# Gastrointestinal Involvement in Adult Patient with Henoch-Schönlein Purpura

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Cite this article as: Uyanıkoğlu A, Sarı S. Gastrointestinal involvement in adult patient with Henoch-Schönlein purpura. *Diagn Interv Endosc.* 2023;2(2):54-56.

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Received: July 30, 2023 Accepted: August 15, 2023 Publication Date: August 22, 2023 DOI: 10.5152/DiagnIntervEndosc.2023.22042



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## Abstract

Henoch-Schönleinpurpura (HSP), which is a systemic leuko cytoclastic vasculitis, is a tetrad characterized by palpable purpura, gastrointestinal involvement, arthral giasand kidney disease. Although it is usually seen in childhood, it can also be seen in adulthood. It can be seen with more severe clinical findings in adults, and it can also cause high-risk complications. In this study, a case of HSP with hemorrhagic erosions on esophagogastroduedenoscopy and colonoscopy presenting with gastrointestinal complaints is presented.

Keywords: Henoch-Schonlein purpura, gastro intestinal involvement, endoscopy

### INTRODUCTION

Henoch-Schönleinpurpura (HSP) is a leukocytoclastic vasculitis involving small vessels. Clinical symptoms such as cutaneous palpable purpura, joint pain, renal involvement, colic abdominal pain and gastrointestinal bleeding are common in HSP patients.<sup>1</sup>

HPS is rare disease in adults and an incidence of 0.1 to 1.8 per 100,000 people/year. The disease is more common in men and the male/female ratio is 1.5.2

Gastrointestinal and renal involvement are the main causes of morbidity and mortality. Gastrointestinal system symptoms are shown in 50-80% of HSP patients. Abdominal pain is the most common gastrointestinal symptom (50%), in addition, it can be accompanied by vomiting (26.7%), blood in the stool (9.2%), and diarrhea (2.5%).<sup>3</sup>

Gastrointestinal symptoms are usually thought to be initiated by immune complex deposition in the vessel walls, leading to edema and bleeding in the small intestinal villi. Ultrasound and computed tomography (CT) could be used to help diagnose gastrointestinal complications of HSP. However, upper gastrointestinal endoscopy and biopsy are the most useful diagnostic methods to evaluate gastrointestinal involvement of HSP.

Endoscopic findings; erythema, edema, petechiae, ulcers, nodular changes, hematoma-like areas, skipping hyperemic ecchymotic lesions. These are seen in the stomach antrum, cecum, ileum and colon.<sup>5</sup>

In our study, an adult patient who presented with abdominal pain and diarrhea after being diagnosed with HSP and who had hemorrhagic erosions in the cecum in his colonoscopy is presented.

# CASE PRESENTATION

A 20-year-old malepatient, from who we have obtained informed consent, presented with complaints of epigastric pain, nausea, diarrhea, and hematuria that had been intermittent for 1 month. It was observed that lesions with petechial rash were present on the bilateral legs and sacral region during the onset of symptoms (Figure 1). 48 mg methylprednisolone was started with the diagnosis of HSP in another center. On CT of the lower abdomen taken in the patient with ongoing abdominal pain, an increase in wall thickness in the intestinal loops was observed in the lower abdomen of the abdomen, and laparoscopic appendectomy was performed on the patient because free fluid loculation in themesentery in the right paracecal region was noted. The patient had no known chronic disease. In laboratory values, sedimentation: 25, C-reactive protein: 0.88 mg/dl (0-0.05), leukocytes: 13500/mm3 (3700-10100), 94 erythrocytes were observed in the complete urinalysis. In esophagogastroduedenoscopy (EGD), erosive hemorrhagic pangastritis, hemorrhagiculcers in theduodenum (Figure 2), and hemorrhagic erosions in thececum in colonoscopy (Figure 3) were

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Figure 1. Palpable purpura and petechial lesions on the lower extremities.

observed. During the follow-up of the patient, he had hematochezia, which did not require blood transfusionand resolved spontaneously with symptomatic treatment. He was discharged after rheumatology and gastroenterology follow-ups were recommended.

# DISCUSSION

HSP is a systemic leukocytoclastic vasculitis and a tetrad characterized by palpable purpura, gastrointestinal involvement, arthralgias, and kidney disease. 4 90% of HSP symptoms are seen before the age of 10 years. It is most common between the ages of 4-6 years. 5 Although it is most commonly seen in childhood, it can be diagnosed in adulthood as in ourcase.

