CASE REPORT

AN UNUSUAL ACUTE ABDOMEN

In an unusual presentation of an acute abdomen, the attending doctors had to make a choice of whether or not to operate. A 78-year-old woman in Italy was referred to the emergency department of a local hospital in March 2004 for evaluation of 6 hours of abdominal cramps, constipation and two episodes of non-bile-stained vomiting. The pain had started gradually, but worsened to reach a peak and was generally diffuse, with some localisation in the left lower quadrant and around the umbilicus.

The woman had no haematemesis, melaena or diarrhoea. She was not feverish and had not suffered from chills or shortness of breath. She took no medication other than an over-the-counter preparation for pain control in chronic arthritis. She had had one to two similar episodes annually from the age of 17, which were not associated with any precipitating factors and which were milder than the current episode.

When she was 19 she had an appendectomy, where no abnormalities were found on pathological examination, and then at the age of 68 an exploratory laparotomy for an acute abdomen that had shown a normal small bowel and colon. Medical history also showed that the patient had occasional episodes of non-pitting and non-itching swelling of the leg and forearm and three episodes of swelling of the face that spontaneously resolved. She had a son who had similar episodes to hers, but no other similar family history.

When she arrived at the emergency department she was afebrile and all other vital signs were normal. On examination, her abdomen was mildly distended, with mild tenderness on palpation, mainly in the peri-umbilical area and left lower quadrant. Testing for faecal occult blood was negative. There was no guarding or rebound tenderness. Bowel sounds were hyperactive. Her white blood cell count was raised, but the rest of the full blood count was normal. Results of other blood tests, the chest X-ray and ECG were normal.

The patient was treated with intravenous fluids and analgesia and she was admitted to the surgical department with a diagnosis of possible acute diverticulitis. On the first day of admission, a dual-contrast CT of the abdomen showed an expanding mass next to the caecum. A colonoscopy showed mild oedema of the ascending colon and caecum and biopsy specimens were histologically normal. She was scheduled for elective laparotomy. The pre-anaesthetic evaluation, which included allergy and immunological testing because of her history, showed reduced total haemolytic complement activity (CH50), and reduced C1 inhibitor and C4, together with normal C3 and Clq, led to a diagnosis of hereditary angioedema type 1. The laparotomy was postponed and a follow-up CT scan 72 hours later showed complete resolution. The symptoms resolved spontaneously and no therapy was started.

She was referred to a specialist centre, where long-term prophylaxis with attenuated androgens was started. One of her sons was found to have a quantitative complement deficiency when her relatives were tested. When the patient was last seen in December 2005, she had been symptom-free for 21 months.

Hereditary angioedema is a form of angioedema transmitted as an autosomal dominant and associated with a deficiency of serum inhibitor of the activated first component of complement. In 85% of cases the deficiency is due to a lack of C1 esterase inhibitor and in 15% to a malfunction of C1 esterase inhibitor. The oedema is typically unifocal, indurated and painful rather than itchy, and there is no urticaria. Attacks are often precipitated by trauma or viral illness and aggrevated by emotional stress. The gastrointestinal tract is often involved, with nausea, vomiting, colic and even signs of obstruction. The condition may also cause fatal upper airway obstruction.

Persiani R *et al. Lancet* 2006; **367:** 1548.

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SINGLE SUTURE

IT'S UP TO MEN

A male contraceptive finally seems to be closer to being a reality. A recent study published in the *Lancet* shows that sperm levels shoot back up to normal around 3 months after men stop taking an experimental hormonal contraceptive. Christina Wang and colleagues from the Harbor-UCLA Medical Center, Torrence, California, pooled data from 1 549 men in 30 studies, whose sperm counts dropped below 3 million sperm per millimetre while taking hormonal contraceptives. Twenty million sperm per millimetre is regarded as being fertile. The male contraceptive is most likely to be in the form of a patch, a topical gel or a bi-monthly injection. An oral formulation is difficult, because oral testosterone can have serious side-effects such as liver damage.

Wang C, *et al. Lancet* 2006; **367:** 1412.