References

An unusual cause of melaena in a child
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(Index words: Hookworm infection, endoscopic diagnosis)

Case report
A previously healthy and playful 2-year old girl was admitted to Base Hospital, Chilaw with a history of melaena and lethargy for one week.

On admission she was lethargic and very pale with a hepatomegaly of 1 cm. Her haemoglobin was 3.5 g/dl and the stool examination and ultrasound scan of the abdomen were normal. In spite of two blood transfusions she continued to have melaena and remained pale. She was then transferred to Lady Ridgeway Hospital. She gave no history of drug ingestion, or features suggestive of gastritis. She was from a poor socio-economic background without toilet facilities. The entire family used the surrounding scrub jungle for defecation. The children used the same surroundings for defecation.

Results of investigations were as follows: Hb 7.65 g/dl, stools report – no ova; stool culture – no pathogens isolated; liver function tests – normal; white blood cell count – 13 600/ul (eosinophils 13%). She continued to have melaena and the haemoglobin dropped to 3.7 g/dl in spite of frequent transfusions. She was transfused 16 units of blood during a period of 35 days.

Ultrasound scan of the abdomen showed a normal portal vein with no evidence of chronic liver disease. Upper gastrointestinal endoscopy showed no varices and the first part of the duodenum including the stomach was normal; barium meal and follow through was normal up to the distal small intestine. 99 mTc Meckels scan showed no evidence of ectopic gastric mucosa, 99 mTc red blood cell scan showed no evidence of haemorrhage into the gastrointestinal tract and CT scan of abdomen showed a normal small intestine.

As all investigations were normal a repeat upper gastrointestinal endoscopy together with a colonoscopy was done at the Professorial Surgical Unit of the Colombo South Teaching Hospital. The upper gastrointestinal endoscopy showed a large number of worms attached to the second part of the duodenal mucosa. A specimen was taken and these were identified as hookworms (Necator americanus). A repeat stool examination at the Department of Parasitology, University of Colombo showed hookworm ova (150 eggs/g). A diagnosis of heavy hookworm infestation was made on the 42nd day of the illness and she was treated with a single dose of 400 mg albendazole. The child showed a dramatic improvement. The melaena ceased, haemoglobin levels remained stable and no further transfusions were required. The entire family was dewormed and the child was discharged on appropriate treatment. Two weeks later the haemoglobin was 8.6 g/dl.

Discussion
Melaena is due to upper gastrointestinal haemorrhage, usually caused by reflux oesophagitis, Mallory-Weiss syndrome, gastric or duodenal ulcers, oesophageal varices, gastric carcinoma or acute gastric erosions. Rare causes include hereditary telangiectasia, pseudoxanthoma elasticum and blood dyscrasias. Hookworm infestation was not listed as a cause of melaena other than a report on a few infants who developed overt gut bleeding and melaena after transplacental infection (1). A literature search on the medline (1990-2001) showed no reports of hookworms being associated with melaena.

In this child the worm load was so great that it caused a massive blood loss giving rise to melaena. Necator

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Isolated ventricular non-compaction or ‘spongy cardiomyopathy’

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(Index words: Echocardiographic features, symptoms, dysrhythmia)

Isolated ventricular non-compaction (IVNC) is a recently described rare congenital cardiomyopathy resulting from an arrest of normal endomyocardial embryogenesis. Non-compaction of the myocardium is diagnosed by echocardiography which shows a typical 'spongy' appearance of the myocardium with trabeculations and recesses. Left ventricular (LV) myocardium is commonly affected, with or without right ventricular involvement (1,2).

Symptoms are frequently delayed until adulthood and manifest as a triad of clinical heart failure due to systolic and diastolic ventricular dysfunction, cardiac arrhythmias (including ventricular tachycardia (VT)), sudden cardiac death, and systemic embolism from emboli formed in the inter-trabecular recesses (1,2). Familial occurrence of the disease has been observed.

We describe a case of non-compaction of the ventricular myocardium in a 37-year old man with the typical echocardiographic features of this disease and a suggestive family history. This is the first such reported patient in Sri Lanka.

Case report

The patient presented with a 19-year history of easy fatigability, shortness of breath with exertion, atypical chest pain, palpitations lasting 1 to 2 min, faintishness, loss of appetite, and loss of weight. He was apparently well till he was 18 years of age and noticed unusual fatigue which progressed gradually thereafter. He was a smoker and consumed alcohol moderately but had stopped both 5 years ago.

He gave a suggestive family history of arterial embolism and heart failure in his mother who had breathlessness on exertion for 3 years, monoparesis of the right upper limb and dense right side hemiplegia a year later, and death at the age of 42 years following an above knee amputation for gangrene. His father also died suddenly at the age of 42 years of unknown cause but 2 siblings are healthy.

The heart apex was not displaced or heaving, with no parasternal heave or thrills. The heart sounds were normal. ECG showed atrial fibrillation with a controlled ventricular rate. Holter monitoring showed a few runs of supraventricular tachycardia and non-sustained ventricular tachycardia. Coronary angiogram showed normal coronary arteries and good LV systolic function.

Discussion

Four morphological criteria diagnostic of IVNC by echocardiography have been proposed (1,2). They are absence of coexisting cardiac abnormalities (by definition), a compacted thin epicardial band and a thicker (>2:1) non-compacted endocardial layer of trabeculations and deep endomyocardial spaces, and predominant localisation of the pathology to LV mid-lateral, apical and mid-inferior areas and 4 colour. Doppler evidence of deep perfused intertrabecular recesses. Our patient had all these features with good LV systolic function and diastolic dysfunction (Figures 1 and 2).

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