CASE PRESENTATION

HIV Clinicians Society Conference 2014

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CMJAH
Mr JM is a 49 year old male admitted to CMAJH on 29/07/2014

Emergency medical services responded to a call that he had collapsed at home

- they arrived to find the patient fitting
- he required heavy sedation to abort the fit
- and the decision was taken to intubate him (etomidate, succinylcholine, morphine, dormicum and lorazepam)
- pupils initially pinpoint
• Arrived @ CMJAH in the afternoon
  ◦ BP 238/163
  ◦ sats 97%
  ◦ pulse 125
  ◦ healing rash over his trunk
  ◦ Chest: coarse crackles on the right with an expiratory wheeze
  ◦ CVS: normal heart sounds
  ◦ Abdo: soft with 4cm hepar; spleen 1cm below costal margin
  ◦ CNS: sedated and paralysed; pinpoint pupils
• Loaded with epilim
• Started labetalol infusion
• Point of care investigations
  ◦ Hb 8.4
  ◦ CRP < 4
  ◦ glucose 10.9
  ◦ U&E 146/3.5/113/19/11.6/226
  ◦ CXR: wide mediastinum with a nodular infiltrate on the left (?miliary) and diffuse infiltrate on the right
Discharge summary obtained from Tshepong Hospital

- treated empirically for TB in 2012
- newly diagnosed HIV+ with CD4 = 118
- renal dysfunction on previous admission – assessed as probable HIVAN
- not yet on ART
What are the possibilities?

1) Meningitis
2) Hypertensive emergency
3) Cerebrovascular accident
4) Toxin ingestion
5) Uraemia
Mr JM commenced the following therapy in the emergency department

- co-amoxiclav 1.2g IVI 8 hourly
- azithromycin 500mg IVI daily
- enoxaparin 40mg s/c daily
- co-trimoxazole 4amps IVI 6 hourly
- hydrocortisone 100mg IVI 8 hourly
- clonazepam 1mg PRN
- 5% D/W + 150ml NaHCO$_3$ @ 100ml/hr
## Laboratory results

### 29<sup>th</sup> and 30<sup>th</sup> July

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>U&amp;E</td>
<td>136/3.7/110/8/10.6/208</td>
</tr>
<tr>
<td>FBC</td>
<td>6.72/8.6/47&lt;br&gt;red cells: rouleaux formation; moderate fragments; marked anisocytosis; round macrocytes; occasional normoblasts white cells: left shift; toxic granulation; Döhle bodies</td>
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<tr>
<td>LFT</td>
<td>5/2/93/35/95/28/31/104</td>
</tr>
<tr>
<td>CMP</td>
<td>2.06/0.89/1.8</td>
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<tr>
<td>INR</td>
<td>1.02</td>
</tr>
<tr>
<td>CRP</td>
<td>&lt;4</td>
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<tr>
<td>ProBNP</td>
<td>26 888</td>
</tr>
<tr>
<td>CK</td>
<td>321</td>
</tr>
<tr>
<td>CKMB</td>
<td>5.6</td>
</tr>
<tr>
<td>βDG</td>
<td>349</td>
</tr>
<tr>
<td>LP</td>
<td>glc 3.6; protein 1.93; ADA &lt;1.0&lt;br&gt;PMN 0; lymphocytes 0 erythrocytes 3&lt;br&gt;no bacteria seen no growth; India Ink and latex negative</td>
</tr>
</tbody>
</table>
Further investigations…

- CTB: multiple hypodense areas in the parietal and occipital lobes – old infarcts most likely secondary to emboli
- Echocardiogram: concentric LVH with goos systolic function – EF 69%; diastolic dysfunction; pericardial effusion <2cm

…admitted to ICU still intubated
Further Mx or Ix?
Subsequent progress over 6 days

- creat: 208… 256… 318… 359
- Hb: 8.6… 7.2… 8.0… 5.8… 7.7
- platelets: 47… 53… 48… 33
- CRP <4… 125
- B/C negative
- sputum culture grew ESBL Klebsiella spp sensitive to ertapenem
- HIVVL 2 668 750
- DIC screen: PT 13.9 , PTT 35.2; thrombin time 16.4; INR 1.11 fibrinogen 4.9↑; D-dimer 3.3↑; anti-thrombin 112
- opening eyes to stimuli
- BP still uncontrolled
- developed diarrhoea
- started amlodipine and carvedilol
- started fluconazole and TB treatment
- started and stopped decadron
Further plan of action included

- Gastroscope
- MRI/MRA brain
- EEG
- Renal sonar
- Bone marrow
Diagnosis of TTP suggested by the classic pentad:

- neurological manifestations
- fever
- renal dysfunction
- thrombocytopenia
- microangiopathic haemolytic anaemia
Treatment of choice?

1) Plasma infusion
2) Plasma exchange
3) Corticosteroids
4) Anti-CD20 monoclonal antibody
5) Intravenous immunoglobulins