Acute abdomen

新光吳火獅紀念醫院
VS 許瓅文

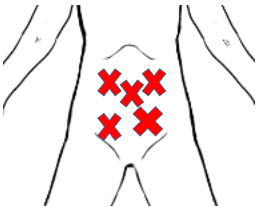
103.09.09

CASE 1: 46Y♀VOMITING

46Y♀vomiting

- Chief complaint
  - Abdominal pain, vomiting and no appetite for 2 days
- Present illness
  - Intermittent abdominal pain
  - Abdominal distention(+)
  - Vomitus: yellowish/ greenish fluid
  - No flatus
  - Similar episode before

- Past Hx
  - Ectopic pregnancy s/p OP 20yrs ago
  - Pregnancy: denied
- PE
  - Abdomen:
    diffuse tender(+)
    no rebound pain
    bowel sound: hypoactive
    percussion: tympanic



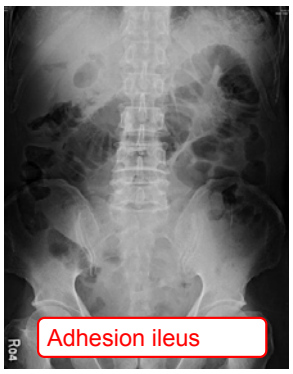
Impression?/ Order

- CBD/DC/Plt
- Panel Ⅰ / T-bil/ Lipase
- PT/aPTT
- KUB (待EIA)
- Urine EIA
- NPO
- D5S run 60mL/hr

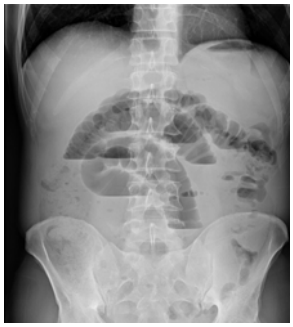
Hx
Site of tender

OP?
Anticoagulant use?

KUB (EIA: negative)



- Standing abdomen



Order

- Promeran 1amp iv q6h & st
- On NG with decompression
- D5S run 120mL/hr
- 排GI床/ 待轉EC
- f/u KUB 8hrs later

Severe distension vomiting

Fluid resuscitation
Dry mouth/ UOP
AKI? Prerenal azotemia?

Clinical feature

- 2nd KUB: ileus improved
- Flatus(+), abdominal pain and distension improved

⇒Try water and soft diet

⇒No discomfort

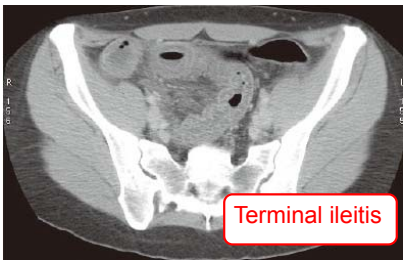
⇒MBD

- 2nd KUB: fixed bowel loop
- Fever(+)
- Persisted abd.pain
- Rebound pain(+)
- NG decompression: 量多，greenish

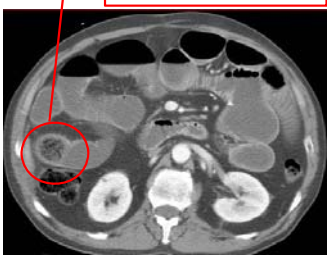
=>what's next?

Order

- Abdominal CT with/without contrast
- B/C x Ⅱ
- Cefmetazole 1g iv q8h & st



Bowel obstruction: bezoar => OP



Ileus

- Abd OP Hx + ileus ≒ adhesion ileus =>empiric Tx
- Be ware of mechanical bowel obstruction!!!
  => CT indication/ OP indicated
- Be ware of medication ↓ bowel motility for Abd OP Hx Pt

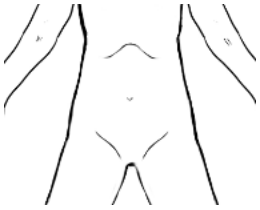
CASE 2: 78Y♂ ABDOMINAL PAIN

78y♂ Abdominal pain

- Chief complaint
  – Abdominal pain since 6 hrs ago
- Present illness
  – 看護：一陣一陣喊肚子痛
  – Vomiting once, food content
  – Diarrhea for 2 times, watery, brownish/ yellowish
  – No fever
- Past Hx
  – Old CVA with bed-ridden/ DM/ HTN/ CAD Hx

– Abd OP Hx: nil

- PE:
  - – Chest: clear BS, IRHB
  - – Abdomen: soft, no tender point
    no rebound pain
  - – Ext: warm, no pitting edema



Impression?/ Order

- NPO
- D5S run 60mL/hr
- CBD/DC/Plt
- F/S
- VBG G6
- Cr, AST, lipase, T-bil
- KUB
- ECG
- PT/aPTT

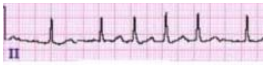
DKA?

