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## Pericarditis as a presenting feature of Henoch-Schönlein purpura

Sirs,

Henoch-Schönlein purpura (HSP) is an inflammatory vascular disease, characterized by involvement of the skin, gastrointestinal tract, joints and kidneys (1). The presenting triad in childhood is usually represented by non-thrombocytopenic purpura, abdominal pain, and arthritis or arthralgia. The pediatric form is generally considered a benign and self-limited disorder, and cardiac involvement in HSP is exceptional, especially as the initial finding. We report a case of HSP which presented with abdominal pain and pericarditis before the appearance of the characteristic skin rash.

An 8-year-old boy came to our emergency room because of severe abdominal pain that had been present for a week. Pain was severe, diffuse and present mostly at night. The family history and past medical history were unrevealing. There was no history of vomiting, diarrhea, or dysuria and no evidence of prior upper respiratory infection. On physical examination the boy was afebrile but ill-appearing, with clinical signs of moderate dehydration. No fever was present. His heart rate was 126/min, and a 1/6 systolic murmur was present. Abdominal examination elicited severe pain in the right lower quadrant, with rebound tenderness. The rest of the examination was within normal limits for his age. The boy was then admitted for a further work-up.

Laboratory tests showed marked elevation of acute phase reactants: ESR 85 mm/hr, CRP 107 mg/dl, Hb 10.8 g/dl, WBC 20,600/mm<sup>3</sup>, platelets 900,000/mm<sup>3</sup>, and ASO titre 333 IU/ml. No viral titres were performed. A surgical consultation ruled out an acute abdomen.

Shortly after admission the boy started to present bloody diarrhea. An abdominal ultrasound and a chest X-ray were normal. Cardiological evaluation with echocardiography revealed the presence of a pericardial effusion (Fig. 1), and ECG showed inversion T waves with repolarization abnormalities. Treatment was symptomatic, with i.v. fluids and replacement of albumin. On the second day of his hospital stay the boy improved, with disappearance of his abdominal pain. The same afternoon a purpuric rash on the lower limbs characteristic of Henoch-Schönlein purpura appeared. Blood pressure, urinalysis and renal function were always normal. The rash increased over the following days, while the pericarditis slowly improved. The boy was discharged, and followed as an outpatient. Over a period of a few weeks the clinical, instrumental and laboratory abnormalities disappeared.

Pericarditis can be associated with systemic diseases such as infections (viral, bacterial or fungal), neoplasms and endocrine/metabolic disorders, or autoimmune diseases. In particular, it is frequent in the context of systemic lupus erythematosus, rheumatic fever, familial Mediterranean fever and systemic onset juvenile arthritis. However, in HSP cardiac involvement is extremely rare, with to our knowledge very few reports published up to now (2-6). Only in one case has pericarditis been described (6), the other reports describing patients with myocarditis/heart failure.

We conclude that HSP should be added to the differential diagnosis of pericarditis of

unknown cause in childhood.

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Fig. 1. Cardiac ultrasound showing a pericardial effusion anteriorly and at the apex.