

## ACUTE ABDOMEN IN HENOCH-SCHOLEIN PURPURA

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### ABSTRACT

Abdominal pain is a frequent symptom in the child with Henoch-Scholein purpura and raises the suspicion of intussusception or perforation. Careful clinical evaluation in the face of radiological appearance of intestinal obstruction in Henoch-Scholein purpura will avoid the morbidity associated with a missed intussusception or perforation.

We report a case of intussusception and perforation in Henoch-Scholein purpura.

### INTRODUCTION

Henoch-Scholein purpura is a disorder caused by cutaneous and systemic small vessel vasculitis of unknown etiology characterized by a rash that is frequently purpuric, abdominal pain associated with gastrointestinal hemorrhage, arthralgia and sometimes nephritis. Abdominal pain most likely results from submucosal, subserosal hemorrhage and accumulation of edema fluid in the wall of the bowel due to vasculitis and thrombosis of small vessels. These changes may lead to gastrointestinal hemorrhage, some may be complicated by intussusception and perforation.<sup>1</sup> Incidence of intussusception in Henoch-Scholein purpura is 2-3%.<sup>2,3</sup>

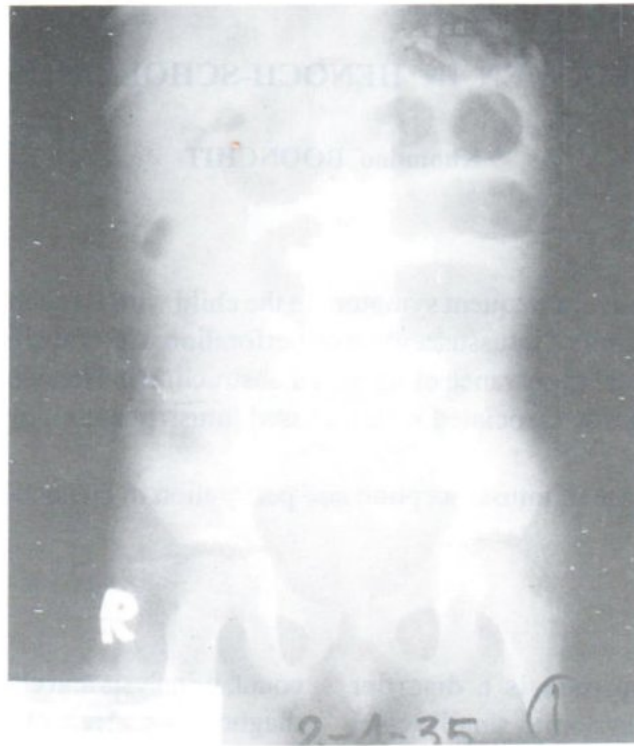
### CASE REPORT

A 4 year old girl was in her usual state of good health until three days prior to the presentation, she developed swelling of her wrists, ankles and feet with two days history of purpuric rash over both feet. On the morning of presentation, she had acute left upper quadrant pain, tenderness all over the abdomen but no mass was palpable. Laboratory data revealed occult blood stool, normal hematocrit, white blood cell

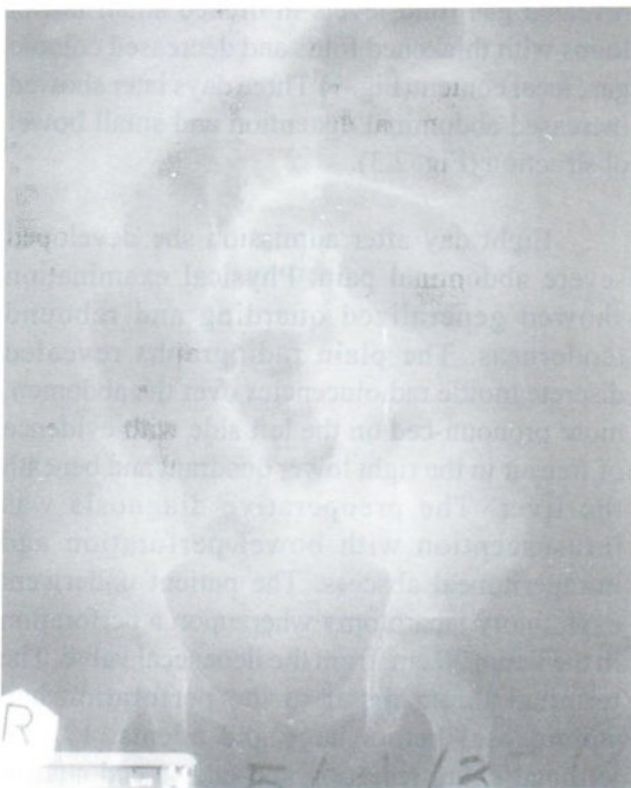
count, urinalysis and clotting studies. The admitted diagnosis was Henoch-Scholein purpura.

Plain radiographs on the admission day revealed gas fluid levels in dilated small bowel loops with thickened folds and decreased colonic gas, fecal content (Fig. 1) Three days later showed increased abdominal distention and small bowel obstruction (Fig. 2,3).

