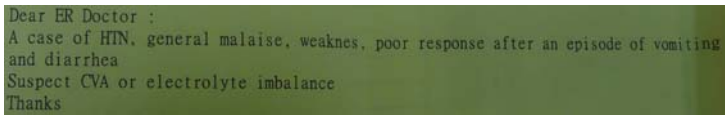
Case conference

- R1 鄭凱文
- Supervisor VS 楊毓錚
- 2013/11/12

Patient Profile

- 84y/o ♂
- 2013/xx/xx 16:31
- E4V5M6
- T/P/R=36.5/95/23; BP = 122/53mmHg
- SpO2 = 96%
- 檢傷主訴：病人主訴為噁心嘔吐、拉、全身沒力
- Triage = 3


Dear ER Doctor :
A case of HTN, general malaise, weaknes, poor response after an episode of vomiting and diarrhea
Suspect CVA or electrolyte imbalance
Thanks

Present Illness

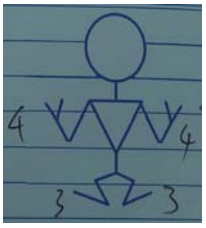
- C.C: vomiting since this afternoon
-
- No Chills
- general weakness
- diarrhea *3 times today (不少)
- no abdominal pain
- vomit *3
- no change of consciousness （只有比較累）

Past History

- No history of abdominal surgery
- HTN
- NKDA

Physical Examination

- Clear consciousness
- pink conjunctiva
- clear BS ； RHBs
- Abd.: soft; no tenderness
- freely movible extremities
- Full EOM
- No focal wekness
- No facial palsy
- F-N-F: cannot evaluate due to severe tremor

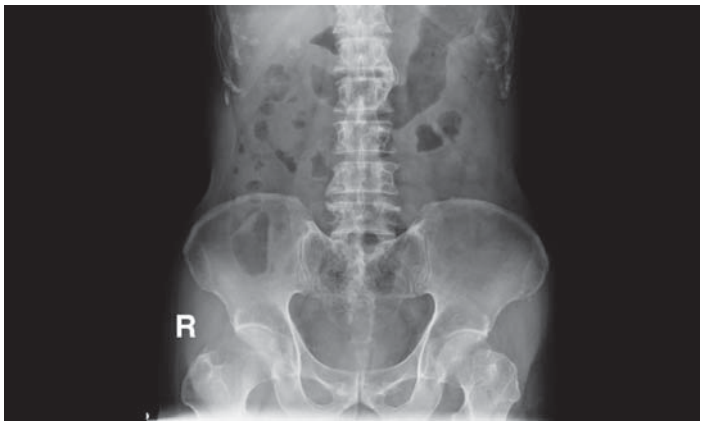


Impression

- General weakness
- vomiting, cause?

Initial order (day 1, 16:44)

- F/S (150)
- Primperan 1amp iv st
- WBC/DC, Hb, Plt
- VBG4
- Crea., AST, Na, K
- IV: N/S run 60mL/hr
- KUB



Lab data

Hb	13.7	G/dL
WBC	4800	/mcL
Seg	83.2	%
Lymphocyte	13.0	%
Monocyte	3.8	%
Eosinophil	0	%
Basophil	0	%
Plt	57000	/mcL

AST	28	U/L
Crea.	1.13	mg/dL
eGFR	61.68	
Na	135	meq/L
K	4.2	meq/L

pH	7.378	
pCO_2	49.7	mmHg
pO_2	39	mmHg
BE	4	mmol/L
HCO_3	29.3	mmol/L
TCO_2	31	mmol/L
SO_2	71	%
LAC.	25.7	mg/dL

Day 1, 18:35

- No vomiting; no diarrhea
- no abdominal pain
- no focal weakness
- → favor AGE
- → try diet; if OK → MBD

