Case conference

Supervisor: VS連楚明
Presentor: R1劉邦民
103.03.12

- 61 y/o female
- Chief complaint: 家屬代述為腹痛，有腸阻塞過
- Triage: I
- T/P/R:37.9/93/20, BP=83/46, SpO2=95%
- Conscious: E4M6V5

Present illness

- Abdominal pain for 6+ hours today
- Progressive after lunch
- Diffuse intermittent cramping
- Nausea/vomiting(+)
- Flatus(+) 3 hours before, no stool for 1 day
- 這幾天仍有排便
- 上個月: 因adhesive ileus & bezoar impaction 住院, 有suggest OP 但拒,

Past history

- Allergy: NKA
- Medical history:
  - Asthma
  - CVA
- Surgical history
  - Gastric ulcer s/p pyloplasty
  - Bezoar impaction s/p exploratory laparotomy

Physical examination

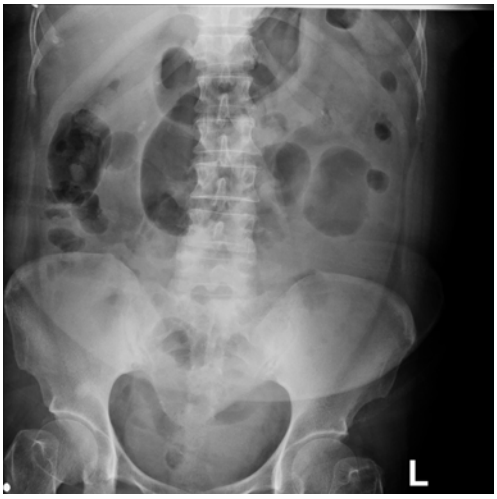
- Cons: ill-looking
- Head & neck: supple
- Chest: smooth respiration
- abdomen: absent bowel sounds, left CV knocking tenderness(+/-)
- Extremity: cool extremity

Impression

- Septic shock with peritonitis, definite etiology?

Management(1811) 0h8m

- Triage:I
- On monitor
- N/S 500 ml IV ST, then run 80 ml/hr
- NPO(1230)
- CBC/DC/Platelet
- Na, K, AST, Cr, lactate
- PT/PTT
- B/Cx2
- KUB
- Invanz 1 gm ivd st
- Morphine 6 mg iv st (VAS:9)



Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位
CBC/Platelet/DC	**********	
WBC	1.9	X1000/ul
RBC	4.21	million
Hb	11.7	gm/dl
Ht	35.9	%
MCV	85.3	fl
MCH	27.8	pg
MCHC	32.6	%
RDW	14.3	%
Platelet	205	x1000/ul

檢驗項目名稱	檢驗值	檢驗值單位
Differential count	**********	
Segmented Neutro.	46.0	%
Lymphocyte	18.5	%
Monocyte	2.0	%
Eosinophil	0.5	%
Basophil	0.0	%
Atypical lymphocyte	0.0	%
Band	31.5	%
Metamyelocyte	1.5	%
Myelocyte	0.0	%

Laboratory data

檢驗項目名稱	檢驗值	檢驗值單位
GOT(AST)	10	U/L
Creatinine	0.72	mg/dL
eGFR	82.35	
Na	134	mmol/L
K	3.7	mmol/L

檢驗項目名稱	檢驗值	檢驗值單位
Lactate	15.8	mg/dL

檢驗項目名稱	檢驗值	檢驗值單位
PT	13.2	second
Normal control	10.8	second
INR	1.22	Ratio
APTT	24.8	second
Normal control	33.4	second
APTT ratio	0.74	

Management

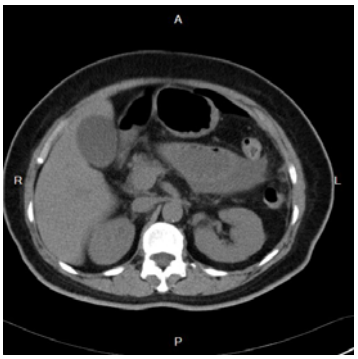
(19:21) (1h18m)

- Abdominal CT with/without contrast

(19:34)

