ER_GS COMBINE MEETING

2013/08/14

Supervisor: VS連楚明

Presentation: 羅志威

就診資訊

- 63歲男性
- 就診時間：DAY1 14:06　　檢傷3級
- 檢傷主訴: 腹痛腹瀉左手洗腎135
- TPR 38.5ºC /74/18 BP 137/65mmHg　SpO2 97%

- 主訴：拉肚子since 中午
- 拉水X3次，abd pain since last night, vomit(-)
  Fever at ER, chills(-)
- 過去病史：ESRD with H/D qW1,3,5，今早才H/D完
- Allergy: NKA
- DM(-), HTN(+), CAD(-)

PE

- 意識：clear consciousness
- 頭頸：Conjunctiva Not palor
- 胸部（心肺）：breathing sound no rales
- 腹部：soft, no tender
- 四肢：not edema

- Impression:
  - r/o infectious diarrhea
  - ESRD

ER COURSE

Order 14:22

- Hb/WBC/DC;
- Cr/GOT/CRP
- VBG6
- F/S(279) ;
- B/C x2;
- IVF: On lock
- smecta 1pk po st
- Tinten 1# po st
- Stool ob/pus

```
PH=7.399
PCO2=42.1 mmHg
PO2=26 mmHg
BE=1 mmol/L
HCO3=26.0 mmol/L
TCO2=27 mmol/L
SO2=47 %
NA=141 mmol/L
K=4.0 mmol/L
HCT=36 %PCV
HB=12.2 g/dL
```

ER COURSE

Hb	12.0	gm/dl
WBC	9.9	x1000/ul
Differential count	**********	
Segmented Neutro.	72.5	%
Lymphocyte	4.0	%
Monocyte	13.0	%
Eosinophil	0.0	%
Basophil	0.0	%
Atypical lymphocyte	0.0	%
Band	10.5	%

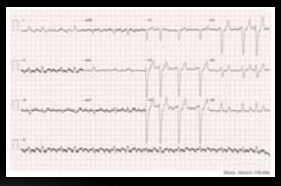
GOT(AST)	24	U/L
Creatinine	4.86	mg/dL
eGFR	12.17	
CRP	24.600	mg/dL

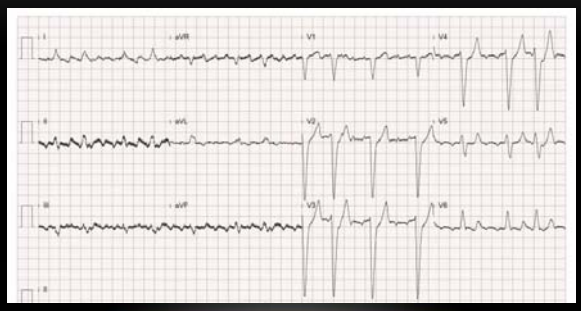
ER COURSE

Order 1550

- ECG
- Stool culture
- Cravit 250mg iv st &qod (洗腎後)
- 排Nephro/GI床
- 待轉EC

- 16:10 Abx 改Ceftriaxone





ER COURSE

Note DAY12 AM 09:02

- S: mild abdominal pain, diarrhea subsided
- O: stable vital signs, no fever or hypotension; Abdomen: mild and diffuse tenderness, no guarding
- A: susp infectious diarrhea
- P: empiric A/B (ceftriaxone) await admission(GI)

Order DAY12 10:49

- 轉EC

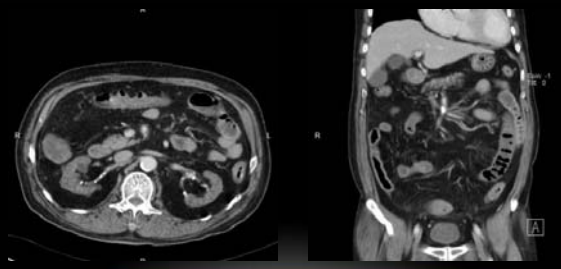
Note DAY12 PM 07:50

- PE: diffuse tender ; rebound pain (+) R>L 壓起來很痛
- Do abd CT, r/o intra-abd infection; peritonitis, cause?

Note DAY13 AM 00:40

- S: 比較少拉, but abdominbal tender(+)
- O: Abdomen: soft: tender around umbilicus
  - Abdominal CT:

    diffuse thickened bowel wall, favor enteritis
- Plan: ABx with Ceftr4iaxone, 排GI床



ER COURSE

Note DAY13 AM 09:41

- S+O: Consciouness: clear, no fever, abdmen: pain ↓↓, BS: clear, no rale

  Abdomen: soft, active bowel sound, no tender, no guarding
- P: keep current ABxwith ceftriaxone
- Admission
- 明天聯絡/D at our hospital

Note DAY13 PM 09:50

- S: 有diarrhea, 水便
- O: chest: clear BS, RHB
- Abdomen: tender over upper/periumbilicus
- Ext: freely movable
- P: Abx with ceftriaxone, 排GI床

ER COURSE

NOTE DAY14 AM 11:20

- S: improved abdominal pain, pain at L>R, diarrhea(+), no bloody no tarry stool, N/V(-)
- O: clear consciousness vital signs: no fever

  Abdomen: tender (+) over Left abdomen; muscle guarding (+), normoactive bowel sound
- Plan: keep ceftriaxone sued; Started to try water, keep HD, monitor abdominal condition

