

Drug points

Hypersensitivity reaction to balsalazide

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Balsalazide is used in short term and maintenance treatment of ulcerative colitis. It is a prodrug in which 5-aminosalicylic acid is linked via a diazo bond to 4-aminobenzoyl- β -alanine, an inert and biologically inactive carrier molecule. We report a case of a hypersensitivity reaction to balsalazide, involving pericarditis, an abnormal liver biochemistry profile, and splinter haemorrhages.

A 59 year old woman developed indeterminate patchy pancolitis. She was unable to take mesalazine or olsalazine but had no adverse effects with sulfasalazine 1 g twice daily, which she took as maintenance treatment. Eight months later her symptoms had resolved and she had normal results for inflammatory markers. On request sulfasalazine was discontinued and she started balsalazide 2.25 g three times daily.

Eight days later she was admitted with central chest pain, shortness of breath, and back pain, which gradually worsened over three days. The colitis was still in remission. On examination she was afebrile, had splinter haemorrhages on two fingernails, and had a raised jugular venous pressure. She had a loud pericardial rub, but there were no murmurs, and the lungs were clear. A soft tender liver was just palpable. Optic fundi were normal.

Investigations showed grossly increased values for inflammatory markers (erythrocyte sedimentation rate 122 mm for first hour, C reactive protein concentration 251 mg/l) with a mild normocytic anaemia and thrombocytosis. A liver biochemistry profile was indicative of cholestasis (alkaline phosphatase 472 IU/l, γ -glutamyl transferase 295 IU/l, alanine aminotransferase 50 U/l, and bilirubin 15 μ mol/l). An electrocardiogram was suggestive of pericarditis, and an echocardiogram showed a small pericardial effusion. Ultrasonography of the liver and biliary tree was unremarkable. Multiple blood cultures and paired viral serology gave negative results. Results for autoantibodies including antinuclear factor, cytoskeletal antibodies, and antineutrophil cytoplasm antibody were negative.

Balsalazide was stopped while the results of investigations to exclude an infective or autoimmune cause were

awaited. The patient was given non-steroidal anti-inflammatory drugs, with some improvement of symptoms and reduction in concentration of acute phase reactants. The chest pain and pericardial rub persisted, however, and she was given prednisolone 20 mg once daily, reduced by 5 mg fortnightly. Symptoms and abnormal blood test results completely resolved within a month, and the steroids were discontinued.

Sulfasalazine was successfully reintroduced, and the patient has remained well. We believe the acute pericarditis, cholestatic liver biochemistry profile, and vasculitis resulted from hypersensitivity to balsalazide because the symptoms developed acutely and other causes were excluded by appropriate tests.

We believe this is the first report of a hypersensitivity reaction to balsalazide: the Committee on Safety of Medicines has received no such notifications, and a search of Medline (1990-9) revealed no cases.

This case has similarities to those of mesalazine associated pericarditis,¹ pericardial effusion,² and lupus-like syndrome.³ Pericarditis associated with sulfasalazine induced lupus syndrome has been recognised^{4 5} and was previously ascribed to the sulfapyridine moiety. However, similar reactions with 5-acetylsalicylic acid drugs such as mesalazine, which do not contain the sulfa group, suggest that an adverse reaction may be a consequence of the 5-acetylsalicylic acid molecule. Because the patient reacted to balsalazide but not sulfasalazine the hypersensitivity reaction may have been to the whole drug rather than the sulfapyridine moiety alone.

- 1 Habal FM, Greenberg GR. Treatment of ulcerative colitis with oral 5-ASA including patients with adverse reactions to sulphasalazine. *Am J Gastroenterol* 1990;83:15-9.
- 2 Jenness H, Becker EW, Weber P. Pericardial effusion during treatment with 5-aminosalicylic acid in a patient with Crohn's disease. *Am J Gastroenterol* 1990;85:332-3.
- 3 Dent MT, Ganapathy S, Holdsworth CD, Channer KC. Mesalazine induced lupus-like syndrome. *BMJ* 1992;305:159.
- 4 Griffiths ID, Kane SP. Sulphasalazine induced lupus syndrome in ulcerative colitis. *BMJ* 1977;iii:1188-9.
- 5 Deboever G, Devogelaere R, Holvoet G. Sulphasalazine induced lupus like syndrome with cardiac tamponade in a patient with ulcerative colitis. *Am J Gastroenterol* 1989;84:85-6.

A patient who changed my practice

To tell or not to tell

Whether it is correct to tell an elderly person how long he or she can expect to live, that is the question. In 50 years of work with elderly people, I have found it necessary only once to tell a patient that his expectation of life was short.

On my ward round I found a 72 year old man with a diagnosis of a large fungating carcinoma of the stomach busily engaged at the bedside with his bed covered in bits of paper bearing names and addresses. In reply to my inquiry as to what he was doing he said: "Doctor, I am planning to get married in two weeks' time and these are my wedding guests' invitations."

In privacy I explained in as kind a way as I could that he had a serious, life threatening disease and that it would be wise for him to put all his affairs in order and not to make any radical plans for the future. A moment's silence followed, and then, to my surprise, he stood up and shook my hand warmly and said: "Thank you very much for telling me all this, doctor, but you must excuse me

as I have a lot of invitations to send out about my wedding." With that he hurried back to the bedside.

I learnt from this experience that the patient was totally unwilling to take in the horrible facts of his illness and was instead preoccupied with happy plans and thoughts of the future. In short, he preferred a fantasy of a happy future to the realities of death and dying.

I did not again attempt to tell an elderly patient the truth about a fatal illness, although I was always careful to inform the relatives. It would seem that many old people prefer to plan for a happy though unrealistic future rather than face a dismal fatal one. Many patients prefer to think about happy tomorrows as well as hope springing eternal. We should not take steps to change this unless patients ask directly for the truth for a good reason, which they seldom do.

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