor after he had been vomiting for around 12 hours. The vomiting had started suddenly, and during the rest of the day he had become lethargic. He was not crying nor was he irritable. There was no fever, and he had passed a normal bowel motion containing no blood or mucus around 6 hours before the vomiting had started. On examination he was of normal length and weight for his age. He was pale and there was a suggestion of epigastric tenderness, but no masses. There were bowel sounds. He was well hydrated. While he was being examined he vomited once - the material was bright green.

- Q1 Before you start investigations, what are your thoughts on the differential diagnosis?
 - (a) Infection must be the first consideration In any infant with sudden vomiting, even without diarrhoea
 - (b) Bilious vomiting means intestinal obstruction until you prove that there is another diagnosis
 - (c) If this is an obstruction intussusception is the most likely cause
 - (d) An obstructed inquinal hernia is a possibility
 - (e) Volvulus is ruled out as it would have caused much more distress for Joseph

Part two

- Q2 A straight X-ray of the abdomen revealed some air-filled loops of small bowel but no definitive pathology. How would you investigate further?
 - (a) Full blood count, urea and electrolytes, C-reactive protein
 - (b) Blood for grouping
 - (c) Blood and urine cultures
 - (d) Blood pH level, serum lactate and glucose
 - (e) Abdominal ultrasound
 - (f) Urgent referral to the paediatric surgeon

Part three

- Q3 While waiting for the test results what is your initial treatment regimen for Joseph?
 - (a) Fluid replacement by intravenous drip
 - (b) Insertion of a nasogastric tube
 - (c) Antibiotics
 - (d) Urgent surgical intervention, probably by air enema
 - (e) Possible emergency laparotomy

Part four

- Q4 His immunisations included the usual diphtheria, pertussis, tetanus, polio, haemophilus influenzae B, meningitis C, and rotavirus. Which of them (if any) have been linked to an increase in intestinal obstruction in infants of Joseph's age?
 - (a) None of them
 - (b) DTP injections
 - (c) Polio virus oral or injected
 - (d) HIB
 - (e) Meningitis C
 - (f) Rotavirus

40 Africa Health July 2015