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Case Report

Bowel angina: Henoch-Schonlein purpura in adult patient based on clinical approach: a case report

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ABSTRACT

The GI involvement of Henoch-Schonlein purpura (HSP) has often been described as self-limiting, with no long term morbidity.GI manifestation is higher in adult patient. HSP is an autoimmune disorder characterized by the deposition of IgA immune complexes in the wall of small to medium size arteries. We present a 41-year-old patient with GI involvement (Bowel angina) in HSP case admitted at Wangaya Regional Hospital Denpasar. The case are treated by steroid and symptomatic treatment. Diagnosis is established through a clinical approach with EULAR criteria. The patient recovered with supportive treatment and had a favourable clinical outcome.

Keywords: HSP in adult, Diagnosis by clinical criteria, Bowel angina, Outcome

INTRODUCTION

HSP is a systemic small vessel vasculitis characterized by immune deposition of Ig A complexes in tissues. It generally has a self-limited course, and clinical manifestations included in the skin, joints, and gastrointestinal. manifestations that may occur in successive episodes.[1] In addition to these manifestations, renal involvement is common, and the long-term prognosis depends on its severity. In other study there were 24% of childhood cases and 76% of adult cases. As involvement of GIT in HSP is higher in adult.[2,3] HSP primarily affects in children, and its incidence is approximately 15 cases/100,000 children per year.[2] Data on this disease in adult are confined to small series with relatively short follow up 3-5, incidence HSP in adult and severity of clinical manifestations appear not to be the same as in children.

HSP diagnosis is based on clinical criteria. The revised criteria developed by EULAR/ PRINTO/ PRES were published in 2010, and are gold standard for the diagnosis of HSP.[10,11] One study reviewed these criteria to assess applicability to adults, and found a diagnostic sensitivity of 99.2% and specificity of 86% supporting its use for all patients with HSP.[6] There are currently no specific biomarkers useful for diagnosis of HSP. Some examinations can show the activity and prognosis of the disease, but none have proven clinically useful.[7-9] The diagnostic criteria for HSP published in 2010 were palpable purpura or petechiae with lower limb predominance (a mandatory criterion) in the presence of at least one of the following: diffuse abdominal pain with acute onset; histopathology showing leukocytoclastic vasculitis or proliferative glomerulonephritis, with predominant immune globulin A (IgA) deposits; arthritis or arthralgia of acute onset; renal involvement in the form of proteinuria or haematuria.[10,11]

These clinical manifestations may develop over the course of days to weeks. The initial presentation is usually with palpable purpura and joint involvement.[12] In 51-74% of

patient, have abdominal pain associated with nausea, vomiting or bleeding, with 42% of patient having severe abdominal pain.[13,14] The characteristic of pain is colicky and localized to the periumbilical and epigastrium regions. It getting worse after meals similar to bowel angina or ischemia.[13] In severe cases, gastrointestinal symptoms may mimic an acute surgical abdomen. Complication of abdominal involvement include intussusception, perforations and bowel infractions.[15] In 32-54% of patients with HSP having renal involvement, usually manifestation as hematuria. Proteinuria without hematuria is rare.[16-18]

We present a case of Bowel angina of HSP in adult patient admitted at Wangaya Regional Hospital Denpasar. This case report is substantial as a reminder that bowel angina in HSP is one of the early symptoms encountered in adult HSP cases. Acute abdominal pain is a clinical symptom that must be altered to get proper and comprehensive treatment. considering HSP with GI involvement varies from mild to severe and life-threatening complications. Aortic aneurysm is one of the differential diagnoses of bowel angina in HSP. Abdominal pain followed by classical symptoms and an identified past medical history; we can establish a diagnosis based on clinical approach. the outcome in adult was found to be similar to children with complete recovery from the disease in the majority of cases.

CASE REPORT

A 41-year-old male was admitted due to complain severe abdominal pain predominantly in the hypogastrium. Pain was diffuse, stabbing in quality.

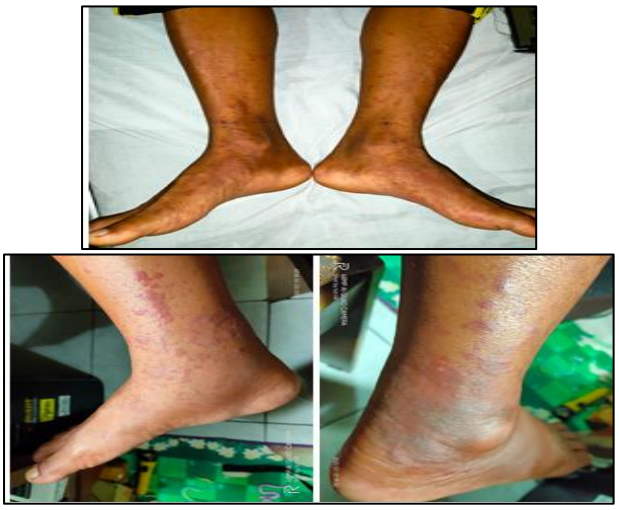

Figure 1: Erythematous papules and palpable purpura on the lower extremities.

