extent of the disease in the involved segment and the lack of a prior histological diagnosis, a segmental resection was felt to be appropriate. Clinicians should be aware of this rare presentation, demonstrated on abdominal X-ray, which required quick diagnosis and urgent treatment. This report adds to the known literature on both Crohn's disease and small bowel volvulus.

Final diagnosis

Crohn's disease presenting as a segmental small bowel volvulus.

Keywords: Crohn's disease; volvulus; small bowel obstruction

Learning points

- Crohn's disease can present in a variety of ways and mimic many other disease processes. It should be part of every clinician's differential diagnosis of acute or chronic abdominal pain
- a closed loop bowel obstruction is a surgical emergency which requires rapid diagnosis and early intervention, if a successful outcome is to be obtained
- true midgut volvulus not only presents in children, but although rare, has been reported in young adults and even geriatrics
- in the absence of congenital abnormalities, a volvulus can occur around any pivotal point; common axes for the volvulus are tumours, adhesive bands, and stenoses

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Atrial flutter in a young man with a highly competitive and stressful occupation

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A previously fit 41-year-old man presented in March 1997 with palpitations and shortness of breath. Initial symptoms consisted of paroxysmal palpitations occurring after exercising; however, over the course of 6 months, he became aware that his pulse was consistently irregular and that even mild exertion made him short of breath. The patient was on no medicines. Coffee, tea and caffeine-containing beverages were only consumed in moderation. He was a life-long non-smoker and consumed approximately 5 units of alcohol per week. His occupation was competitive with a mentally stressful environment; he found his performance was helped by the use of a dietary supplement. Examination was unremarkable apart from an irregularity of the arterial pulse. The patient appeared euthyroid and was normotensive (blood pressure 110/700 mmHg) with no signs of heart failure. An electrocardiogram showed atrial flutter, at a rate of 148 beats/min, with variable block. Haematological and biochemical analyses, including thyroid function were normal as were a chest radiograph and echocardiogram. The patient was anticoagulated with warfarin and commenced on flecainide (200 mg bid) in anticipation of precipitating a pharmacologic cardioversion to sinus rhythm.

Administration of flecainide resulted in a deterioration in symptoms due to increased irregularity of heart rhythm and a reduction in exercise capacity. This was discontinued and an elective DC cardioversion was performed with a return to sinus rhythm at a rate of 68 beats/min.

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Questions

- 1 What is the most probable diagnosis ?
- 2 What would be your next investigation ?
- 3 In what cardiovascular circumstance might you have chosen to avoid flecainide because of its pro-arrhythmic potential ?

Answers

QUESTION 1

Atrial flutter precipitated by the combination of stimulant herbal constituents in the dietary supplement used as an aid to performance at work.

QUESTION 2

An electrocardiogram with the patient back in sinus rhythm looking for evidence of an accessory conduction pathway.

QUESTION 3

The risk of pro-arrhythmic effects are always present but are most likely in patients with structural heart disease and/or significant left ventricular impairment. Flecainide should therefore be avoided in the presence of haemodynamically significant valvular heart disease and/or heart failure. Flecainide should also be avoided post-myocardial infarction and in cases where ischaemia is suspected as the underlying aetiology of the arrhythmia.

Comment

The current trend for alternative or complementary medicine, in particular, a proliferation of 'herbal remedies' and 'dietary supplements', has led to concern being expressed in both the lay and medical press.¹ Such products may contain numerous compounds, including cocktails with western synthetic medicines.² They are often untested, unregulated by medicine review bodies and are available to anyone.³ In a clinical context the problem is compounded by undisclosed use, use by patients already on conventional medicines and use by those with underlying medical conditions.⁴

Several components of the dietary supplement used by this patient (table) are individually reported as having cardiovascular and/or central nervous system effects; of particular note the use of guarana, ginseng, ginger and liquorice are cautioned in those with existing heart disease.⁵ It appears probable that our patient developed his arrhythmia as a consequence of a combination of these actions. The use of traditional herbal medicines over centuries has led to a widespread feeling that they are

Learning points

- herbal preparations are frequently heterogeneous and lack quality controls
- risk is usually due to contamination, to an added drug or to falsification of constituents
- potential interactions with conventional orthodox medicines need to be considered
- constituents may be unknown, undisclosed and could contain illegal (ie, amphetamines) and/or prescription only (ie, steroids) components
- an awareness of toxic effects should include those due to heavy metals and to mega-vitamin over-dosage

innocuous. Whilst atrial flutter was relatively well tolerated in this patient, a previously healthy individual was subjected to several potential complications including tachycardia-related cardiomyopathy, thrombo-embolic events, trial of anti-arrhythmic therapy, anticoagulation and DC cardioversion.

Table 1 Constituents of the herbal blend component of the single dietary supplement used in this case and their potential for clinical effects

Component	System affected
Guarana	cardiovascular
Astragalus root	
<i>Rhizoma ligusticum</i>	cardiovascular
White willow bark (weidewinde)	
Bladderwrack (<i>Fucus vesiculosus</i>)	endocrine
Peppermint	
Lemon verbena	
Goto kola	CNS
Siberian ginseng	cardiovascular
Licorice	endocrine
Cinnamon	
Chamomile	cardiovascular, CNS
Ginger root	cardiovascular
Bee pollen	
<i>Pericarpium citri reticulatae</i>	cardiovascular
Rehmannia root	
Chicory	
Reishi mushroom (<i>Ganoderma lucidum</i>)	

CNS = central nervous system

Final diagnosis

Atrial flutter secondary to stimulant components of a compound dietary supplement.

Keywords: dietary supplements; herbal remedies; arrhythmia; atrial flutter

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Sore mouths and itchy wrists

J A G Buchanan, J M Zakrzewska

Oral soreness is a frequently encountered complaint in clinical practice with a large number of possible causes. Figures 1 and 2 below are clinical photographs taken of the mouths of two different late-middle-aged patients complaining of long-standing oral soreness, particularly associated with the ingestion of acidic, spicy foods and drinks. On direct questioning, both admitted to having pruritic rashes on the flexor aspects of the wrists and forearms which had appeared several months previously (figure 3). Both patients have oral manifestations of the same mucocutaneous condition. Study the photographs below and say whether the following statements are true or false.

Figure 1

Figure 2

Figure 3

Questions

- 1 The oral lesions are:
 - A caused by *Candida albicans*
 - B associated with an elevated titre of IgG autoantibodies to the intercellular substance of the epithelium
 - C typically bilateral
 - D usually painless and associated with urethritis, conjunctivitis and arthritis
 - E a recognised marker of internal malignancy.
- 2 Cutaneous manifestations of this condition include:
 - A alopecia
 - B nail pitting
 - C violaceous papules with Wickham's striae
 - D photosensitive rash
 - E an association with a positive Koebner's sign.
- 3 In the management of this condition:
 - A the oral lesions rapidly respond to oral metronidazole at doses of 200 mg tid for 7 days
 - B biopsy will typically show features of dysplasia
 - C liver function tests should be considered
 - D a careful drug history should be taken
 - E topical steroids are curative.

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