

Patient RV

Chest pain following automobile
accident

History of Present Illness

- 10 year old restrained female passenger involved in a high speed left lateral impact automobile crash complaining of left chest pain
- At the scene of the accident she had transient hypotension, but this resolved with a 10 ml/kg bolus of lactated ringers solution.

Medical History

- Past Medical Problems - None
- Past Surgical History - None
- Medications - None
- Allergies - None
- Social History - Normal previously healthy child

Physical Examination

- Vitals
 - BP 114/62
 - Pulse 140
 - Resp 24
 - Temp 36.5 C
- General: Awake and alert with some skin mottling
- HEENT- Normal
- Neck - Nontender, C-collar in place, trachea in the midline
- Chest - Decreased breath sounds on the left.

Physical Examination

- Abdomen - Moderate tenderness over the lower left chest and upper abdomen
- Back - Nontender without deformity
- Pelvis - Tender, but stable to AP compression
- GU- Normal child

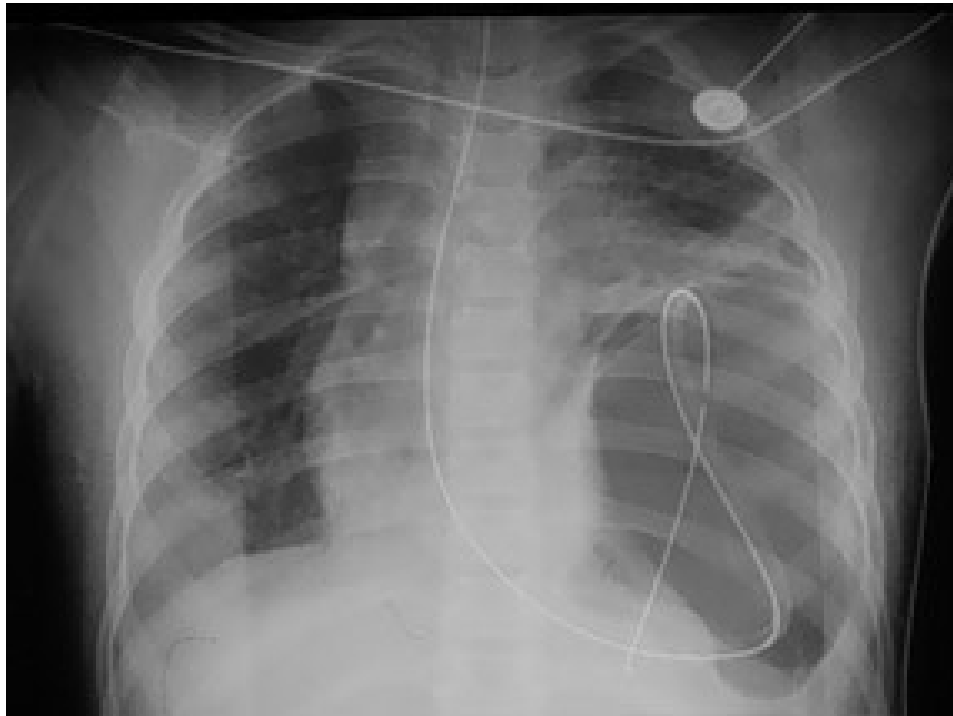
Physical Examination

- Rectal - Normal sphincter tone. No occult blood.
- Neuro-Awake and alert, Glasgow Coma Score 15, Normal pupillary exam, normal motor and sensory exam
- Ext- No deformities, pulses trace palpable and symmetrical

Laboratory

- Hematocrit - 32
- WBC - 20,000
- Amylase 88
- Arterial Blood Gas - pH 7.34 PO₂ 106
PCO₂ 36 Base Excess -7
- Urinalysis - 30-40 red blood cells

Diagnostics



Ruptured diaphragm. In addition, there is compressive atelectasis of the left pulmonary parenchyma.

