lems that could be attributed to short stature. The data need, however, to be interpreted with caution: it is possible that shorter pupils are simply more likely to mistake the normal rough and tumble in the playground for bullying. The data could also be accounted for by the fact that significantly fewer control than short boys admitted to being bullied. Even when they did, few confessed to being upset.

Around one in four short victims, girls as well as boys, were both victims and bullies; from the reported association between bullying, physical size, and sex, it might have been expected that few short pupils and even fewer short girls would bully others.[1 3] Are some of these the so called provocative victims for whom any reaction, however painful, is preferable to being ignored?[3] Pupils do not always tell parents or teachers when they are being bullied, and this report may serve to alert parents and teachers to potential bullies as well as victims. As Olweus reminds us, "Every individual should have the right to be spared oppression and repeated, intentional humiliation, in school as in society at large."[3]

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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, with 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 sulphasalazine 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 sulphasalazine 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 3 days. The colitis was still in remission. On examination she was apyrexial, 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 μmol/l). An electrocardiogram was suggestive of pericarditis, and an echocardiogram showed a small pericardial effusion. Ultrasound 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.

Sulphasalazine 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 sulphasalazine induced lupus syndrome has been recognised[4 5] and was previously ascribed to the sulphapyridine moiety. However, similar reactions with 5-acetylsalicylic acid drugs such as mesalazine, which do not contain the sulpha group, suggest that an adverse reaction may be a consequence of the 5-acetylsalicylic acid molecule. Because the patient reacted to balsalazide but not sulphasalazine the hypersensitivity reaction may have been to the whole drug rather than the sulphapyridine moiety alone.

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