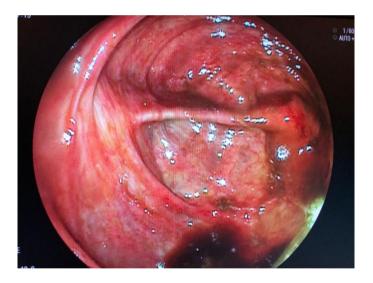
Gastrointestinal involvement is a commons ymptom in HSP. The most common clinical finding is colic abdominal pain.<sup>6</sup> The rate of gastro intestinal involvement is higher in adults than in children.<sup>7</sup> Gastrointestinal symptoms generally occur nearly a week after the onset of the rash. The first clinical presentation may be present in approximately 8% of cases.<sup>6</sup> In our case, it was observed that there

## **MAIN POINTS**

- Henoch-Schönlein purpura is a leukocytoclastic vasculitis that affects small blood vessels and is a major cause of morbidity and mortality due to gastrointestinal involvement.
- Endoscopy and biopsy are the most useful diagnostic methods to evaluate gastrointestinal involvement of HSP.
- Endoscopic findings include erythema, edema, petechiae, ulcers, nodular changes, hematoma-like areas, and hyperemic ecchymotic lesions.
- 90% of HSP cases occur before the age of 10, however it can also occur in adulthood.
- Patients may initially present with symptoms mimicking acute abdomen. Therefore, the symptom of abdominal pain associated with HSP needs to be diagnosed early to avoid unnecessary surgical explorations



**Figure 2.** Hemorrhagic ulcerated lesions in the duodenum in a patient with Henoch-Schonlein purpura.



**Figure 3.** Hemorrhagic lesions in the cecum in a patient with Henoch-Schönlein purpura.

were petechial rash lesions in the lower extremities and sacral region together with abdominal pain. Audemard-Verger et al. in their study, 137 (53%) gastrointestinal involvement in 260 adult HSP patients; 135 (99%) of the patients with gastrointestinal findings had abdominal pain, 36 (26%) had diarrhea, 26 (19%) had nausea or vomiting. Inourcase, it was observed that there were occasional abdominal pain, nausea and diarrhea complaints.

Patients may initially show symptoms mimicking acute abdomen. Therefore, early diagnosis of HSP-related abdominal pains ymptom is required to avoid unnecessary surgical exploration.<sup>4</sup> In our patient, laparoscopic appendectomy was performed because of abdominal pain, nausea, and free fluid localization in the mesentery in the paracecal region on CT. Although it is rarely seen in the literature, it is seen that there is a case of acute perforated appendicitis.<sup>9</sup>

There is no specific diagnostic test for HSP. High serum Immunoglobulin A level is connected with HSP in nearly 60% of patients. Urinalysis could range from microscopic hematuria to proteinuria. Coagulationa nd platelet count are generally normal. However, inflammatory markers such as sedimentation rate and C-reactive protein (CRP) levels are usually increased.<sup>6</sup> In our case, CRP and leukocyte levels were found to be slightly higher.

Analyzing the endoscopic imaging findings, Han et al. in their study, it was observed that erythema/petechiae (65%) were the most endoscopic findings in patients undergoing EGD anderosion/ulceration (65%) were the most endoscopic findings in patients who underwent colonoscopy. In our case, erosive hemorrhagic pangastritis in EGD and hemorrhagic erosions in the cecum were seen in colonoscopy.

Although HSP is rare in the adult age group, it should be considered that HSP may have gastrointestinal involvement in patients with palpable purpura, recurrent abdominal pain, and diarrhea. It should not be forgotten that early diagnosis can protect patients from unnecessary procedures and complications.

**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

Peer-review: Externally peer-reviewed.

**Author Contributions:** Concept – A.U., S.S.; Design – A.U.; Supervision – A.U.; Resources – S.S.; Materials – S.S.; Data Collection and/or Processing – A.U., S.S.; Analysis and/or Interpretation – A.U., S.S.; Literature Search – A.U., S.S.; Writing Manuscript – A.U., S.S.; Critical Review – A.U.

**Declaration of Interests:** The authors declare that they have no competing interest.

Funding: The authors declared that this study has received no financial support.

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