

Adult-Onset Purpura: An Interesting Case Report

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Abstract:

Background: HSP is named after Henoch and Schönlein, but William Heberden 1st described this disorder in the early 1800s.¹ Major difference is that IgA vasculitis with nephritis occurs in children aged below 15 years, and IgA nephropathy is seen in patients aged above 15 years. IgA vasculitis with nephritis patients present with various extrarenal symptoms, but IgA nephropathy patients present with hematuria. Histology findings in IgA vasculitis with nephritis show capillary staining and glomerular injury more compared to IgA nephropathy. Environmental, genetic factors, and antigenic factors contribute to the cause of IgA vasculitis. And there was an association with HLA haplotypes.

Objective: To report one case who came with HSP to our tertiary care center.

Materials and Methods: The current case was reported at Saveetha Medical College, a tertiary care centre in Tamilnadu, India in December 2023. A detailed history was taken from each patient. Thorough physical examination, vital signs and systemic examination were done.

Case details: A 43-year-old male, who is diabetic for 3 years, came with a complaint of abdominal pain in the epigastric region along with an intermediate burning sensation for 10 days. The patient was treated with IV fluids, pain killers, and Inj. METHYL PREDNISOLONE 500 mg in 200 ml over 4-6 hrs. was given for 3 days followed by oral steroid therapy for the next 2 months.

Mycophenolate Mofetil, Methotrexate and folic acid were also added given persistent arthritis in follow up. The patient was discharged in stable condition.

Conclusion Early recognition of multiorgan involvement, especially in out-of-common age groups, as in our adult patient, along with appropriate intervention can reduce the incidence of disease and limit organ damage.

Key Words: Henoch schlein purpura, IgA nephropathy, Haematuria, End stage renal disease, Vasculitis

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I. Introduction

Immunoglobulin A vasculitis or Henoch-Schönlein Purpura (HSP) involves small vessels of kidneys, joints, gastrointestinal tract, and skin. It can also affect central nervous system and lungs; however, but these findings are rare. HSP is an IgA-mediated disorder which is self-limited and managed with symptomatic treatment but serious complications like renal failure, can occur.

HSP is named after Henoch and Schönlein, but William Heberden 1st described this disorder in the early 1800s.¹ IgA vasculitis is now considered as the preferred term. Major difference is that IgA vasculitis with nephritis occurs in children aged below 15 years, and IgA nephropathy is seen in patients aged above 15 years. IgA vasculitis with nephritis patients present with various extrarenal symptoms, but IgA nephropathy patients present with hematuria. Histology findings in IgA vasculitis with nephritis show capillary staining and glomerular injury more compared to IgA nephropathy.

IgA vasculitis with nephritis shows 98% clinical remission; compared to patients with IgA nephropathy which may progress to end-stage renal disease (ESRD) in 20 years of diagnosis among 30% to 50% of patients.²⁻³

Environmental, genetic factors and antigenic factors contribute to the cause of IgA vasculitis. And there was association with HLA haplotypes.⁴ Group A *Streptococcus* was seen in culture of more than 30% of patients with IgA vasculitis with nephritis.⁵⁻⁶ And recently, it was identified that IgA vasculitis was associated with COVID-19 infections.⁷ Coronavirus damage blood vessels directly, causing inflammation and immune complex formation. IgA vasculitis was also reported with COVID-19 immunizations.⁸ Given less literature on HSP, the current case was reported.

Objective: To report one adult who was diagnosed with Henoch Schlein Purpura.

II. Methods

The current case was reported at Saveetha Medical College, a tertiary care centre in Tamilnadu, India during December 2023.

Study Design: Case report

Methodology:

A detailed history was taken from each patient. Thorough physical examination, vital signs and systemic examination were done.

Ethical considerations: Written Informed consent was obtained from the patients who participated in the study.

III. Results

Case details:

A 43-year-old male, who is diabetic for 3 years, came with a complaint of abdominal pain in epigastric region along with intermediate burning sensation for 10 days. He was diagnosed to have hypertension. History showed that he consumes alcohol occasionally since last five years. Physical examination showed reddish raised lesions, which started in lower limbs and gradually progressed to abdomen and upper limbs. B/L ankle joint swelling and knee and ankle joint pains were present for seven days. On general examination, he is fully conscious and oriented. There is no pallor, icterus, cyanosis, clubbing, edema and, lymphadenopathy.