檢查項目避免重複開立

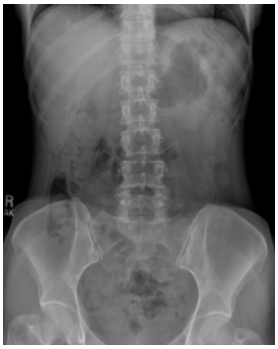
Previous ECG: Af
OPD drug: warfarin 3mg qd

Lab data/ Image

- WBC: 22000/ seg. 80%/ band 5%
- INR: 1.65
- ECG: Af



- F/S: 206
- VBG
  - – pH 7.372 Na 138 K 3.6
  - – PO_2 61 PCO_2 33
  - – HCO_3 18



Impression?/ Order

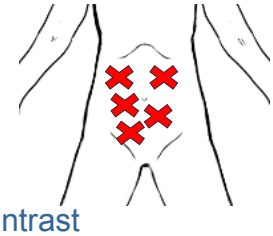
Enteritis
Leukocytosis, other infection source?

- B/C x Ⅱ
- Stool culture x Ⅰ , stool pus cell & OB
- U/A, U/C
- CXR
- Cravit 500mg iv qd & st
- 排GI床/ 待轉EC

8 hrs later…

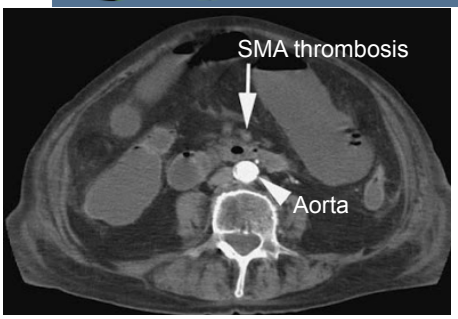
看護表示大便為磚紅色，病患呼吸比較喘
PE: diffuse tender(+) rebound pain(+)

- ABG G4
  - – pH 7.205
  - – PO_2 61 PCO_2 15 SaO_2 91%
  - – HCO_3 6
  - – Lactate 85



- Abdominal CT with/without contrast
- O_2 mask 10L/min

Abd CT contrast



- Consult GS
- On critical
- Send Pt to OR on call
- PreOP prepare
- Admit to ICU post OP

Ischemic bowel disease

- Great mimic
  - – From enteritis to septic shock, respiratory failure, unknown cause of acidosis
  - ⇒ 心中有ischemic bowel, 才能抓到ischemic bowel
  - ⇒ Persisted pain without tender
- Risk factor
  - – > 60 y/o
  - – Af/ hypercoagulopathy/ digoxin use

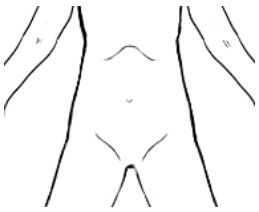
CASE 3: 63Y ♂ SUDDEN ONSET ABDOMINAL PAIN

63y ♂ sudden onset abd pain

- Chief complaint
  - – 剛剛突然肚子痛，有冒冷汗
- Present illness
  - – 坐在警衛哨內吃便當時，突然肚子痛
  - – 快要暈倒的感覺，從來沒這樣過
  - – Tearing pain(+), 胸口也會痛
  - – 現在比較不痛了
- Past Hx
  - – 平時都沒有看醫生的習慣

Vital signs
BT: 37.3℃
HR: 78bpm
RR: 18/ min
BP: 195/ 100 mmHg
SpO2: 99%

- – No abd OP Hx
- PE:
  - – Chest: clear BS, RHB
  - – Abdomen: soft, no tender point
    no rebound pain
  - – Ext: warm, no pitting edema
  - – Skin: wet and cold
    (剛剛冒冷汗)



Impression?/ Order

- On monitor
- ECG — NSR, no ST elevation
- On IV lock
- Morphine 5mg iv st
- CBC/DC/Plt
- PT/aPTT
- Panel Ⅰ, CK, CKMB, Tro I
- CXR ~~(portable)~~
- ~~D-dimer~~

