A case of lower leg skin rash and severe arthralgia

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DESCRIPTION

A 23-year-old previously healthy man was in his usual state of good health until 5 days prior to admission when he noted fever of 38.0°C, cough, rhinorrhoea and sore throat. Two days prior to admission, he developed a symmetrical painful rash over the lower extremities, and bilateral arthralgia in his knees and ankles. Over the ensuing 48 h, palpable purpura developed over the bilateral buttocks, lower legs and thighs (figure 1). He subsequently presented to our outpatient clinic and was admitted for inability to walk due to severe bilateral knee and ankle pain. Swelling in the knees and ankles was not noted. Owing to the history of prior upper respiratory tract infection symptoms, arthralgia and palpable purpura, Henoch–Schönlein purpura (HSP) was suspected. Three days after admission, severe colicky abdominal pain and appetite loss developed, along with an increase in white cell count (12 400/µL) and C reactive protein (8.52 mg/dL), precluding oral dietary intake. CT scanning of the abdomen revealed diffuse duodenal and jejunal oedema and thickening, as well as target sign, consistent with intestinal vasculitis (figure 2, white arrows).[1] Upper gastrointestinal endoscopy showed multiple erosions in the duodenum, also consistent with intestinal vasculitis (figure 3, white arrows).[1] Histopathological examination of a skin lesion biopsy revealed leucocytoclastic vasculitis, compatible with Henoch–Schönlein purpura. Platelet count remained normal, as did serum creatinine and urinalysis. Blood cultures and urine cultures were negative, as were multiple immunological studies, including antineutrophil cytoplasmic autoantibody. The patient was treated with methylprednisolone (80 mg/day), which was tapered successfully. His condition improved and he was doing well at follow-up 2 months after the onset of his illness.

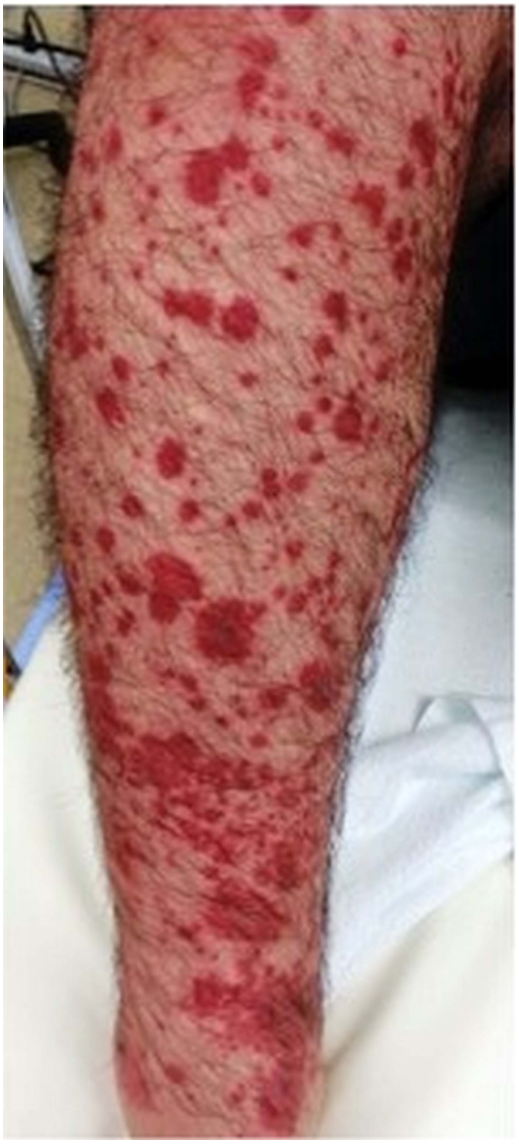

Figure 1 The patient had a symmetrical rash over the lower extremities.

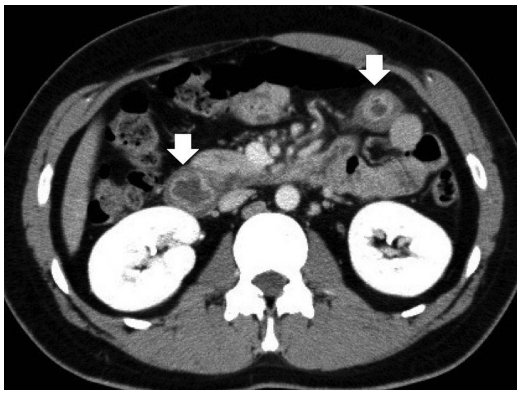

Figure 2 CT scanning of the abdomen showed diffuse duodenal and jejunal oedema and thickening, demonstrating target sign (white arrows).

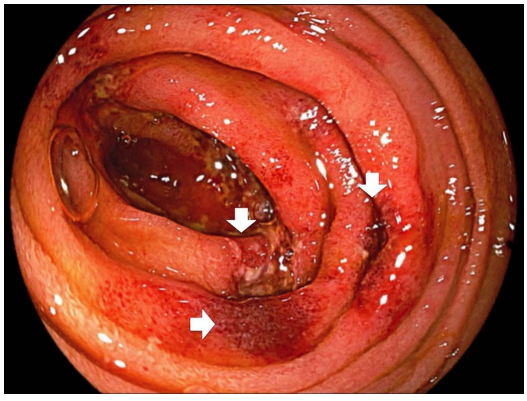

Figure 3 Endoscopy showed multiple erosions in the duodenum (white arrows).

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Gastrointestinal involvement occurs in about 48% of adult-onset HSP cases.[2] Though gastrointestinal symptoms usually develop within 1 week after the onset of the rash, they are the first manifestation in 8% of cases, and may be associated with life-threatening complications, including intussusception, infarction and perforation.[2] Abdominal CT scans often show wall thickening with a target sign, as well as engorgement of mesenteric vessels with a comb sign, suggesting vasculitis.[2] Endoscopic findings include diffuse mucosal erythaema, petechiae, haemorrhagic erosions and ulcers, commonly in the duodenum and ileum.[1] Treatment with corticosteroids, plasmapheresis or intravenous immunoglobulin, is typically required in the setting of severe gastrointestinal involvement,[2 3] randomised trials addressing respective efficacy of these treatment options are lacking. Physicians should be aware of the physical and radiological signs of HSP in order to initiate early treatment.

Learning points

- Gastrointestinal involvement is common in Henoch–Schönlein purpura (HSP), usually when occurring within 1 week of the onset of rash. Severe cases can be life-threatening, requiring early diagnosis and treatment.
- Pathology of gastrointestinal manifestation of HSP includes submucosal haemorrhage and oedema due to vasculitis.
- A patient presenting with lower extremity rash and abdominal pain should lead to prompt consideration of HSP. Skin biopsy, abdominal CT scanning and colonoscopy are helpful to confirm the diagnosis.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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