

## A 4.5-year-old girl with acute abdominal pain

### History:

A 4.5-year-old girl presented with abdominal pain for 10 days which was accompanied with low grade fever for 2 days before the symptom. The pain was located around periumbilical area, in which it was partially improved after taking antacids. Five days prior to admission, she was brought to the emergency department due to increased intensity of the pain. She was treated with ranitidine 75 mg bid and discharged home. There was no clinical improvement, then she was admitted to the hospital for further investigation and treatment.

### Past history:

At the age of six months, she was diagnosed as GERD due to recurrent vomiting and weight loss. As a result, life-style modification and cisapride suspension were introduced with clinical improvement. Around the age of two years, she complained of recurrent vomiting, abdominal pain, and constipation. At that time, cisapride suspension and lactulose were prescribed with clinical improvement. She was brought to the medical attention again when she was four years old, in which she presented with abdominal pain, vomiting and feeding refusal. UGIS showed no evidence of gastroesophageal reflux but there was a sign of duodenal bulb irritability, leading to a possible diagnosis of duodenitis. The patient was treated with sucralfate for 2 weeks.

Feeding history was normal. There was a history of contact rodent's urine at her home environment.

### Physical examination:

General appearance- Thai girl, Fatigue

Body weight 14 kg, height 110 cm

Vital signs: T 37 C, PR 93/min, RR 15/min, BP 100/70 mmHg

HEENT: mild pale, no jaundice, dry lips and normal eyegrounds

Heart: regular rhythm, no murmur

Lungs: normal breath sound, no adventitious sound

Abdomen: soft, no distension, mild tenderness at epigastrium and LUQ, normal bowel sound

Ext: no pitting edema

PR: empty rectum

CNS: intact

### Basic investigations:

**CBC** : Hb 10.9 g/dl, Hct 33%, WBC 27.190/cumm, N60, L19, Mono8, Eo1, Atyp L 12, platelet 707,000/cumm

**UA** : normal

**ESR** : 10 mm/hr

**Stool examination**: no cell, no parasite, occult blood-negative

**DTX** : 94 mg/dl, **BUN/Cr** : 7/0.5 mg/dl

**Na** 138 mEq/L, **K** 3.8 mEq/L, **Cl** 104 mEq/L, **CO2CP** 20 mEq/L

**LFT**: A/G 3.6/2.1, AP 135 IU/L, AST/ALT 16/14 IU/L, TB/DB 0.2/0.1 mg/dl

**LDH**: 335 U/L

**Serum amylase**: 334 U/L, **Urine amylase**: 7,130 U/L, **ACCR**: 7%

**EGD** : swelling of the duodenal mucosa (second part)

**Pathology** : Mild chronic gastritis, moderate acute and chronic duodenitis

**PPD test**: negative, **Anti-HIV**: negative

**ANA**: 1:20

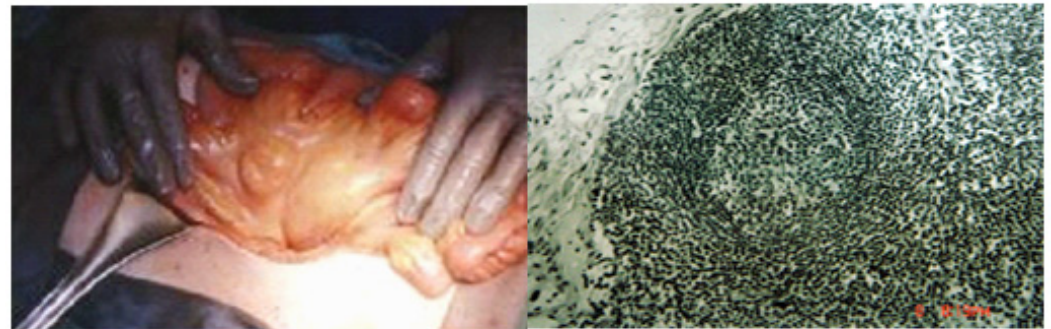
**Gastric washing for AFB x 3 days**: negative

**UGIS** : No evidence of intestinal obstruction

**CT abdomen**: There was bowel wall thickening, especially at the terminal ileum.

#### Clinical course:

The patient underwent exploratory laparotomy. The operative findings showed generalized adhesion of the omentum to small bowel, enlarged mesenteric nodes along the jejunal mesentery and distal ileal mesentery. (Figure 1) The pathology revealed preserved nodal architecture and mixed patterns of hyperplasia consisting of follicles, paracortical, and sinus patterns. Sinuses were patent with focal monocytoid hyperplasia. Neither atypia nor granuloma was noted. Occasional eosinophils were seen in the parenchyma without evidence of malignancy. (Figure 1) It was diagnosed as reactive lymphoid hyperplasia.



**Figure 1:** Enlarged mesenteric nodes and reactive hyperplasia on histopathology

#### Diagnosis :

Mesenteric lymphadenopathy

#### Treatment :

As a history of contact rodent's secretion, azithromycin was prescribed postoperatively with clinical improvement.

**Mesenteric lymphadenopathy**

Etiology: This condition can be a manifestation of systemic infectious diseases, such as acute appendicitis, viruses (adenovirus, HIV, HHV4, EBV), *Toxoplasma gondii*, *Mycobacterium* species, *Penicillium marneffeii*, Cat-scratch disease, *Giardia*, *Yersinia enterocolitica*, *Yersinia pseudotuberculosis*, and *Citrobacter rodentium*. For a non-infectious causes include lymphoma, GI malignancy, SLE, autoimmune lymphoproliferative syndrome, castle man disease, celiac disease, Crohn's disease, and Brennemann's syndrome. The patient usually presents with chronic or recurrent abdominal pain, vomiting, weight loss, gut obstruction, intussusception or asymptomatic. Pain usually results from mass effect within the peritoneum or traction on mesentery.

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