An unusual cause of diarrhoea in a young female

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In March 2010, a 32-year-old woman presented to hospital following 4 days of profuse watery diarrhoea. Her medical history included mild asthma, hypertension, ischaemic heart disease (myocardial infarction treated with balloon angioplasty 11 years previously) and she was a cigarette smoker of 20 per day for 18 years. Regular medications comprised ramipril, doxazosin and salbutamol inhalers prn. On admission, she was apyrexic, tachycardic (124 bpm), hypertensive (blood pressure 152/82 mmHg) and was noted to be morbidly obese (body mass index: 41 kg/m²). Clinical examination revealed no abnormality. Urinalysis was unremarkable. Initial laboratory investigations showed: Hb 13.7 g/dl [normal range (NR) 11.5–16.5 g/dl], leucocyte count 11.0 x10⁹/l (NR 4.0–10.0 x10⁹/l), urea 4.1 mmol/l (NR 3.3–8.8 mmol/l), creatinine 73 µmol/l (NR 40–110 µmol/l) and C-reactive protein 10.0 mg/l (NR 1.0–10.0 mg/l). She was biochemically euthyroid. Electrocardiogram showed a sinus rhythm and Q-waves consistent with an old inferior territory infarct. Serum β-hCG was markedly elevated at 8877 IU/l (NR <5 IU/l in non-pregnant women)—a titre consistent with 6 weeks gestation. Subsequent transvaginal ultrasound showed an empty uterus, free fluid in the Pouch of Douglas and an ectopic pregnancy with a foetal heart pulsation (Figure 1).

Laparoscopy, performed under general anaesthetic, revealed haemoperitoneum and an unruptured right tubal ectopic pregnancy (Figure 2) and she was treated with a right salpingectomy. Subsequent histopathology showed a small focus of salpingitis isthmica nodosa, a predisposing factor for tubal ectopic pregnancy. The patient had an uneventful post-operative course and was discharged home the next day.

Ectopic pregnancies are relatively common (11.1/1000 maternities) and usually occur as a result of either decreased blastocyst motility along the fallopian tube or alterations in the tubal environment facilitating early implantation. These include previous ectopic pregnancy, structural tubal abnormality, pelvic inflammatory disease, assisted reproduction techniques, intrauterine contraceptive devices and tubal surgery, e.g. salpingotomy and tubal ligation.

The hallmarks of presentation are bleeding per vaginum, localized abdominal pain, shoulder-tip pain, collapse and diarrhoea. The immediate danger once symptomatic is that of delayed diagnosis, resulting in tubal rupture, haemorrhage, shock and ultimately death. It is therefore of utmost importance that ectopic pregnancy be excluded in any woman, presenting with any of the above symptoms, in whom an intrauterine pregnancy has not been confirmed by ultrasound. Diarrhoea is a presenting symptom in many ectopic pregnancies. As in this case, a difficult clinical examination in combination with an uncommon presenting symptom can result in delayed diagnosis and complication development.

Tubal pregnancy can be managed by laparotomy, operative laparoscopy, medically, i.e. methotrexate, and occasionally by observation alone. Management must be tailored to the clinical condition and future fertility requirements of the woman. In the context of serum β-hCG level >3000 IU/l and a
positive foetal heart, expectant and medical management are discouraged.\textsuperscript{3}

In summary, atypical presentations of ectopic pregnancies are important to recognize as they can often mimic gastrointestinal disease. It is recommended that women of reproductive age, who present with diarrhoea, vomiting and/or collapse, be investigated for possible ectopic pregnancy.\textsuperscript{4} Clinicians should use a combination of clinical suspicion, serum $\beta$-hCG tracking and ultrasound scanning to diagnose ectopic pregnancies in a timely manner.

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\section*{References}
\begin{enumerate}
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