He had history of recurrent mild abdominal pain around 13 days ago. He presented palpable purpuric lesion on the lower limbs which appeared for 7 days prior to admission. Cutaneous lesion began as erythematous macular non pruritic rash that evolved into palpable purpura. He has two episodes of diarrhea with a small amount of bloody mixed with loose stool since this morning admission. Volume and frequency of passing urine within normal limit, no blood or pain sensation were reported. He is doing not have any drug or food allergies and wasn't taking any prescribed medication. Minimal joint pain was reported. History of abdominal trauma, cardiac arrythmia, hypertension or prior bleeding episodes was denied.

Physical examination showed, the patient was fully alert with stable hemodynamic. Head and thorax within normal limit. On abdomen examination the bowel sound were normal, flat and soft. Revealed tenderness in the hypogastrium on deep palpation without rebound pain or palpable masses. An erythematous palpable purpuric rash was observed on his lower extremities.

Hematological analysis revealed a white blood cell (WBC) 15.29×103 /µL, (Neutrophils 84.5%; lymphocytes 8.8%; monocytes 6.3%; eosinophils 0.3%; and basophils 0.1%). A normocytic red blood cell count of 5.34×106 /µL Hemoglobin of 15.0 g/dL, Hematocrit level of 44.2%, platelet count of 324×103 /µL. Renal function test showed a slight increase of ureum 70 mg/dL and creatinine 1.6 mg/dL urinalysis examination showed protein (+1), keton (+4), urine clarity: slight cloudy, urine sedimentation within normal limit. Some cases in HSP population have a renal involvement, usually manifesting as hematuria. Mild proteinuria without hematuria is rare.[16] In this case the patient has increased of ureum and creatinine serum slightly accompanied by mild proteinuria. In this case, the possibility of kidney damage has occurred which is at risk for chronic kidney failure, being less 2% in those with hematuria or minimal proteinuria to 19% when both nephritic and nephrotic syndromes are found.[19]

DISCUSSION

There are many causes of an acute abdomen and most commonly these are surgical. However, there are important underlying medical causes that can present in a similar way. Surgical causes included ruptured organs, bowel obstruction and perforated viscera. The medical cause is numerous and seen less often, making the initial diagnosis challenging. Among differential diagnosis of acute abdomen are ischemic colitis, aortic aneurysm, mesenteric ischemia. In this case, bowel angina is one of the clinical presentations of HSP. Because the GI tract is generally free of damage by vasculitis involving medium sized vessels due to redundant circulation. However, the small intestinal villi contain loops of vessels with end capillaries. that when obstructed, result in necrosis of the villus tip. The avascular areas-the intestinal epithelium, the epidermis, and cartilage are fed by diffusion of nutrients from capillaries. These are the area's most commonly affected by HSP.[20]

Day first admission patient had severe abdominal pain and appeared palpable purpuric lesion on both limbs, based on sign and symptoms, his complained already included of

criteria diagnostic of HSP (by EULAR/ PRINTO/ PRES).[10,11] Patient was started on normal saline infused; Nacl 0.9% 20 dpm, antibiotic prophylaksis; ceftriaxone 1 gram twice a day, proton pump inhibitor (PPI); esomeprazole 40 mg once daily and steroid administered. We start 62.5 mg of methyl prednisolone twice a day. 2nd day his complaint still affects but, the pain was minimal decreased after got steroid administrated. 3rd day hospitalization abdominal pain was decreased. To diagnosis of abdominal organ rupture, bowel or gastric perforation or abdominal aortic aneurysm, its a minimum possibility. Bloody vomiting, pulsation of the umbilical artery, persists abdominal severe pain, or the occurrence of decreased consciousness. There were no signs and symptoms as described. Had history of taking any medication or medical history of hypertension was denied. In addition, ultrasound of the abdomen showed the impression of the absence of an acute abdomen.

4th day we tapered down of methyl prednisolone 62.5 mg per day in divided dose, continued antibiotic and PPI. until the sixth day of treatment, the complaints of abdominal pain were gone, the trend of clinical improvement and purpura began to decrease. Steroids can be effective in treating disturbing extrarenal symptom (bowel angina) of HSP, and their use seems to be indicated in cases with severe symptoms.[21] the potential benefit of corticosteroid administration early in the course of HSP may be more prominent and decreased prolonged hospitalization, the risk of surgery, or progression of chronic renal disease.[22] Follow up on 7th day, his condition getting better. Patient can be discharged from the hospital. Metyl prednisolone intravenous switched to orally 4 mg twice a day for one week, and continued follow up of blood chemistry and urinalysis by policlinic as an outpatient.

CONCLUSION

The chief complaint of acute abdominal pain is commonly found in adult HSP cases. Prompt and proper treatment will be reducing the risk of life-threatening complications. A diagnostic approach through anamnesis and physical examination has been able to establish the diagnosis of HSP in adults.

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