- Bain ½ amp iv st

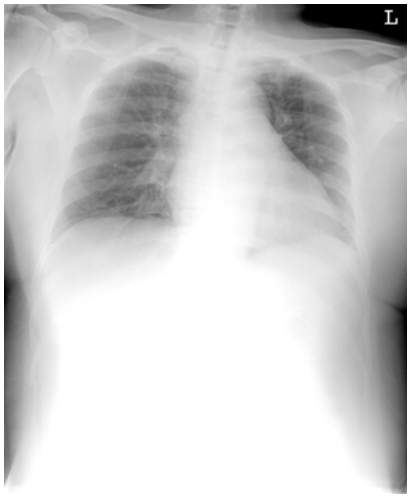
Abdominal CT

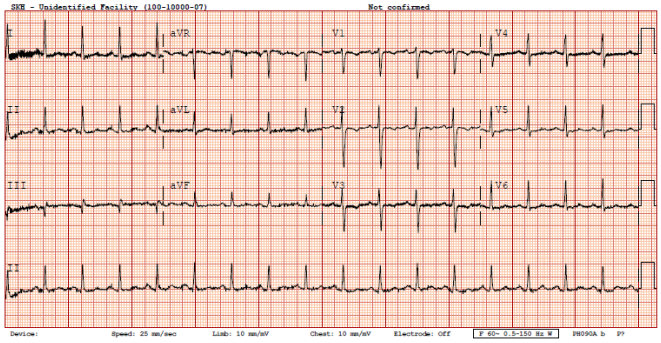


management

(2007)

- Consult GS doctor
- On NG with decompression
- Pre-OP evaluation(CXR, EKG)





GS doctor note

- Hallow organ perforation, suspected jejunal perforation with internal herniation

→ Arrange OP

Management

(2050)

- On Foley catheter

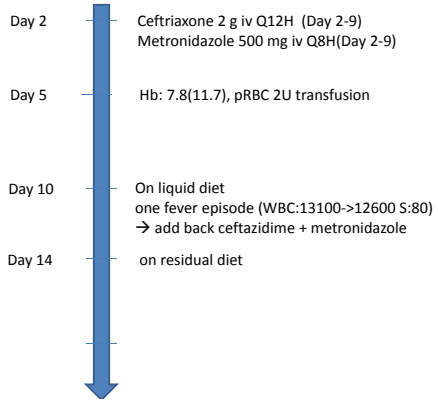
(2114) (3h11m)

- Sent patient to OR

OP finding

- Pre-OP diagnosis : hallow organ perforation
- OP method: segmental resection of small bowel
- Post-OP diagnosis: bezoar impaction with perforation of small bowel
- OP finding:
  - One 1 cm perforation 150 cm from treitz ligament with one 5-6 cm bezoar impacted at proximal site of stricture 5 cm distal to perforation

Hospitalization course



Discussion

- Small bowel obstruction (Rosen 7th , chapter 90; uptodate)

BOX 90-2 LESIONS CAUSING SMALL BOWEL OBSTRUCTION

Intrinsic
Congenital (atresia, stenosis)
Inflammatory (Crohn's disease, radiation enteritis)
Neoplasms (metastatic or primary) 15%
Intussusception
Traumatic (hematoma)

Extrinsic
Hernias (internal and external) 15%
Adhesions >50%
Volvulus
Compressing masses (tumors, abscesses, hematomas)

Intraluminal
Foreign body
Gallstones
Bezoars
Barium
Ascaris infestation

Risk factor

- Prior abdominal or pelvic surgery
- Abdominal wall or groin hernia
- Intestinal inflammation
- History of, or increased risk for neoplasm
- Prior irradiation
- History of foreign body ingestion

Uptodate

Clinical manifestation

- Nausea/Vomiting
- Cramping abdominal pain (crescendo- decrescendo pattern)
- Obstipation (inability to pass flatus or stool)
- more proximal→ more discomfort and shorter between onset of symptoms and presentation
- Intermittent, colicky pain shifted to constant, severe pattern→ development of complications(perforation, ischemia)

Diagnostic tool

- Plain film(at least two films)
  - Supine film + upright or decubitus film
- CT scan
  - defining the site of obstruction and possible cause

Management

- Conservative treatment
  - Intravenous hydration
  - NG decompression
- Antibiotic (cover GNB and anaerobe)
  - When surgery planned or suspected vascular compromise/intestinal perforation
- Surgical intervention
  - No S/S relief after short time of NG decompression
  - Symptoms persist after 48 hours of conservative treatment

Gastric bezoar

Risk factor

- Gastric dysmotility
  - underlying anatomic abnormality
    - 70-94% gastric surgery
    - 54-80% vagotomy and pyloroplasty
  - Gastroparesis
- Gastric outlet obstruction
- Dehydration
- Drug
  - anticholinergic agents and opiates
  - insoluble carrying vehicle (enteric-coated aspirin)
  - high hydroscopy, defined as the ability to attract and retain water (eg, psyllium and wheat dextrin)

Management (for gastric bezoar)

- Chemical dissolution:
  - Coca-Cola (50%), acetin (50%), Cellulase (83-100%)
  - AE: partially dissolved → distal bowel obstruction
- Endoscopic removal
- Adjuvant prokinetics: Metoclopramide (10 mg PO TID+HS)
- Surgery
  - fail chemical dissolution and endoscopic therapy
  - complications including obstruction and significant bleeding

Prevention of recurrence

- increase water intake
- Diet modication (eg, avoid persimmons, stringy vegetables, and high fiber foods)
- chew food carefully
- underlying motility disorder evaluation
- seek psychiatric evaluation if needed