VS NOTE DAY14

- 聯絡Radiologist Dr 吳: 表示SMA thrombus, 之前內科DR. 洪惠風處理經驗較多

ER COURSE

- S: still abdominal pain, fever(+)
- O: TPR: 39.4oC/84/18 BP 155/79 mmHg
- Consciousness: alert
- Abomdne: soft, tender over whole abdomen; guarding(+), mild rebonding tenderness
- A:
- 1. susp SMA thrombosis with ischemic bowel
- 2. susp infectious diarrhea
- 3. ESRD on HD
  P:
- 1. keep ABX with ceftriaxone
- 2. recheck blood data
- 3. consult GS Dr
- 4. explain the condition to family

OP FINDING DAY14 AM 01:05

- much turbid ascites(about 300ml) was noted
- A segment of 170cm small bowel showed ischemic change and gangrene started from 140cm level distal from ligament Treitz to ileocecal valve
- Resection of a segment of 170cm ischemic small bowel
- Preservation of a segment of 140 cm relative viable small bowel
- Easy touch bleeding
- Relative poorer tissue status
- 手術圖待補

ADMISSION COURSE

- DAY15 E4VEM3 BT36.7oC HR 115 BP 140/50mmHg; Abdomen: no persisted muscle guarding
- DAY16 E4VEM5 BT38.8oC HR 90 BP 100/50mmHg; No abdominal tender or guarding
  - Consult Inf Dr. 張: shift Abx to Ceftriaxone 2g q12h +SABS 500mg q8h
- DAY17 E4VTM6 HR 82 BP 148/51mmHg frequent VPC +Af
  - Keep Abx, fever control; Weaning ventilator; On TPN; pain control

- DAY18 08:27 Drowsy consciousness, poor response
- PE: left side weakness, poor response, eye contact
- GCS: E4V3M6
- BP 104/53 HR 84 Na 135 K 4.1

WBC	10.6	X1000/ul
RBC	3.69	million
Hb	10.6	gm/dl
Ht	32.0	%
MCV	86.7	fl
MCH	28.7	pg
MCHC	33.1	%
RDW	15.4	%
Platelet	75	x1000/ul

Segmented Neutro.	87.0	%
Lymphocyte	4.0	%
Monocyte	5.0	%
Eosinophil	2.0	%
Basophil	0.0	%
Atypical lymphocyte	1.0	%
Band	1.0	%
Metamyelocyte	0.0	%
Myelocyte	0.0	%

Na	135	meq/L
K	4.1	meq/L

Note DAY18 20:27

- Nurse called , told the patient had no BP and not arousable , CPCR was then started
- According to nurse, 19:50 the pateinet was still arousable and sputum suction was done, the patient's son was along with him at that moment
- Endotracheal intubation was performed by anesthesiologist
- ECG persistedly showed PEA and bosmin was given every 3mins, after 30min CPCR, no ROSC noted

GOT(AST)	377	U/L
GPT(ALT)	45	U/L
LDH	1124	U/L
CPK	815	U/L
BUN	32	mg/dL
Creatinine	5.44	mg/dL
eGFR	10.69	
Na	142	meq/L
K	>7.5	meq/L
Troponin I	0.17	ug/L
CRP	21.700	mg/dL
CK-MB	18.3	ng/mL
Lactate	150.4	mg/dL

WBC	14.1	X1000/ul
RBC	3.17	million
Hb	9.8	gm/dl
Ht	29.6	%
MCV	93.4	fl
MCH	30.9	pg
MCHC	33.1	%
RDW	16.5	%
Platelet	63	x1000/ul

Segmented Neutro.	48.0	%
Lymphocyte	32.0	%
Monocyte	8.0	%
Eosinophil	0.0	%
Basophil	0.0	%
Atypical lymphocyte	2.0	%
Band	9.0	%
Metamyelocyte	1.0	%
Myelocyte	0.0	%

MESENTERIC ISCHEMIA

BACKGROUND

- Relative rare disorder, but high mortality rate(60%~100%)
  - 小腸存活率：<12hr約100%; 12~24hr 56%; >24hr 18%
- 無關性別; 典型患者為>60yr
- 成因可分為:
  - Arterial obstruction: by atherosclerosis, AAA, dissection…
  - Non-occlusive ischemia: hypovolemia, sepsis, drugs
  - Venous thrombosis: hyper-coagulation status, cirrhosis, pancreatitis, malignancy, OCP

HISTORY AND PE

- 可分作 Acute ischemia或 Chronic ischemia，兩者表現不太相同
  - Visceral and poorly localized, severe
  - 有15~25%的患者不會痛, 而是以其他GI症狀表現(~50% diarrhea)
  - SMA triad: GI emptying, abdominal pain, underlying cardiac dz
  - Chronic ischemia: postprandial abdominal pain
- PE相對正常, 但疼痛很厲害

DIAGNOSIS

- Lab: 沒有檢驗項目可以rule in or rule out mesenteric ischmeia
  - 75%病人 WBC >15000
  - Lactate的升高是後期的表現
- Image:
  - CT scan: >90% sensitivity; 89~94% specificity
  - Angiography: 74~100% sensitivity; ~100%specificity, 病程早期的患者有較高的 false negative rate, 不適用於嚴重患者，且可能delay 開刀
  - MRI: 可用在診斷慢性缺血，急性期不適用
  - Ultrasonography: duplex可用來篩選可疑患者, highly operator depended

TREATMENT

- Acute arterial embolus: surgical embolectomy, intra-arterial thrombolysis
- Acute arterial thrombosis: arterial reconstruction/ bypass
- Acute non-occlusive ischemia: papaverine infusion
  - Papaverine: opium alkaloid antispasmodic drug(本院沒有)
- Venous thrombosis
  - Acute: Heparin / Warfarin + Operation
  - Chronic: Angioplasty ± stent or revascularization

THANKS FOR YOUR ATTENTION