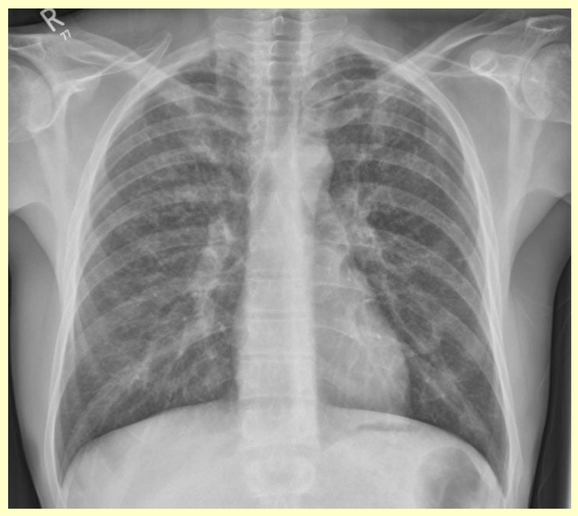
Unknown cause of diffuse small gut disease in XDR-TB/HIV coinfection

Morris TC, Venkatraman N, Bell D
Department of Infection and Tropical Medicine, Leicester Royal Infirmary

37 year old Lithuanian man, UK 2011, unemployed, living alone

PMHx:
1. Intravenous drug use (on Subutex)
2. HIV-1 (Dx 2011, CD4+ 80, VL 160,000)
   - » Atripla July 2011, CD4+ July 2012 140
3. Hepatitis C
   - » untreated, VL 664242 iU/mL, genotype 1a, normal liver imaging
4. Miliary TB (2011)
   - » fully s, 2RHZE/4RH

Referred Sept '12: 2/12 cough & weight loss



Sputa:
Smear -ve

BAL:
Smear +ve

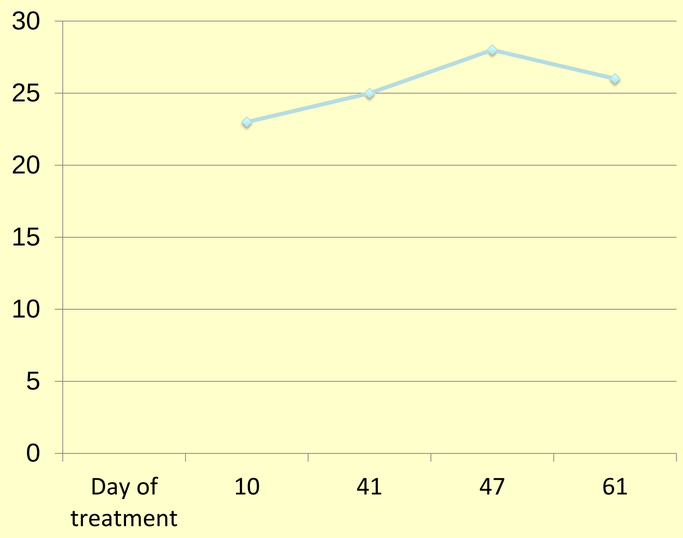
Sputum TB culture: *M. tuberculosis* isolated
Res. RHE, Sens. Z
rpoB mutation detected
katG/inhA mutations detected

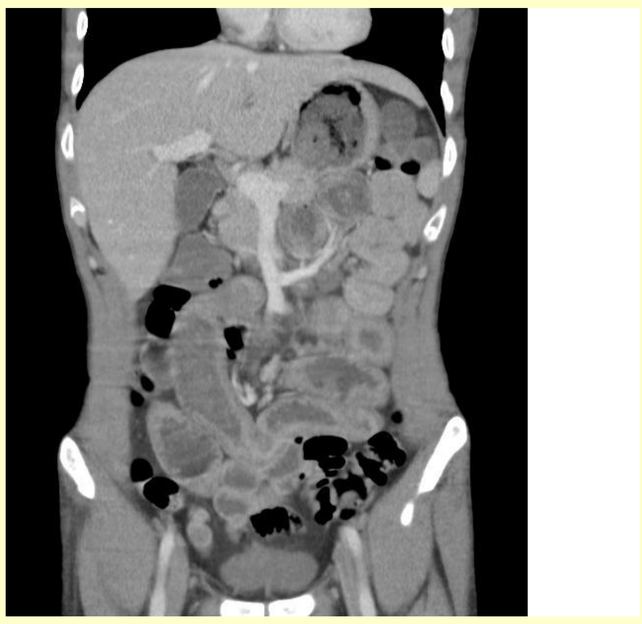
2nd line DSTs: Res: Streptomycin, Kanamycin, Moxifloxacin, Ofloxacin
Sens: Amikacin, Capreomycin, Protionamide, PAS, Linezolid

Rx: Z, Levofloxacin, Amikacin, Prothionamide, Cycloserine, PAS, Linezolid

Around 30 days into Rx, he started to c/o abdominal Sx:

Initial improvement on TB medication:





Vomiting

Abdo pain

BMI fallen <18.5

CT: diffuse small bowel thickening and dilatation

Initial improvement, TPN stopped, but GI Sx recrudesced:

Trial of steroids: no benefit → NG tube for feeding

TPN for 3/52

TDM: Amikacin, Cycloserine, Efavirenz all in therapeutic range
HIV V.L.: < 40 copies/mL (on two occasions)
EBV PCR: 11000 copies/mL
CMV PCR: not detected
HHV-8 PCR: not detected
Stool: -ve for M/C/S, OCP and CDT
Ba+ F/T: no stricturing
Repeat CT: no lymphadenopathy
OGD: Gastric bx: "chronic inflammation, nil specific"
D2 bx: "normal, fragmented mucosa"

Around 3/12 into Rx:
Markedly worsening abdominal pain. Out-of-hours CT scanning:
"free intraperitoneal fluid and air likely secondary to a gastro oesophageal junction perforation. The diffuse small bowel dilatation and thickening has progressed since previous imaging."

Joint Surgical & Medical decision:
"owing to extent of bowel disease in the context of its unknown aetiology, no surgical option is likely to be of benefit."

Patient died shortly after. Body repatriated to Lithuania.

University Hospitals of Leicester NHS
NHS Trust