

# Case Presentation

Philipp Agyeman

# History & clinical examination

Previously healthy 14y old adolescent

Starting 5 days ago:

- Pain in left ankle

Starting 2 days ago:

- Jaundice
- No fever
- Returned from camping in Italy 10 days ago

Good physical condition, jaundice, otherwise nothing abnormal in clinical examination

# Laboratory values

Hematology: Hgb 13.8g/dl, WBC  $7.75 \times 10^3/\mu\text{l}$ , Plt  $84 \times 10^3/\mu\text{l}$

Chemistry: ALT 178U/L, bilirubin (total)  $103 \mu\text{mol/L}$ ,  $\gamma\text{gt}$  533U/L

Your diagnosis please

# Possible causes of jaundice

Medication: diclofenac

Infection: hepatitis A, EBV, sepsis

Immunological: autoimmune hepatitis

Inborn:  $\alpha$ -1 antitrypsin deficiency

Wilson disease

Obstruction: choledocholithiasis, choledochus cyst

Less likely: cystic fibrosis, celiac disease, metabolic disease,  
thyroid disease

Discharged home  
2 days later new rash  
Progressive deterioration  
Presents again in poor health  
No fever

ALT 189U/L, bili tot 328 $\mu$ mol/L,  
bili conj 281 $\mu$ mol/L,  $\gamma$ gt 168 U/L,  
Creat 166 $\mu$ mol/L, albumin 19g/L,  
Crp 223mg/L, leukocytosis,  
thrombocytopenia

# Differential diagnosis of purpura

Infection: Purpura fulminans, DIC, Endocarditis, Rickettsia,  
Leptospira

Autoimmunity: vasculitis

Medication: Dafalgan, Diclofenac

Admitted to ICU  
3 x 2 blood cultures  
Dermatologic review and skin  
biopsy

Started on Cefepime i.v.



6/6 Blood cultures grew *S. aureus*  
Skin biopsy showed G+ cocci and grew *S. aureus*

# What are your next steps?

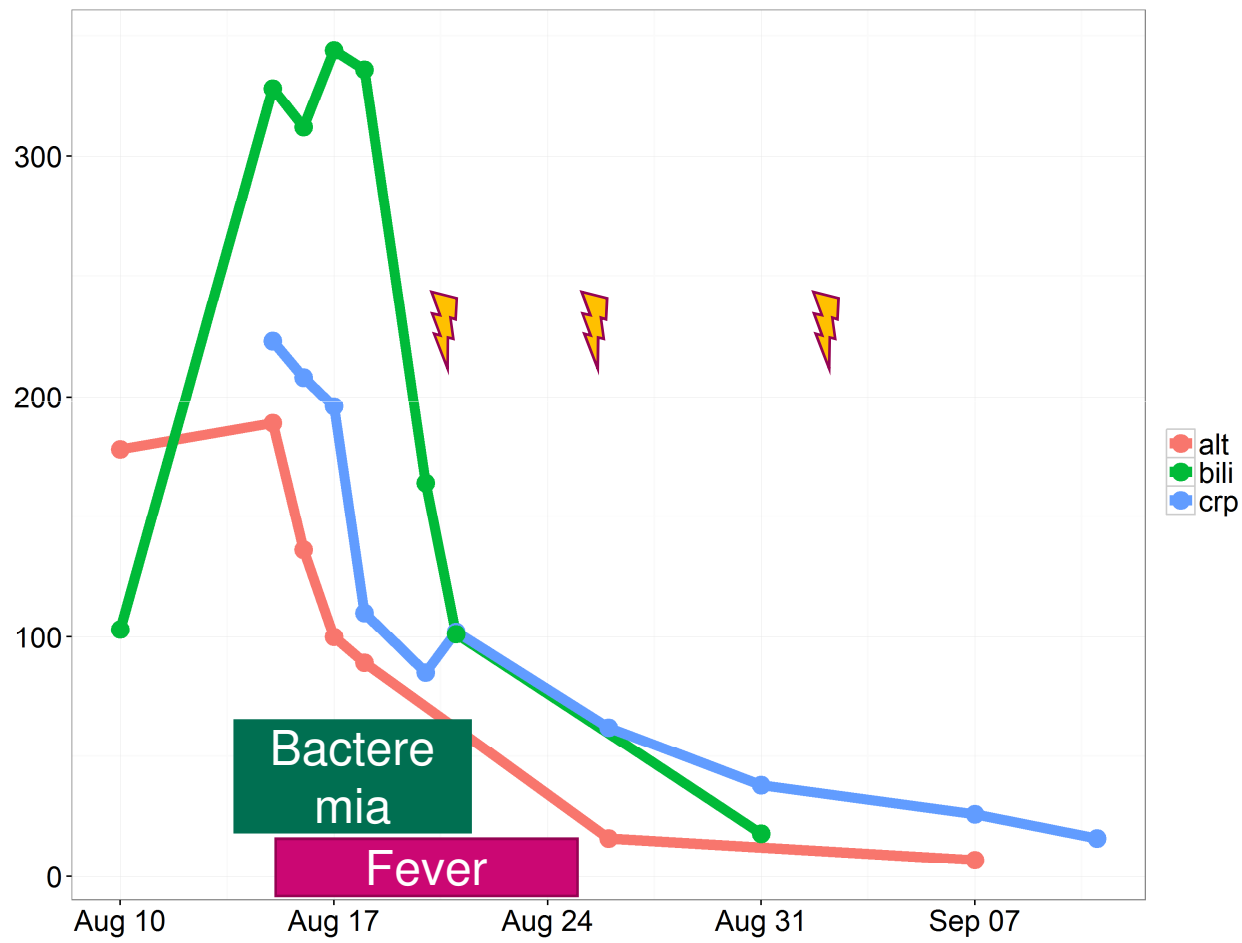
Echocardiography

Whole body MRI

Repeat blood cultures to document resolution of bacteremia

- All patients with *Staphylococcus aureus* bacteremia should be evaluated with echocardiography, preferably by transesophageal echocardiography unless the patient meets criteria for being at low risk.
- For low-risk patients, transthoracic echocardiography is adequate.
- Low-risk patients meet all of the following criteria: (1) nosocomial acquisition of bacteremia, (2) sterile follow-up blood cultures within 4 days after the initial positive blood culture, (3) no permanent intracardiac device, (4) no hemodialysis dependence, and (5) no clinical signs of endocarditis or secondary foci of infection.

Holland et al. JAMA 2014



Jaundice as a presenting symptom of a severe infection, rare?

## Acute Osteomyelitis Presenting As Cholestatic Jaundice



M J M L Hakeem [↑](#)

D N Bhattacharyya

Department of Infectious Diseases, Victoria Hospital Hayfield Road Kirkcaldy  
Fife KY2 5AH

Hakeem Scot Med J 2006

# Take-home message

X-ray or CT early on do not exclude osteomyelitis

Uncommon presentation of common disease more likely than uncommon disease

*S. aureus* bacteremia -> exclude Endocarditis, document resolution of bacteremia, drain abscess