Watermelon stomach treated with oral corticosteroid

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Gastric antral vascular ectasia is an unusual but important cause of persistent gastrointestinal blood loss and chronic iron deficiency anaemia in the elderly. The distinctive endoscopy appearance of longitudinal rugal folds containing a visible convoluted column of vessels, traversing the antrum and converging on the pylorus has been likened to the stripes of a water melon[1]. A patient with this condition treated with oral corticosteroids is described.

Case report

A 73-year-old Caucasian woman with past history of pernicious anaemia, recurrent pancreatitis and mild renal impairment presented with recurring iron deficiency anaemia over an 18-month duration. She needed repeated blood transfusions. She had positive faecal occult blood and pentagastrin-fast achlorhydria with normal barium meals, barium enemas and colonoscopy. A gastroscopy revealed the typical longitudinal red streaks in the atrum and pylorus. Isotope red cell tagging showed consideral faecal blood loss. She was unsuitable for surgery because of aortic stenosis and mild renal impairment. Oral prednisolone 30 mg daily was prescribed and gradually reduced to 10 mg maintenance. Two months later an isotope study showed a significant fall in blood loss. Prednisolone and iron therapy maintained her haemoglobin at a near normal level for 5 years. A repeat endoscopy showed red vascular lesions extended to the body of the stomach though she needed no further blood transfusion. She died later from heart failure.

Discussion

Linear angoid streaks in the gastric antrum with chronic gastrointestinal blood loss have been reported first[2] in a single case in 1978. The term 'watermelon stomach' has been introduced by Jabbari to designate antral vascular ectasia because of its typical endoscopic appearance. A total of 43 case reports compatible with watermelon stomach have been described in the literature[3]. The majority are women with an average age of 70 years presenting with chronic iron deficiency anaemia with positive faecal occult blood test. Associated conditions included cirrhosis of the liver in 37%, achlorhydria 35%, or severe hypochlorhydria in 40%. Histology from biopsy and antrectomy specimens have shown abnormal mucosal vessels, with fibrin thrombi and/or ectasia and spindle cell proliferation distinguishing from acute gastritis and atrophic gastritis biopsies[4].

Surgical removal of the antrum has been a successful definite therapy in 63% of the 43 cases, with an operative mortality of 7.4%. Oral iron and repeated judicious blood transfusions remain the treatment of choice where surgery is contra-indicated. Corticosteroid therapy has proved to be an effective alternative treatment[5], as happened in the case reported here.

Isotope labelling confirmed the marked reduction of gastrointestinal blood loss following corticosteroid therapy, and the patient maintained near normal haemoglobin with oral iron therapy. Corticosteroid acts by improving the capillary fragility.

In summary, watermelon stomach has emerged as a distinct reasonably well-defined disease entity causing gastrointestinal blood loss and chronic iron deficiency anaemia in the elderly, and allows almost definite diagnosis on endoscopy and/or histology. The importance of recognizing the condition is emphasized, as repeated unnecessary barium studies can be avoided.

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Reviving the Moore-Federman syndrome

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The Moore-Federman syndrome, reported in six members of the same family in 1965, is characterized by short stature, joint stiffness, normal intelligence, hypermetropia, glaucoma, asthma and hepatomegaly[1]. There were no subsequent reports until in 1989 Winter *et al.*[2] pointed out the similarity between this condition and the more recently described acromicric dysplasia reported by Maroteaux in 1988[3]. The features of acromicric dysplasia are short stature, joint stiffness, with associated radiological abnormalities, and typical facies. Winter *et al.* suggested that the two conditions were identical, illustrating their hypothesis with four cases. We describe a further case who again had most of the features of both conditions and also report on the progress of one of the four children reported by Winter[2].

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Case reports

Case 1

This 6-year-old boy was the third child of unrelated parents. His birth weight was 3.01 kg but at 12 months had been noted to be growing slowly. On examination his height was 90.7 cm (−4.7 standard deviation score), his face was rounded with a small nose and upslanting palpebral fissures, and his fingers and toes were short and broad with limitation of flexion and extension of the metacarpophalangeal and interphalangeal joints. Further features were hypermetropia,

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