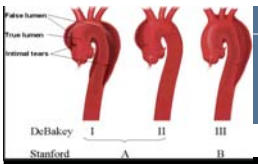
- 四肢BP

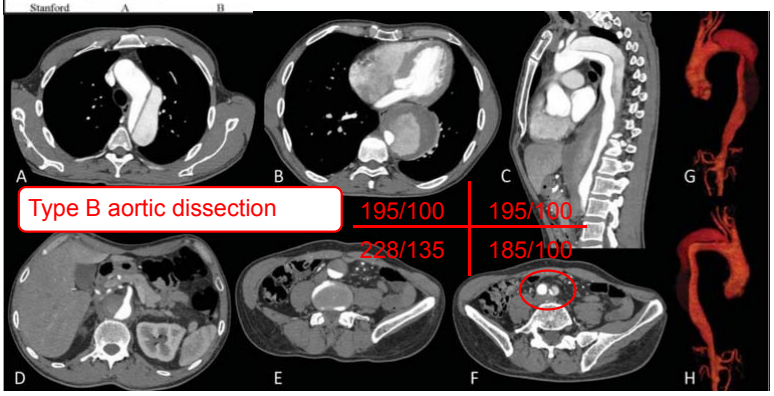
195/100	195/100
228/135	185/100

- Aorta CT with/without contrast

不等NPO & Cr
打電話給2134要求急做

AORTA CT with contrast





Type B aortic dissection

195/100	195/100
228/135	185/100

Order

- On critical
- Consutl CVS
- Labetalol 20mg iv st

HR 82bpm
BP 195/100 mmHg
Pt 覺得左腳冷冷的

- Admit to SICU

Aortic dissection

- Tearing/ cutting pain/ severe pain
  - Rupture/ tearing/ occlusion
- Cold sweating
  - ↑Sympathetic tone
- With direction
- No tender point – visceral pain
- Risk factor: HTN, connective tissue disease(Marfan syndrome),

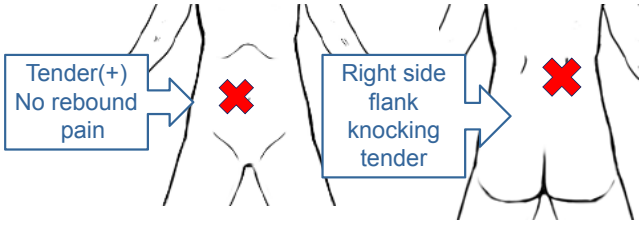
CASE 4: 82Y♂ SUDDEN ONSET FLANK PAIN

82 Y♂ sudden onset flank pain

- Chief complaint
  - Sudden onset flank pain just now
- Present illness
  - 剛下計程車的瞬間開始痛
    現在一直很痛
  - Not aggravated with motion
  - Abdominal pain: mild
  - Nausea (+) vomiting (-) tenesmus(-) diarrhea(-)
  - Hematuria (-)
  - Flank pain(+): 好像右邊比較痛

Vital signs
BT: 37.3℃
HR: 78bpm
RR: 18/ min
BP: 165/95 mmHg
SpO2: 99%

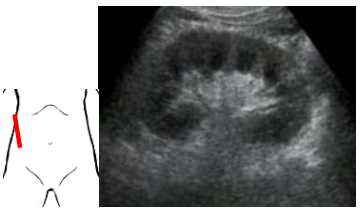
- Past Hx
  - HTN(+) CAD(+) urolithiasis Hx(+)
  - OP Hx: s/p appendectomy, trauma s/p OP (腸子破？)
- PE

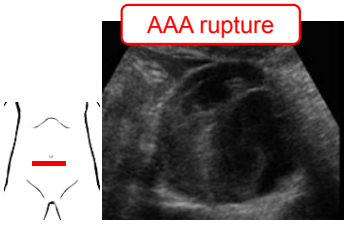


Impression?/ Order

- U/A
- Morphine 5mg IM st
- KUB
- Bedside echo

Stone四實

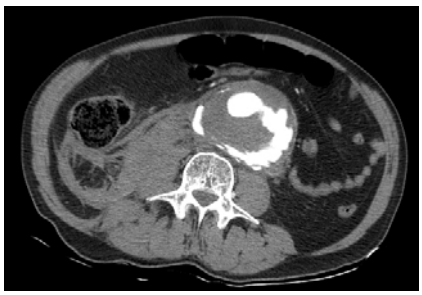




Order

- On critical
- On monitor
- On large bore IV x2
- O2 N/C 4L/min
- Triage改Ⅰ級
- CBC/DC/Plt, Panel Ⅰ, PT/aPTT
- Aorta CT with/ without contrast
- ECG, CXR
- NS 1000mL IV st
- 緊急備血pRBC 6U, 輸pRBC 4U
- Consult CVS
- NPO
- PreOP prepare
- Admit to ICU post OP

