An Uncommon Sepsis

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- A 19-year-old male
- Febrile temperature with rigors for 5 days
  - Fell ill with a sore throat that passed and was followed by an upper right abdominal pain, worsening during inspirium
- Previously healthy, no chronic diseases
Analyses 07.11.13

• CBC
  – WBC 5.44 (4.5 .. 11 E9/L)
  – RBC 4.87 (4.2 .. 5.7 E12/L)
  – Hb 151 (134 .. 170 g/L)
  – Plt 110 ↓ (145 .. 390 E9/L)
  – Neut% 90.4 ↑ (40 .. 80 %)

• Clinical chemistry
  – CRP 268 ↑ (<5 mg/L)
  – PCT 10.56 ↑ (<0.05 ng/mL)
  – Creatinine 103 (62 .. 106 µmol/L)
  – Urea 7.6 ↑ (2.9 .. 7.5 mmol/L)
Radiology

- **Chest X-ray**
  - Normal
- **Ultrasound of abdomen and pelvis**
  - Enlarged spleen
- **Ultrasound of neck area**
  - Enlarged submandibular and upper cervical lymph nodes on the left
Chest X-Ray 07.11.13
Decision 1

• Patient is septic, the primary site of infection unknown
• Blood cultures, urine culture
• Initiation of empiric i.v. antibiotics with amoxicillin/clavulanic acid and infusion
• Emergency CT of abdomen-pelvis due to worsening abdominal pain
CT

- Minimal peritoneal fluid
- Enlarged spleen
- An infiltration with a central space at the base of the right lung
Decision 2

• The lungs are probably the primary site of infection
  – Chest CT the next day to evaluate the extent of pneumonia

• Considering atypic pneumonia – p.o. clarithromycycin additionally
Chest CT 08.11.13

- Multi-focal pleuropneumonia
Serology

- HIV, CMV – negative; EBV IgG – positive
- C. pneumoniae, M. pneumoniae, L. pneumophila - negative
Microbiology

• Urine culture – negative
• Blood cultures – *Fusobacterium necroforum*
  – Anaerobic infection also known as *Lemierre syndrome* or *necrobacillosis*
  – Amoxicillin/clavulanate was continued based on antibiogram
Chest CT 19.11.13
27.11.13

- Patient is discharged from hospital in good condition
- CRV 28mg/l, PCT 0.04ng/ml
- Oral clindamycin is continued for 5 days
Lemierre syndrome

• A rare condition characterized by recent oropharyngeal infection, followed by septic thrombophlebitis of the internal jugular vein and metastatic abscesses
Passage from tonsillar v into the IJV

Bacterial endotoxin induces platelet aggregation and septic thrombus formation

Septic emboli lodge in lungs, liver, endocardium, and/or joints
Learning points

• Potentially life-threatening disease in young previously healthy persons
• Maybe not so uncommon anymore?
Thank you!
Literature


