



Erythromycin triggers intussusception in a pediatric patient with Henoch–Schönlein purpura

To the Editor,

Henoch–Schönlein purpura (HSP) serves as the commonest systemic vasculitis in children. Intussusception is a rare gastrointestinal complication of HSP with symptoms such as nausea, vomiting, diarrhea, colicky pain, and hematochezia. A clinical survey from Taiwan, China demonstrated that the gastrointestinal tract was implicated in 77.8% of children with HSP; among them, only one case (0.48%) experienced intussusception (1). Although the pathogenesis remains unclear, intestinal motility disorders, mural edema, and hemorrhage are reported to be associated with the onset of intussusception (2).

An 8-year-old girl was referred with a 10-day history of ankle pain and erythematous papules on the lower limbs. On admission, her axillary temperature was 37.1°C, respiratory rate was 20/min, heart rate was 98/min, and blood pressure was 100/60 mmHg. Her blood counts were as follows: white blood cells, $6.87 \times 10^9/L$ with 54.82% neutrophils and 33.53% lymphocytes; hemoglobin, 130 g/L; and platelets, $370 \times 10^9/L$. Urinalysis revealed microscopic hematuria (53 erythrocytes/ μL) and mild proteinuria (480 mg/d). Specific immunoglobulin M antibodies for *Mycoplasma pneumoniae* (MP) were positive. The patient was diagnosed with HSP in combination with MP infection, and subsequently treated with intravenous methylprednisolone (5

mg/kg/d) plus erythromycin (30 mg/kg/d). Three days later, she complained of colicky abdominal pain and hematochezia. Palpation of the abdomen showed periumbilical tenderness. Findings from an abdominal computed tomography scan demonstrated a concentric structure located in the transverse colon (Figure 1). An open appendectomy and manual reduction of the intussusception were performed. Seven days post-operation, she was discharged with no specific complications.

There were four unusual features in the present case. First, the major reason triggering us to present this case is intussusception. A clinical survey from Taiwan, China demonstrated that only 0.48% of patients with HSP experienced intussusception (1). Especially, the occurrence of abdominal symptoms prior to development of the typical purpuric skin lesions may pose a diagnostic challenge to physicians. Second, our patient was 8 years old. Intussusception is predominant in infancy, and the incidence was 74 per 100,000 among children younger than 1 year of age, with a peak age incidence of 5 to 7 months (3). It is less common in older children. Third, the colo-colonic intussusception is often accompanied with intestinal organic disease, such as rotavirus enteritis and colon carcinoma (4,5). However, no organic intestinal disease was founded in our patient. Last, but most important, although there is no report about the association of macrolides with intussusception to date, we speculate that erythromycin may be a major trigger for the onset of intussusception in our patient.

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Figure 1. Abdominal computed tomography scan demonstrated a concentric structure in the transverse colon (arrows)

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