



Successful Treatment of Chronic Henoch-Schonlein Purpura with Colchicine and Aspirin

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Anaphyctoid purpura or Henoch-Schonlein purpura, a common vasculitis in children, is characterized by non-thrombocytopenic purpura, arthritis or arthralgia, abdominal pain, gastrointestinal hemorrhage and nephritis. The immunopathology of these lesions is that of leukocytoclastic vasculitis characterized by deposition of immunoglobulin A and complement 3, but is often accompanied by IgG, IgM, fibrin and properdin. Treatment is supportive, with attention to maintenance of good hydration, nutrition and electrolyte balance, and control of pain with simple analgesics [1]. Glucocorticosteroids, customarily used for severe gastrointestinal disease or hemorrhage, may dramatically decrease joint and skin symptoms, but they are not usually required. This disease usually remits spontaneously within a week, but it may recur for months before remission is complete. Rarely do patients have recurrent disease for years. Chronic Henoch-Schonlein purpura not involving the kidney has only been reported in occasional case reports [1,2].

We describe two children with Henoch-Schonlein purpura and a persistent rash that lasted several months. Treatment with a combination of low dose aspirin and colchicine resulted in complete resolution of all disease symptoms.

Case Descriptions

Case 1

A 17-year-old girl presented with a typical purpuric rash over her legs, buttocks and elbows. The lesions first appeared in crops as an erythematous maculopapular rash and later became petechial. The purpura were palpable, changing from red to purple and becoming rusty; they eventually faded following treatment. The girl was otherwise healthy and her past history was unremarkable. No preceding infection was documented prior to the onset of the rash.

Her chest radiogram was normal and laboratory investigation showed normal blood cell count, with elevated erythrocyte sedimentation rate to 50 mm/h in the first hour. Complement levels, liver and kidney function tests were normal. Urinalysis was negative and serum immunoglobulin levels showed normal IgG and IgM but an elevated IgA (4.87 g/L). There were no findings on serology for antinuclear antibody, anti-neutrophil cytoplasmic antibodies, rheumatoid factor and lupus anticoagulant. Symptoms continued for 4 months and disappeared only after a short course of corticosteroids (prednisone 1 mg/kg/day). However, when corticosteroid treatment was discontinued, the rash reappeared with pain and ankle effusion. Colchicine (2 mg/day) and aspirin (100 mg/day) were prescribed, which

resulted in a rapid clearance of the rash and reduced the joint swelling. Over the next 3 years, any attempt to discontinue this treatment resulted in a flare-up of the disease. Currently the patient is still maintained on this treatment regimen. Kidney function has remained normal.

Case 2

An 18-year-old girl presented with a typical rash of Henoch-Schonlein purpura over the legs. The lesions first appeared in crops of palpable purpura changing from red to purple and becoming rusty; they eventually faded following treatment. The girl was otherwise healthy and her past history was unremarkable. No preceding infection had been documented prior to the onset of the rash. Chest radiogram was normal and laboratory investigation revealed normal blood cell count with elevated erythrocyte sedimentation rate to 60 mm/h in the first hour. Complement and serum immunoglobulin levels, liver and kidney function tests were normal. Urinalysis was negative and there were no findings on serology for antinuclear antibody, ANCA, rheumatoid factor and lupus anticoagulant. Skin biopsy showed leukocytoclastic vasculitis of the small vessels with precipitation of IgA, IgG, C3 and fibrinogen in the vessel wall.

ANCA = anti-neutrophil cytoplasmic antibodies

The skin lesions disappeared after a short course of corticosteroids (prednisone 1 mg/kg/day), but reappeared with pain and ankle effusion when the drug was discontinued. The symptoms continued for 6 months, with marked ecchymoses, red elevated painful lesions of the skin over both feet, and dark pigmentation of the skin. Colchicine 1 mg/day was prescribed with no effect. The dose was then increased to 2 mg/day and aspirin (100 mg/day) was added, with a rapid resolution of all symptoms within 2 weeks. The patient was free of symptoms on this therapy for 3 months. The medications were then tapered slowly over another 2 months with no recurrence of the rash.

Comment

The clinical course of Henoch-Schonlein purpura is usually self-limited and has an excellent prognosis. Therefore, immunosuppressive therapy is rarely indicated, and treatment usually consists of supportive and symptomatic therapy. However, in patients with recurrent disease, corticosteroids for limited periods are recommended. It is difficult to evaluate the efficacy of treatment because of the natural history of spontaneous remissions and recurrence.

We successfully treated two patients with chronic Henoch-Schonlein purpura who had suffered from intractable skin vasculitis and arthritis. A combination therapy with colchicine and aspirin resulted in rapid recovery in both patients, and the use of these two common and well-tolerated medications induced and maintained long remissions. Prior to the administration of these drugs, the patients suffered considerable discomfort and restriction in daily activities. Corticosteroids were not recommended be-

cause of the chronic nature of the disease in these patients.

The rationale for using colchicine to treat Henoch-Schonlein purpura is based on the fact that colchicine perturbs microtubule function of the polymorphonuclear cell cytoskeleton [3]. This results in inhibition of polymorphonuclear cell migration to the site of inflammation. Colchicine is extremely successful in the prophylactic treatment of familial Mediterranean fever, a disease characterized by acute attacks of polyserositis, where polymorphonuclear cells accumulate over a short time in abundant numbers at the site of inflammation. Interestingly, an increased incidence of Henoch-Schonlein purpura with a severe and prolonged course has been reported in association with familial Mediterranean fever [4]. The rationale for aspirin treatment is derived from its antiplatelet aggregation effect. The vasculitis in Henoch-Schonlein purpura typically involves small skin blood vessels in dependent or weight-bearing areas, where the microcirculation of the blood is poor or more sluggish. Thrombi are often seen in the occluded or narrowed blood vessels, contributing to the decreased blood flow; activation of endothelial adhesion molecules attract polymorphonuclear cells and enhance inflammation. Thus this combined treatment is likely to alleviate the tendency to intravascular coagulation, and decrease the migration of polymorphonuclear cells and down-regulate their intrinsic inflammatory potential at the site of tissue injury.

The use of aspirin or colchicine in cutaneous vasculitis has been reported before, but as an additional therapy to corticosteroids or immunosuppressive drugs [1]. The use of both medications together, to our knowledge, has

not been reported. Aspirin has been recommended in low doses for adults to prevent both stroke and myocardial infarction. Exerting caution regarding its adverse effects, such as epigastric discomfort, gastric ulceration, and gastrointestinal hemorrhage, should be common practice. However, bleeding due to low doses of aspirin does occur rarely. In three randomized trials evaluating aspirin versus placebo, the respective mean incidences of fatal and major bleeding during aspirin treatment were 0.2% and 0.8% per year, compared to 0.1% and 0.7% per year, respectively, in patients on placebo [5].

These non-toxic therapeutic measures are likely to alleviate symptoms in patients with chronic Henoch-Schonlein purpura.

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The best contraceptive is a glass of water; not before or after, but instead.

Pakistani delegate at international planned parenthood conference.