Vitals- Blood pressure-150/90 mm of Hg, Pulse rate-86 beats per min. , Spo2- 99%.

Respiratory rate was 18/min. On systemic examination, epigastric tenderness is present. Cardiovascular, respiratory, central nervous systems are normal. Local examination showed multiple palpable purpuric skin lesions over bilateral lower limb extending up to umbilicus and over medial border of bilateral forearm. Swelling was noted over bilateral ankles.



Image 1: Purpura extending to abdomen



Image 2: Purpura on both legs

The following tests were done:

<p>HB 12.8% Total leukocyte count -8880 PLATELETS-3.23 LAKHS</p>	<p>ESR-55 CRP-52.2 ANA-IFA:NEGATIVE C-ANC Negative</p>	<p>Computed tomography-ABDOMEN- Mild concentric wall thickening involving d4 segments of duodenum,adjacent proximal jejunal / fatty liver</p>	<p>CECT ABDOMEN- MILD CONCENTRIC WALL THICKENING INVOLVING D4 SEGMENT OF DUODENUM,ADJACENT PROXIMAL JEJUNAL / FATTY LIVER</p>
<p>Liver function tests TB/DB-0.73/0.19 mg/dl OT/PT/ALP-26/38/67 Protein/Albumin-6.7/3.8</p>	<p>URINE R/E-NORMAL SR.AMYLASE SR.LIPASE-46/170 SR.LDH-223 mg/dl SR.CPK-64</p>	<p>UGI SCOPY- Leukoplakic spots in distal esophagus and hemorrhagic spot stomach</p>	<p>UGI SCOPY- LEUKOPLAKIC SPOTS IN DISTAL ESOPHAGUS AND HEMMORHAGIC SPOTS IN POT STOMACH</p>
<p>Renal function tests- BLOOD UREA: 23 Serum Creatiine -0.7 mg/dl URINE PCR-0.03 Electrolytes Na+/K+/CL/HCO3-136/4.4/98/24 mg/dl</p>	<p>HBA1C-7.9% Fasting glucose-103 mg Post prandial glucose-240 Random glucose-136 mg/dl SR.CPK-64</p>	<p>HPE OF SKIN BIOPSY- Perivascular neutrophilic and lymphocytic infiltrate present.features suggestive of leukocytoclastic vasculitis</p>	<p>HPE OF SKIN BIOPSY- PERIVASCULAR NEUTROPHILIC AND LYMPHOCYTIC INFILTRATE PRESENT.FEATURES SUGGESTIVE OF LEUKOCYTOCLASTIC VASCULITIS</p>

Patient was treated with IV fluids, pain killers and Inj. METHYL PREDNISOLONE 500 mg in 200 ml over 4-6 hrs was given for 3 days followed by oral steroid therapy for next 2 months.

Mycophenolate Mofetil, Methotrexate and folic acid were also added given persistent arthritis in follow up. The patient was discharged in stable condition.

IV. Discussion

SP recurrence can occur in 30% to 50% of patients even after seven years of initial onset. Renal involvement is seen in 30%-50% of subjects. Delayed-onset chronic kidney disease can occur as a complication. Arthritis can be seen in 75% of subjects and lower limb joint involvement is more than upper limb joint involvement.

HSP was previous reported by Sheth et al.⁹ in one 37-year-old male who presented with nausea, vomiting, purpuric rash, abdominal pain, along with migratory polyarthralgia. Colonic biopsy findings showed inflammatory bowel disease and Skin biopsy revealed leukocytoclastic vasculitis. Direct immunofluorescence study showed IgA deposition showing the diagnosis of HSP.

Sohagia et al.¹⁰ described a case of male with HSP presenting with cutaneous and gastrointestinal manifestations. Endoscopy showed ulcerations in the stomach, right colon. Biopsies showed leukocytoclastic vasculitis in skin and gastrointestinal tract. Steroid therapy helped to provide resolution of the symptoms. Mild disease usually resolves spontaneously, and symptomatic treatment alone is enough in most cases. Systemic steroids are suggested for moderate to severe HSP. Prognosis of HSP depends on the extent of renal involvement.

V. Conclusion

Early recognition of multiorgan involvement, especially in out-of-common age groups, as in our adult patient, along with appropriate intervention can reduce the incidence of disease and limit organ damage. The study is self-sponsored. There were no conflicts of interest.

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