Henoch-Schönlein Purpura Following Laparoscopic Cholecystectomy for Gallstone Pancreatitis: A Rare Association

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Case Report

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ABSTRACT:

Henoch-Schönlein Purpura (HSP), also known as IgA vasculitis, is a common small-vessel vasculitis characterized by IgA deposition in vessel walls, predominantly affecting children aged 3–10 years, with a male predominance. We report a rare case of a 15-year-old male who developed a purpuric rash, arthralgia, and recurrent abdominal symptoms following laparoscopic cholecystectomy for gallstone pancreatitis. Subsequent evaluation confirmed HSP with cutaneous, gastrointestinal, and renal involvement. The patient demonstrated a favorable response to corticosteroid therapy and supportive care.

Key words: Henoch-Schönlein Purpura, IgA Vasculitis, Purpuric Rash, Gallstone Pancreatitis, Proteinuria, Hematuria.

INTRODUCTION:

Henoch-Schönlein Purpura (HSP) or IgA vasculitis, is the most common form of small-vessel vasculitis in children, particularly affecting young males below 10 years.[1] The condition typically follows upper respiratory tract infections, exposure to cold weather or certain medications. HSP characteristically involves the skin, joints, gastrointestinal tract, and kidneys.[2] The hallmark clinical features include palpable purpura[3] (often localized to the lower extremities), arthralgia or arthritis, colicky abdominal pain with or without gastrointestinal bleeding, and renal manifestations resembling IgA nephropathy—such as hematuria and proteinuria.[4] The patient we present is a 15 years old male who had features of pancreatitis. This case is unique due to the patient's age and the unusual initial presentation with pancreatitis.

CASE REPORT:

A 15-year-old cachectic male presented to the emergency department with complaints of severe abdominal pain persisting for over 12 days, associated with multiple episodes of vomiting and constipation. A purpuric rash was noted over the upper and lower limbs. There was no history of fever, jaundice or pruritus.

He had been previously evaluated at another center for similar symptoms and diagnosed with gallstone pancreatitis. On presentation to our facility, laboratory investigations revealed leukocytosis and elevated C-reactive protein (CRP). Abdominal ultrasound showed echogenic foci within the gallbladder, consistent with cholelithiasis. Serum lipase levels peaked at 950 U/L. After appropriate evaluation and counseling, laparoscopic cholecystectomy was performed on March 30, 2025. Histopathology confirmed chronic cholecystitis, and the patient was discharged in stable condition.

However, on April 6, 2025, he was re-admitted with a recurrence of severe abdominal pain, two episodes of hematochezia, and vomiting. Laboratory evaluation again showed leukocytosis with a neutrophilic predominance (76%). Urinalysis revealed 2+ proteinuria and microscopic hematuria. A 24-hour urinary protein collection measured 6 grams/day. CRP and procalcitonin were mildly elevated. Autoimmune markers including ANA and ANCA were negative. Lipid profile was unremarkable except for mildly raised triglycerides.

Hypoalbuminemia (2.7 g/dL) was noted. Renal function remained stable, with a serum creatinine of 0.6 mg/dL throughout hospitalization.

The patient developed migratory arthralgia during his hospital stay. Given the constellation of palpable purpura, abdominal symptoms, joint involvement, and nephrotic-range proteinuria, a diagnosis of Henoch-Schönlein Purpura was made, based on the European League Against Rheumatism (EULAR) & Pediatric Rheumatology European Society (PRES) classification criteria.[8,9]

Oral Prednisolone (1 mg/kg/day) were initiated alongside supportive care, leading to a gradual resolution of cutaneous, gastrointestinal, and musculoskeletal symptoms. Given the clinical improvement, biopsies were deferred.

DISCUSSION:

HSP was initially described by Heberden in 1801, with subsequent contributions by Schönlein and Henoch outlining its association with arthritis and gastrointestinal involvement, respectively.[5] It classically presents as a triad of palpable purpura, abdominal pain, and arthralgia/arthritis, with renal manifestations occurring in up to 40% of cases.[6]

This case, due to the patient's age and the initial presentation with gallstone pancreatitis—an uncommon diagnosis in adolescents.[10] The presence of abdominal symptoms, elevated lipase, and ultrasonographic findings directed early clinical focus toward a hepatobiliary etiology. However, the recurrence of symptoms postoperatively, in combination with purpura, hematochezia, joint involvement, and renal findings, was more consistent with systemic vasculitis.

While pancreatitis is an uncommon manifestation of HSP, it has been reported and may result from vasculitic involvement of the pancreatic vasculature.[7] In this case, whether the gallstones were causative or coincidental to HSP-related gastrointestinal involvement remains uncertain.

The diagnosis was established clinically using EULAR/PRES criteria[8,9] and the patient showed significant improvement with steroid therapy. Renal function remained preserved, and invasive diagnostics were not warranted.

This case highlights the diagnostic challenge in distinguishing primary gastrointestinal pathology from systemic vasculitis, especially when symptoms overlap. A high index of suspicion for HSP is essential in pediatric and adolescent patients presenting with multisystem involvement, even in the presence of a seemingly unrelated diagnosis such as gallstone pancreatitis.

CONCLUSION:

Henoch-Schönlein Purpura, while common in children aged 3–10 years, is relatively uncommon in adolescents. Our patient, though outside the typical age range, presented with characteristic features of HSP, including non-thrombocytopenic palpable purpura, abdominal pain, arthralgia, and renal involvement marked by nephrotic-range proteinuria and hematuria. The initial misdirection toward gallstone pancreatitis illustrates the diagnostic complexity in atypical cases. Prompt recognition and initiation of corticosteroid therapy led to clinical improvement, reinforcing the importance of considering systemic vasculitis in patients with unexplained multisystem involvement.

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