Day 1, 20:00

- 還沒吃、一直想尿尿
- 家屬：目前人和平常一樣，有下床走沒問題
- → keep OBS
  → try diet

Day 1, 20:37

- 有喝粥 ok 。意識清楚
- no more vomiting
- no abd. Tenderness
- family 說 p't 常手抖，懷疑 Parkinsonism ？

Day 1, 20:40

- Tinten
- Dimotil
- Smecta
- Gascon
- AGE sheet
- 預 GI/Neuro OPD.
- MBD ＆ OPD f/u

Bounce Back Visit

- 2013/xx/xx+2 09:44
- E4V5M6
- T/P/R=38.3/66/20; BP = /mmHg
- SpO2 = 97%
- 檢傷主訴：病人主訴為發燒、畏寒
- Triage = 3

Present Illness

- C.C: fever since yesterday
- ER visit 2 days ago, due to vomitting ＆ diarrhea
- → impression: AGE
- Vomitting & diarrhea subsided
- Fever developed yesterday
- general weakness，不說話
- urine output↓
-
- Past History: HTN 、 NKDA

Physical Examination

- E4V1M6（前天還可對答）
- pink conjunctiva
- clear BS 、 RHBs
- Abd.: soft, no tenderness
- warm extremities

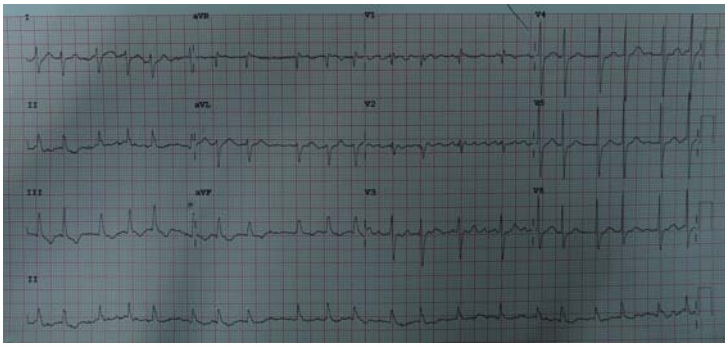
Impression

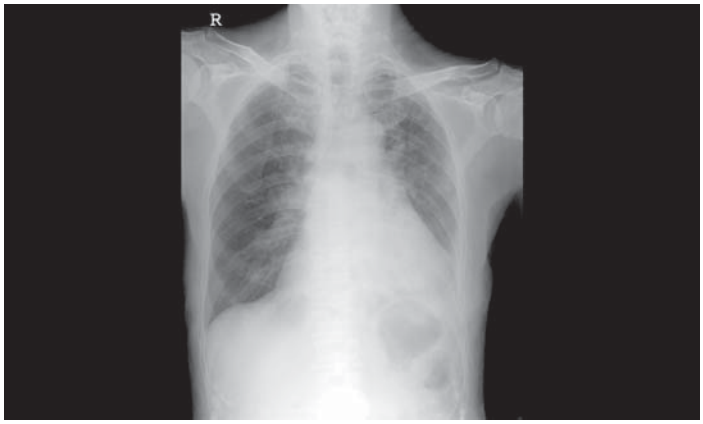
- Fever, cause?

Initial order (day 1, 10:12)

- B/C *1
- WBC/DC, Hb, Plt
- VBG6
- AST, Crea, BUN
- Lactate
- N/S run 60mL/hr
- 試自解 U/A 、 U/C
- Tinten 1# po st
- EKG