AORTA CT with contrast



- Abdominal aneurysm: >3cm
  - ≧5cm rupture risk ↑

AAA rupture

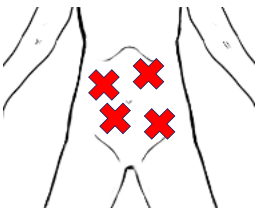
- Most important D.D of urolithiasis
  - Bedside echo=> always check aorta
  - Life-threatening
- Tender point(+) – somatic pain
- Risk factor
  - Old age
  - HTN, AAA Hx
- Keep BP balance

CASE 5: 45Y♀SUDDEN ONSET ABDOMINAL PAIN

45Y♀sudden onset abd. pain

- Chief complaint
  - Abdominal pain since 2hrs ago
- Present illness
  - Sudden onset epigastric pain, dull pain(+)
  - Diffuse abdominal pain now
  - Radiate to back(+)
  - 騎車來的路上遇到坑洞震動就特別痛
  - Nausea/ vomiting (-)
  - Diarrhea(-)

- Past Hx
  - Pregnancy: denied　LMP: 忘記了，都不規則
  - Abd OP Hx: denied
  - PUD (+)
- PE
  - Diffuse rebound tender(+)
  - Bowel sounds: normoactive
  - Pt一直坐在床上不敢動

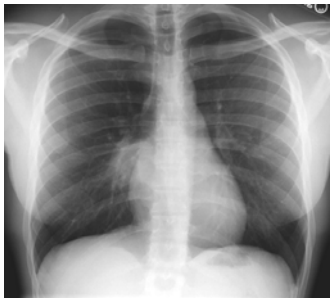


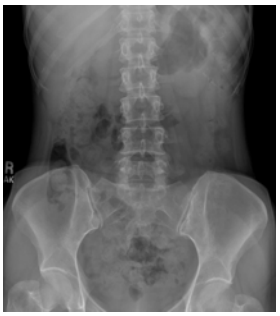
Impression?/ Order

- CBC/DC/Plt
- Panel Ⅰ, lipase, T-bil
- PT/aPTT
- Urine EIA
- CXR (sitting or standing, 待EIA), KUB
- NPO
- Bain 5mg iv st
- D5S run 60mL/hr

Lab data & Image

- Urine EIA: negative
- WBC 15000 seg. 78% band 0%

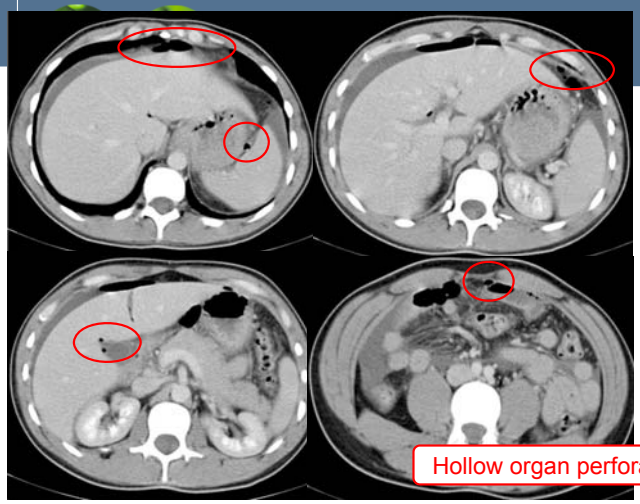




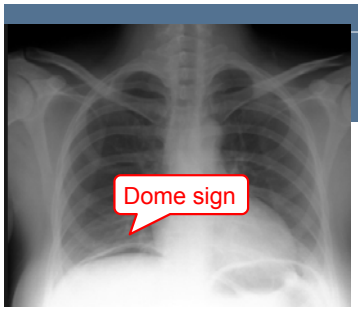
Next order?

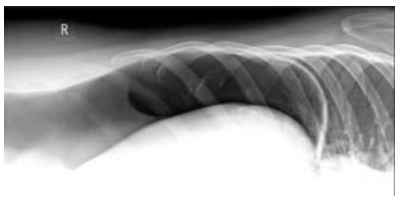
Pt表示肚子痛有比較減輕，但一動還是很痛
=> PE: diffuse rebound pain(+)

- Abdominal CT with/ without contrast



- Ertapenem 1g IV st
- Consult GS
- Send Pt to OR on call
- preOP prepare
- ECG
- Admit to ward post OP