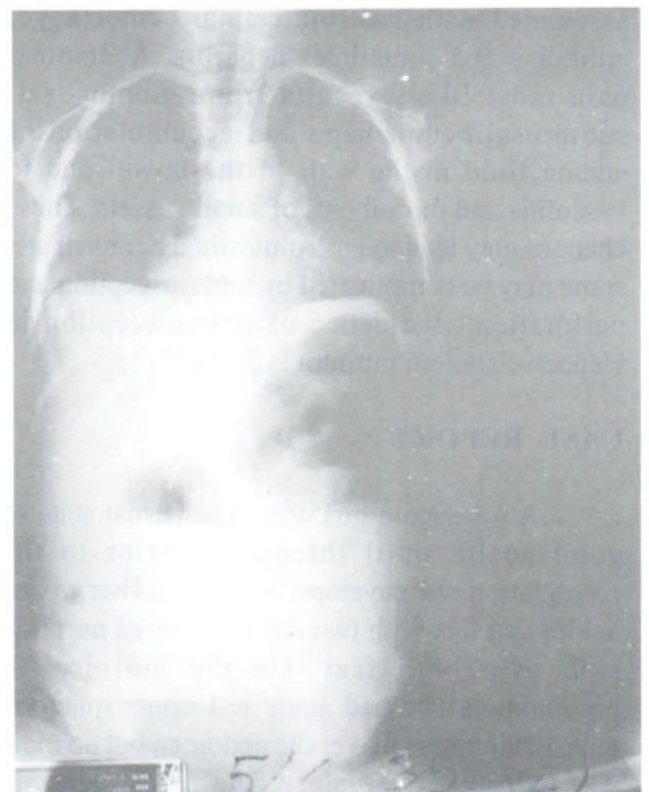
Eight day after admission she developed severe abdominal pain. Physical examination showed generalized guarding and rebound tenderness. The plain radiographs revealed discrete mottle radiolucencies over the abdomen, more pronounced on the left side with evidence of free air in the right lower quadrant and beneath the liver. The preoperative diagnosis was intussusception with bowel perforation and intraperitoneal abscess. The patient underwent exploratory laparotomy whereupon a perforation in the ileum 20 cm. from the ileocaecal valve. The terminal ileum distal to the perforation had submucosal hemorrhage and edema. 17 cm. terminal ileum resection and end to end anastomosis were accomplished.



**Fig. 1** Plain abdomen supine on the admission day showed dilated small bowel loops.

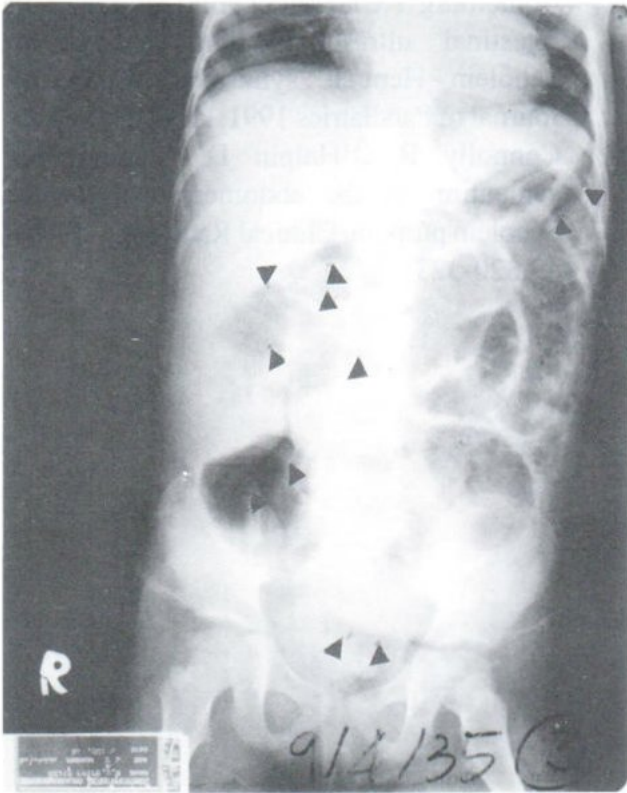


**Fig. 2**



**Fig. 3**

**Fig. 2, 3** Three days later, Plain Abdomen supine and upright showed evidence of small bowel obstruction.



**Fig. 4** Free air and abnormal air were observed.

## DISCUSSION

Some authors have drawn attention to difficulty in the diagnosis of intussusception in Henoch-Scholein purpura.<sup>4-6</sup> Identification of patients with this complication may be obscured for a number of reasons:

1. Abdominal symptoms are frequent among patients with Henoch-Scholein purpura who do not have intussusception.
2. The presentation of intussusception variable and may be identical to that of intestinal vasculitis and edema or mural hematoma, not requiring surgery.<sup>5,7,8</sup>
3. Intussusception may occur at any stage of illness.<sup>5,8</sup>
4. After surgery intussusception may occur at a different site.<sup>9</sup>
5. The place of contrast studies is limited by its invasiveness and by the fact that most intussusceptions in Henoch-Scholein purpura are in the

small bowel.<sup>10</sup> Especially in the presence of vasculitis with severe intestinal involvement, there may be a high risk of perforation.

Some studies assess the role of Ultrasound in patients with abdominal symptoms due to Henoch-Scholein purpura.<sup>6,9,11,12</sup>

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