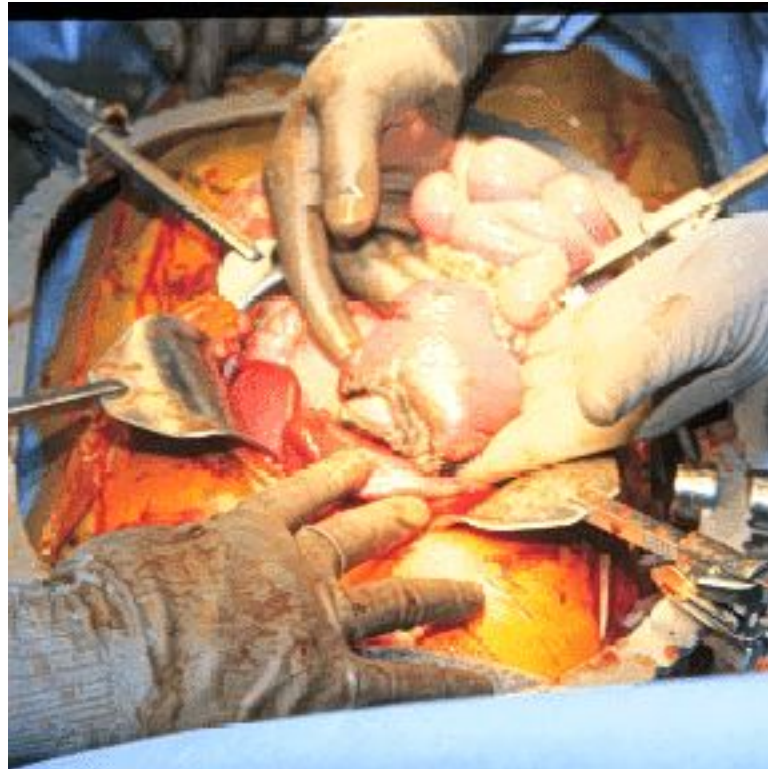
Diagnosis

- Ruptured left hemidiaphragm following motor vehicle accident
- Possible ruptured spleen

Operative Findings

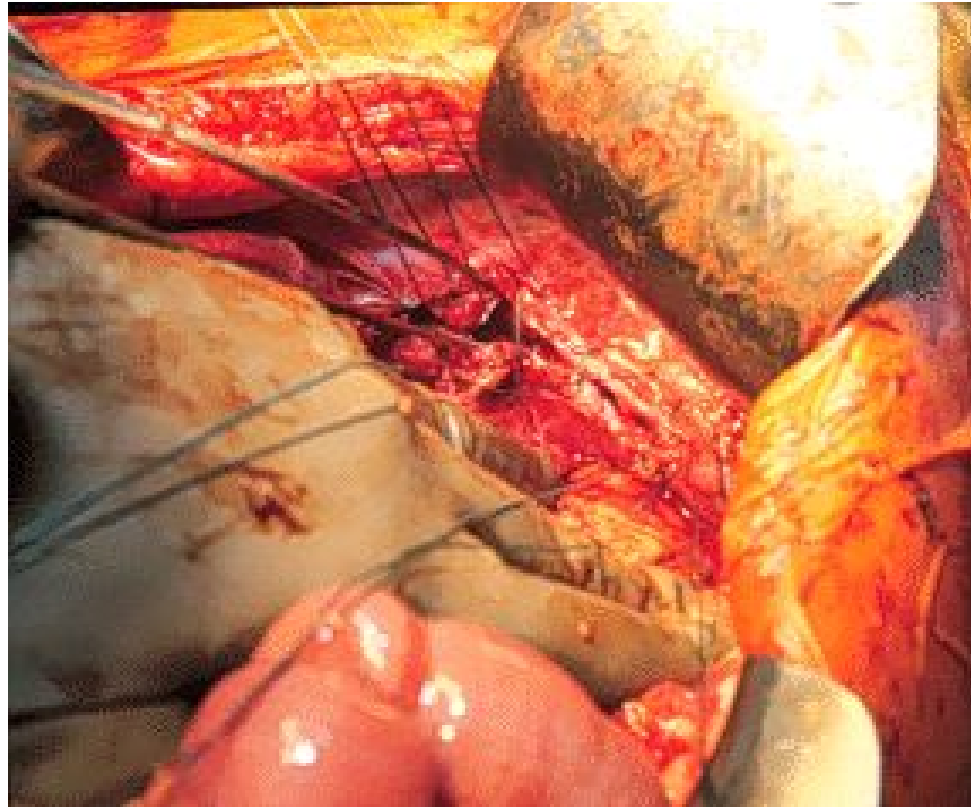
- Ruptured left hemidiaphragm with the stomach and spleen herniated into the left chest
- Fractured superior pole of the spleen extending into the hilum
- Moderate amount of blood in the left chest

