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Case Report

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## Henoch-Schonlein Purpura with TCM Trials – A Case Report

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### Abstract

Henoch-Schonlein Purpura (HSP), also known as “anaphylactoid purpura”, is a systemic vasculitis of unknown cause, primarily affecting children, in which circulating immune complexes of IgA and C3 are deposited on arteioles, capillaries and venules. It is characterized by nonthrombocytopenic purpuric rash, abdominal pain, arthralgia and renal involvement. Here, this report presented a 13-year old children hospitalized for his recurrent HSP, his history of clinical course and treatment outcome.

**Keywords:** *Henoch-Schonlein purpura, Corticosteroid, Traditional Medicine (TCM), Children*

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### 1. Introduction

Henoch-Schonlein Purpura (HSP), also called “anaphylactoid purpura”, is first recognized by Heberden in 1801 (Iqbal, 2005). HSP is systemic, IgA mediated vasculitis of small vessels that is usually self-limiting. The clinical features include a palpable purpuric rash, arthralgia, gastrointestinal involvement (with abdominal pain and/or gastrointestinal bleeding), and renal involvement (Hung *et al.*, 2009). The etiology of HSP is unknown. Treatments include conservative care, corticosteroids, and antibiotic therapy. The prognosis generally is good, except for cases with renal involvement (Hung *et al.*, 2009). This report was presented by a 13-year-old male with HSP and its current outcome.

### 2. Case Report

A 13-year old boy was admitted into hospital due to his recurrent episodes of hematuria and increased proteinuria on March 21, 2004. On December 30, 2003, he was once admitted into other hospital due to his history of a sudden onset of arthralgia, skin rash, and abdominal pain for 3+ months duration. At that time, the initial diagnosis of Schonlein-Henoch syndrome was made. Proteinuria 4+ was declined to 3+ following prednisone (40 mg/day). Subsequently, he was transferred into the second affiliated hospital of Central South University, Changsha. Laboratory data: Hemogram: Hemoglobin is 97 g/L, WBC 9.9 x 10<sup>9</sup>/L, plt 187 x 10<sup>9</sup>/L. Urinalysis: Proteinuria ++ to +++, urine OB +++, proteinuria detection was 724.7 mg/day. His blood BUN was 2.18 mmol/L, Serum creatinine 49.5 umol/L. A renal biopsy was the diagnosis of membranoproliferative glomerulonephritis. His proteinuria was varying degree from 2+ to 3+ after using

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prednisone (30 mg/mL). At discharge, proteinuria detection was increased to 1610.5 mg/day (control: 0-150 mg/day). The repeated diagnosis of this syndrome was further defined.

On physical examination at hospital at this time showed a mild pallor, weakness, and gross hematuria. Urine OB +++++. Urinalysis was continuous to be shown 4+ RBC and 3+ proteinuria. Treatment consisted of Ampicillin sodium injection and a small dosage of 5 mg dexamethasone intravenously, and etamsylate injection intensively staunches the bleeding of urine. During hospital, Traditional Chinese Medicine (TCM) was also taken. Repeat urinalysis, at 9<sup>th</sup> day during hospitalization, showed 2+ to 3+ RBC and 1+ proteinuria. As an outpatient, he was placed on continuous TCM investigation. TCM consisted of *Astragalus membranaceus*, *Angelica sinensis*, *Rehmannia glutinosa*, *Rehmannia glutinosa preparata*, *Ophiopogon japonicus* Ker Gawl., *Salvia miltiorrhiza*, *Moutan cortex*, *Fructus corni*, *Rhizoma anemarrhena*, *Asiatic plantain seed*, *Cephalanoplos segetum*, *Herba ecliptae*, *Rhizoma imperatae*. During the follow up of 17 years, he was well now.

### 3. Conclusion

In this study, A HSP associated with renal involvement had successfully treated using combination therapy of corticosteroids and TCM as adjuvant use.

On physical examination in HSP, no abnormalities were found besides a non-palpable skin rash of the legs. A skin biopsy showed a leukocytoclastic vasculitis with deposition of IgA and C3. Although the mechanism of pathogenesis is still not fully delineated, many studies have implicated IgA and IgA-containing immune complexes (IgA1-IgG and IgA1-IgA1) deposition in glomerular basement membrane (Lau *et al.*, 2010). The main pathological changes include mesangial proliferative changes, with varying degrees of segmental necrosis and glomerular crescent formation at grade III-IV stage (Ani *et al.*, 2009). Jauhola *et al.* (2010) recommended weekly home urine dipstick analyses for the first 2 months for patients with HSP. In current case, membranoproliferative glomerulonephritis is likely considered because of RBC amounts in his urine, and based on the diagnosis of renal biopsy. In the absence of more conclusive finding, therefore, the correct diagnosis could only be reached by combining all of the clinical and pathological facts such as a kidney biopsy.

Steroid hormones (prednisone) had its benefits for several clinical relevant HSP outcomes. Shin *et al.* (2010) reported that intravenous dexamethasone resulted in the rapid remission of abdominal pain or arthralgia in all patients without major complications. Early corticosteroids exposure significantly reduced the hazard ratios for abdominal surgery, particularly those gastrointestinal manifestations of the disease (Weiss *et al.*, 2010). In current case, treatment consisted of corticosteroids, antibiotic therapy and traditional medicine (TCM) (Zhu, 2018).

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