EKG





Lab data

U/A: no pyeuria

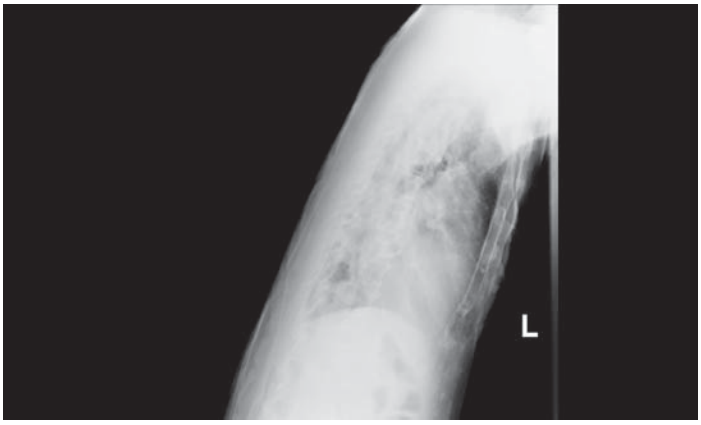
AST	28	U/L
BUN	13	mg/dL
Crea.	0.91	mg/dL
eGFR	79.18	
Lactate	11.1	mg/dL

Hb	13.2	G/dL
WBC	9100	/mcL
Seg	77.0	%
Lymphocyte	17.5	%
Monocyte	5.5	%
Eosinophil	0	%
Basophil	0	%
Plt	68000	/mcL

pH	7.447	
pCO_2	39.2	mmHg
pO_2	33	mmHg
BE	3	mmol/L
HCO_3	27.1	mmol/L
TCO_2	28	mmol/L
SO_2	67	%
Na	134	mg/dL
K	3.3	mg/dL
Hb	14.3	g/dL
Hct	42%	PCV

Day 1, 11:55

- CXR, lateral view
- B/C *1
- VBG4
- ICP for U/A
- Avelox 400mg iv st
- 待轉 EC



Day 1, 13:29

- 排 chest/inf 床
- Avelox 400mg iv qd

Day 1, 17:30

- BT: 39.1℃; PR: 115;
- Lethargy; E1V2M5
  - Acetamol 1amp iv st
  - influenza rapid test（自費）
  - recheck vital signs & GCS @ 18:00

Day 1, 19:00

- 18:00 39.1/115/18; 127/72mmHg; E1V2M4
  - N/S challange 200mL st
- Day 1, 19:35
  - Weakness; no abdominal pain
  - Heart: RHBs w/ murmur
  - GCS: E4V5M6, but slow response
    - arrange heart echo
    - arrange brain CT w/o contrast r/o meningitis

Brain CT

Day 1, 2050

- 兒子說前兩天意識都正常，今天早上才變差
- On monitor

- Diagnosis:
  - Right frontal ICH+IVH

Discussion

- Fever ＆ atypical presentation of ICH
  - Edlow JA, Selim MH. Atypical presentations of acute cerebrovascular syndromes. The Lancet Neurology. 2011;10(6):550-560.
  - Deogaonkar A, De georgia M, Bae C, Abou-chebl A, Andrefsky J. Fever is associated with third ventricular shift after intracerebral hemorrhage: pathophysiologic implications. Neurol India. 2005;53(2):202-6.

Acute neurological symptoms

	Stroke-like presentation	Atypical stroke-like presentation
True stroke	Stroke	Stroke “chameleons”
Not a stroke	Stroke mimic	Non-stroke

reasons for atypical symptoms

- symptoms evolve with time
- substantial variability in the classic CVA
  - small strokes
  - early presentations
  - young age
  - posterior circulation location
  - no lateralising motor or speech findings

non-classic symptoms of acute stroke

Non-localising symptoms

- Neuropsychiatric symptoms
- Acute confusional state
- Altered level of consciousness

Abnormal movements

- tremor 、 parkinsonism
- Involuntary repetitive hyperkinetic movements
- Disappearance of abnormal movements
- Unilateral asterixis (flapping tremor)

Peripheral nervous symptoms

- Acute vestibular syndrome
- Acute hearing loss
- Cortical hand/foot syndrome
- Pure sensory loss or paraesthesias

Atypical symptoms

- Dysarthria
- visual symptoms
- Dysphagia

Fever ?

- common after ICH
- correlates with ICH volume
- third ventricular shift → hypothalamic compression in "central fever."

Limitation of brain imaging

- CT
  - False (-) in small or late-presenting SAH
- MRI
  - False (+) in seizure