

A Case with Long-Standing Abdominal Pain Diagnosed with Henoch-Schönlein Purpura

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Abstract: Henoch-Schönlein purpura (HSP) is a systemic vasculitis characterized by purpura, arthritis and abdominal pain. We report a case of a 9 year old girl diagnosed with Henoch-Schönlein purpura after a long period of abdominal pain. Despite the diagnosed of appendicitis with abdominal ultrasound, she was not operated because the physical examination did not suggest appendicitis. She hospitalized and fallowed. Abdominal pain and vomiting continued for 2 weeks and petechiae appeared in lower extremities, lower abdomen and buttocks at the end of the two weeks. She treated with prednol, recovered well without any surgical intervention and discharged home

Keywords: Abdominal pain, Children, Henoch-Schönlein purpura.

INTRODUCTION

Henoch-Schönlein purpura (HSP), is the most common vasculitis of childhood characterized by deposition of immune complexes containing the antibody IgA in the glomeruli, skin and gut [1]. HSP affects the skin, gastrointestinal tract, joints, kidneys and rarely other organs such as testis [2]. The etiology of this phenom which mainly holds small vessels and damages is not fully known [3].

There are different criteria for HSP developed by the American College of Rheumatology (ACR) and European League Against Rheumatism (EULAR); but both require palpable purpura, abdominal pain and evidence of small vessel vasculitis on biopsy.

The HSP criteria of the American college of Rheumatology were defined as follows:

- The purpura, which is palpable and is not with thrombocytopenia;
- Emergence of initial symptoms under the age of twenty;
- Abdominal pain (common abdominal pain, ischemia in the intestines, bloody diarrhea);
- Granulocytes on the vein wall in the biopsy [4].

To establish a diagnosis of HSP, it is necessary to have at least two of these four criteria. According to European Rheumatology Union; diffused abdominal pain, IgA deposits in biopsy, or arthritis and renal involvement must be observed together with the palpable purpura [5].

We report an interesting patient diagnosed with HSP after a long duration of abdominal pain who initially referred as acute apandisit. The aim of this article is to consider the diagnosis of HSP when

long-term abdominal pain cannot be attributed to a cause.

CASE REPORT

A 9 year old girl admitted to a hospital due to abdominal pain. She had antibiotic therapy for 1 week due to urinary tract infection, but abdominal pain persisted despite antibiotic treatment. An abdominal ultrasonography had been performed and detected 5 mm appendix on ultrasound. She was referred to our hospital for a preliminary diagnosis of acute appendix.

When the patient came to our hospital, her vitals were in normal range. On physical exam, there was sensitivity in both lower quadrants and no defender and rebound. Oral intake of the patient was stopped and follow-up. White blood cell count (WBC) was 15.47 10³uL, Plt was 495.000 10³uL, Hb 13.4 g/dl, CRP 20.2 mg/L. Urine analysis showed no microscopic heamaturia or proteinuria and urine culture was clean. In the USG, a circular of 11 mm thick circular bowel was observed in the appendix (16 mm in diameter)

(acute appendicitis?). The patient was not operated because her clinic was not compatible with acute appendicitis. Computerized tomography (CT) was taken from the patient. CT showed dilatations of air fluid level in the abdomen and fluid with a maximum diameter of 2.5 cm in the pelvis.

Abdominal pain continued intermittently in the follow-up. When oral intake was opened, vomiting and abdominal pain began again. On the 7th day of

hospitalization, petechiae appeared in both lower extremities, lower abdomen and buttocks [Fig 1 and Fig 2]. The diagnosis of HSP was made clinically by the author given the classical appearance of rash and history. After 15 days of abdominal pain, the patient was diagnosed with HSP. Fecal occult blood test was positive. Prednol was given for 7 days at 2mg / kg. The patient recovered well without any surgical intervention and was discharged home.



Fig-1: HSP rash on foot



Fig-2: HSP rash on the lower extremities

DISCUSSION

Abdominal pain of childhood is one of the most common reason for admission to hospital. Therefore, good assessment and proper recognition of the symptoms of abdominal pain, which can occur for various reasons, is very important. Abdominal pain in children should be evaluated together with; the patient's age, sex, localization of the pain, duration of symptoms and physical findings [6].

The gastroenteritis, intussusception and constipation in infants, gastroenteritis, constipation and appendicitis in young children, and appendicitis,

constipation and functional form in school-children are the first three rows of acute abdominal pain [7].

HSP, one of the reason of abdominal pain, is the most common vasculitis among children. Although the causes are mostly unknown, infections, drugs, immunizations, insect bites and some foods are responsible for the etiology [8]. HSP affects skin and connective tissues, scrotum, joints, gastrointestinal tract and kidneys. The distinctive feature of the disease is characteristic thrombocytopenic purpura seen on the extremities and buttocks in almost all patients. After the prodrome, a number of symptoms develop such as rash (95-100% of cases), especially involving

the legs, abdominal pain and vomiting (35-85%), joint pain (60-84%), especially involving the knees and ankles, subcutaneous edema (20-50%), scrotal edema (2-35%), and bloody stools [9].

The first finding of HSP is usually skin involvement in the form of palpable purpuric rash [8]. Bukulmez *et al.* [10] showed that, the application complaint of the almost all patients was detected as rash and more than half of the patients had joint involvement and they recovered without any sequela. The incidence of joint involvement among children with HSP has been reported as 50%-80%.

Gastrointestinal involvement is seen in two-thirds of patients with HSP including vomiting, hematuria, severe abdominal pain, massive hemorrhage, melena, hematochezia, obstruction or perforations. This condition is thought to be the result of edema and bleeding in the vein wall due to mesenteric vasculitis. Gastrointestinal involvement rate is reported as 50%-75%, and intestinal perforation or obstruction rate is found as 4%-5% in the literature [11].

Renal involvement can be seen in a wide range from microscopic hematuria and mild proteinuria to end-stage renal failure in patients with HSP. In Turkey the mean rate of renal involvement is reported as 20%, the incidence of hematuria rate is 20%-38.6% and the presence of proteinuria rate is 18%-68%, 10-60% range in literature [12].

Bukulmez *et al.* [10] reported that, the most frequent complaint of children with HSP was rash and joint findings. Although the most common reason for admission is rash, in our case, rash appeared 2 weeks after abdominal pain.

CONCLUSION

In conclusion rash may appear late in HSP and if the abdominal pain cannot be attributed to a cause, HSP should be kept in mind.

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