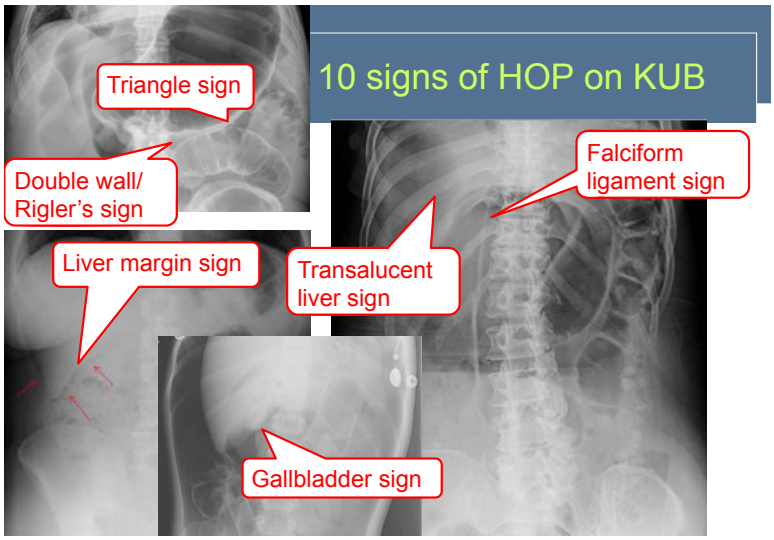
What if… 1st CXR

- Hx + image = hollow organ perforation
  => Immediate GS consultation for OP

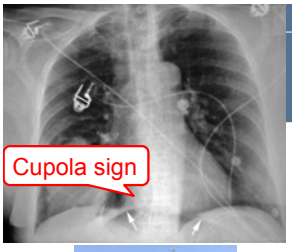
Hollow organ perforation

- Typical presentation: sudden onset + peritoneal sign 痛到不敢動
- Atypical presentation
  - Duodenal posterior wall: retroperitoneum
  - Sealing of perforated wound →delayed ED visit
- Diagnostic tool
  - X ray: CXR, Left decubitus view, KUB
  - CT

10 signs of HOP on KUB

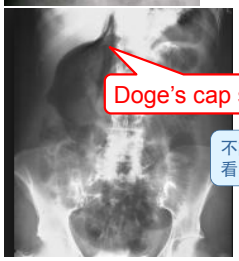


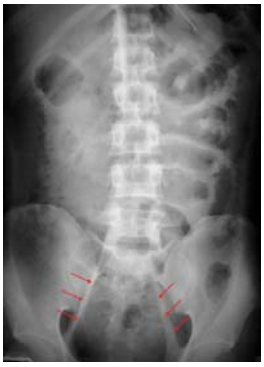
Italian style



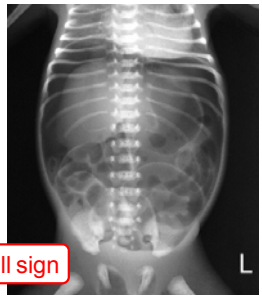
- Doge's cap sign
  - Air in Morrison pouch

(liver & kidney)

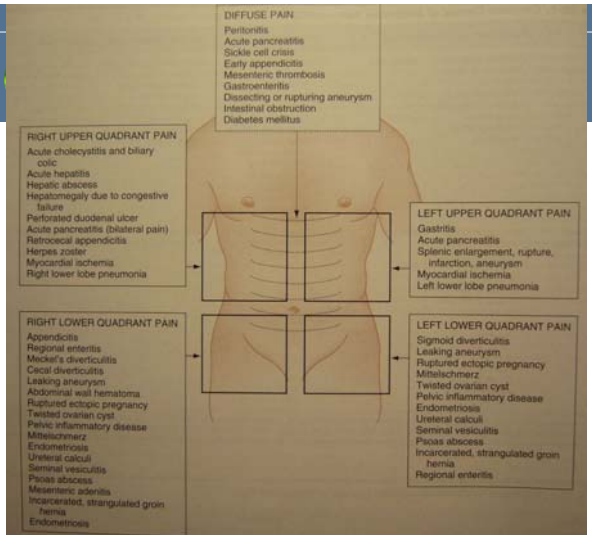




- Inverted V sign
  - Sacrotuberous ligament



DIFFERENTIAL DIAGNOSIS



Extra-abdominal cause

- Thoracic
  - Pneumonia/ myocardial infarction/ pulmonary embolism
- Abdominal wall
  - Herpes zoster/ muscle spasm
- GU
  - Testicular torsion
- Systemic
  - DKA/ AKA/ uremia/ porphyria/ SLE/ vasculitis

Red flag signs

- Pain →vomit
- Peritoneal sign
- Sudden onset
  - Vessel/ occlusion
- No tender point + old age
- Syncope/ cold sweating

Conscious change
Unexplained shock or acidosis
=> Late stage of sever intraabdominal infection

Thank you for your attention!!!