Repair of Spleen



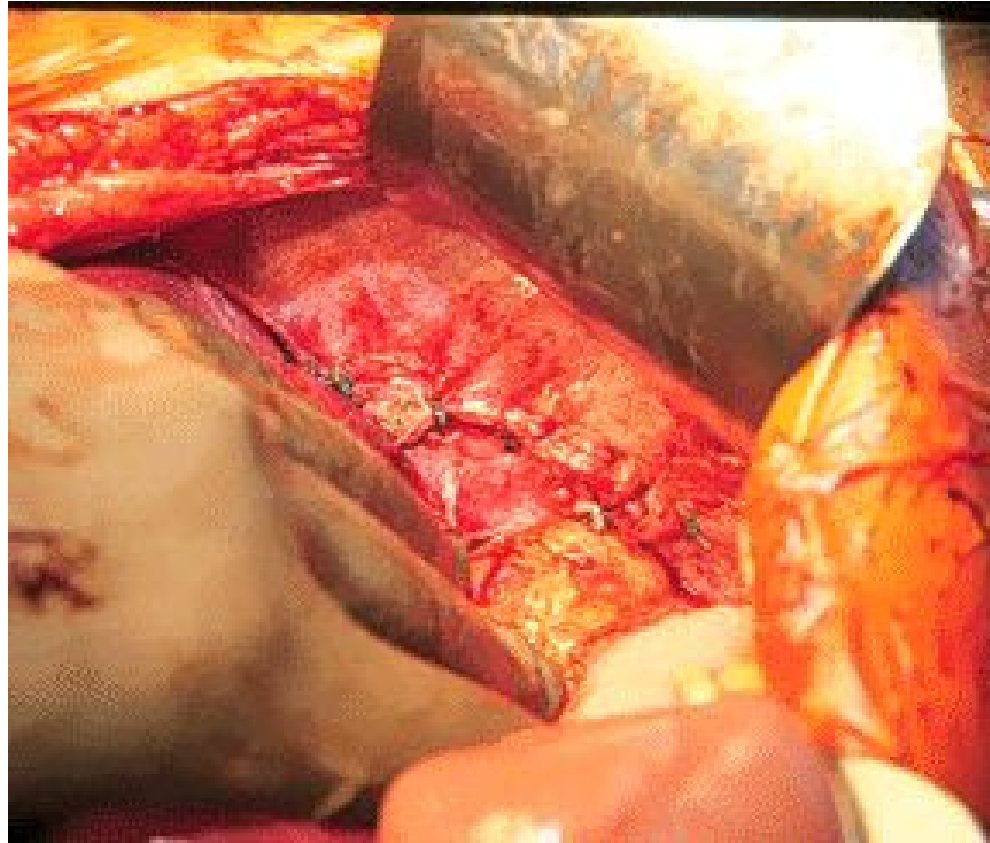
The superior pole of the spleen was injured and was excised. To control bleeding, a row of pledgeted sutures were placed adjacent to the line of resection.

Repair of the Diaphragm



A row of interrupted sutures were placed to repair the laceration. They have not yet been tied and cut.

Repair of the Diaphragm



Postoperative Course

- Extubated on postop day 1
- Early mobilization
- Early enteral feeding
- Nasogastric tube discontinued on postop day 3
- Advanced to a diet on postop day 4
- Chest tubes discontinued on postop day 6
- Discharged to home on postop day 7

Learning Issues