

UNUSUAL CAUSES OF PNEUMOPERITONEUM IN ADOLESCENTS THINK GASTRIC ULCER!

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Background:

- **Gastric ulcer** in children and adolescents is a rare entity. Perforated ulcer is even more unlikely to happen.
- Few cases were described in the literature over the years. It often mimics other causes of **acute abdomen**.

Methods:

- We present **two cases** of gastric perforation in previously healthy adolescents, each with a distinct clinical presentation but a shared underlying pathology.

Case presentation:

➤ CASE 1 :

- A **13-year-old** boy with no medical history
- **One-month** history of **ulcer-like** pain.

SYMPTOMS

Intense epigastric pain

Vomiting

CLINICAL FINDINGS

No signs of shock

No fever

Epigastric tenderness

CHEST X-RAY



Figure 1:
Bilateral pneumoperitoneum

ABDOMINAL ULTRASOUND

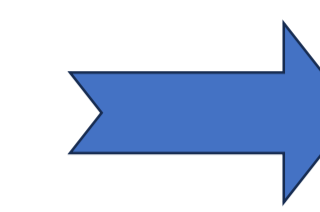
- No intra-abdominal fluid and no obvious pathology

EMERGENCY LAPAROSCOPY

- **Localized inflammation** of the stomach.
- No significant peritoneal contamination, no visible perforation.

CONVERSION TO LAPAROTOMY

- A 0.5 cm perforation was identified on the **anterior prepyloric region** of the stomach.



The ulcer was sutured after biopsies.

➤ CASE 2 :

- A **13-year-old** boy with no medical history.

SYMPTOMS

Acute abdominal pain

Vomiting

CLINICAL FINDINGS

Signs of shock

Fever

Abdominal guarding

Fluid resuscitation and reanimation first !

EMERGENCY LAPAROSCOPY

Sus-mesocolic peritonitis with **Gastric wall inflammatory lesions**

CONVERSION TO LAPAROTOMY

- Small gastric perforation **<0,5cm** on the greater curvature.



Primary repair of the perforation with **biopsy** was performed after decontamination.

CHEST X-RAY

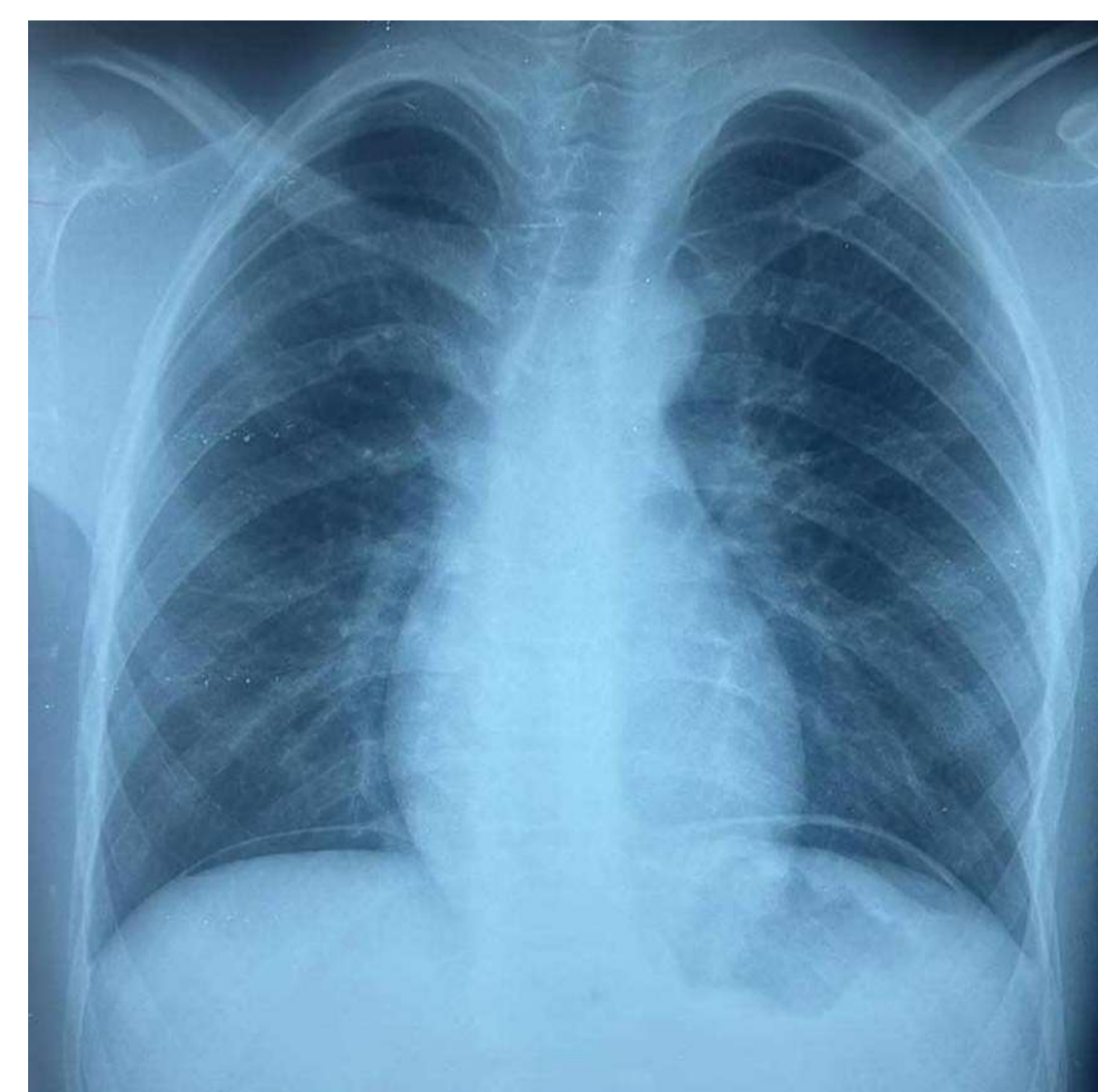


Figure 2: **Pneumoperitoneum**

OUTCOMES

- Anatomopathology revealed **ulceration of the gastric wall** in both cases.
- **Postoperative course:** uneventful, both adolescents recovered well and were discharged on antibiotics and proton pump inhibitors.

Conclusions:

- Although rare, gastric ulcer perforation should be considered in adolescents presenting with **acute abdomen**.
- In this case, **pneumoperitoneum** was the key radiologic finding that guided diagnosis.
- These cases highlight the variable presentation—from stable patients to those in shock—and the essential role of surgical exploration and H. pylori management in achieving **favorable outcomes**.