

A Complicated Case with Co-Infections

Tom Wingfield, UK
ESIM, Switzerland, 2011

“Jo” – 49 Yr Old Male Transfer

- 4/7 **Acute diarrhoea** – profuse and intermittently mixed with blood
- 2/12 – Abdo pain; loss of appetite; weight loss
- **Past History:**
 - **Type 2 DM**
 - **Hypertension**
 - Laparotomy post-trauma with splenectomy
- **No allergies**
- Congolese, UK 10 yrs
- Pyrexial; dry, poor urine output
- **Initial Bloods:**
 - **Urea 16.7; Creat 416**
 - **eGFR 16; Bic 10.3**

28/5/9 – Day 4

- HIV Test positive (CD4 10, non-resistant virus)
- HBsAg positive (Hep B eAg positive; HBV DNA 4512 copies/ml)
- Patient informed of above
- Counsellor asked to see

29/5/9 – Day 5, Additional Info

- Divorced: “**...don't want to talk about it**”
- 2 children, different mothers: “**..they live in Paris**”

29/5/9 – Day 5, CXR



2/6/9 – Week 2, Problem List

New Issues:

- Spontaneous sputum AAFB (TB) positive
- Isospora in stool

Existing Issues:

- HIV and HBV
- Improving Renal Impairment

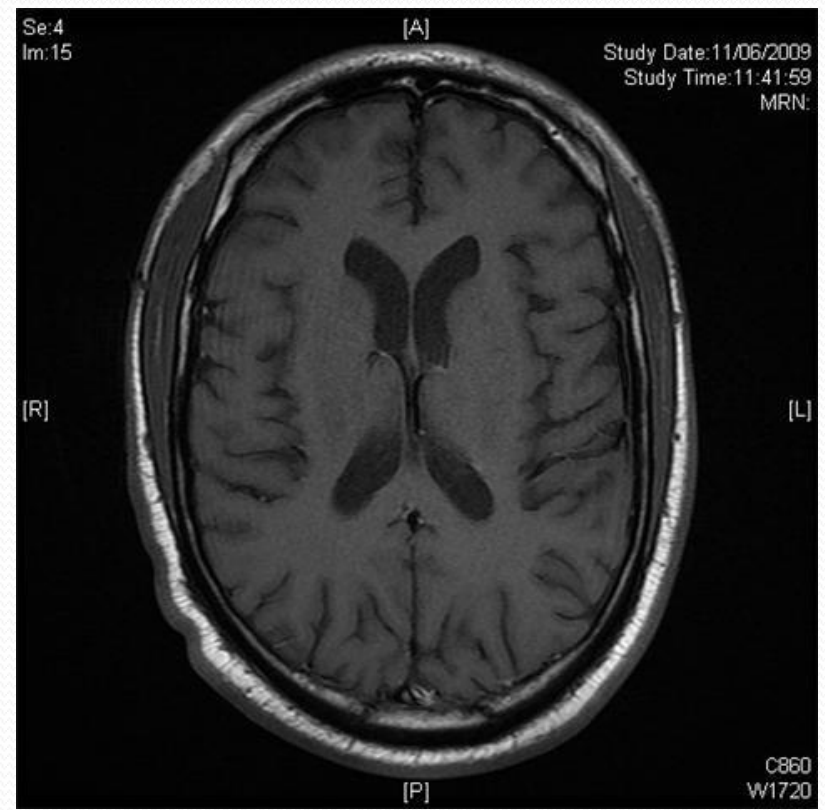
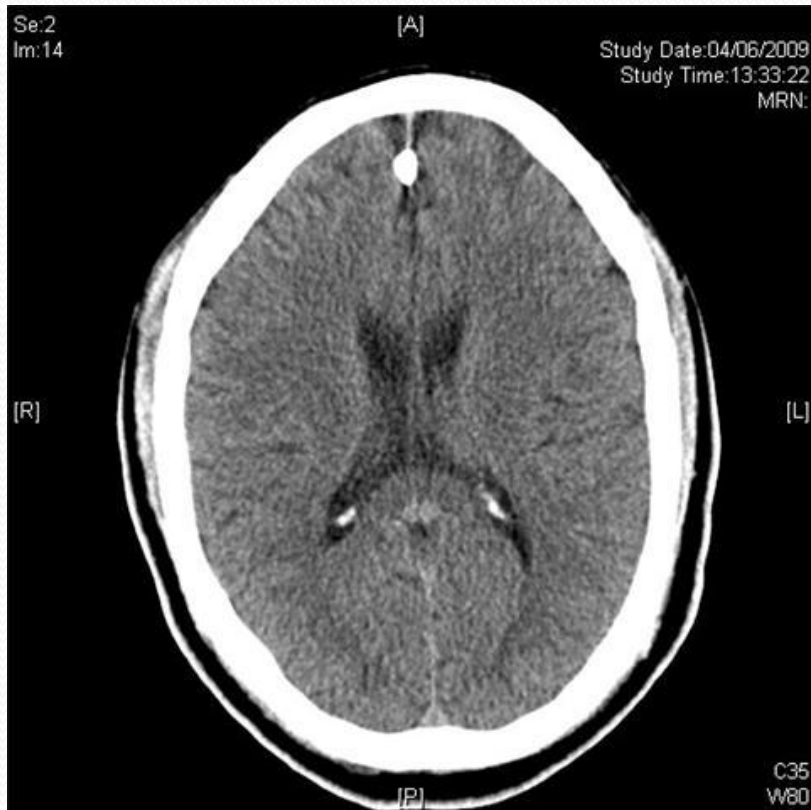
Other issues:

- Withdrawn, evasive and occasionally aggressive

2/6/9 – TB / Isospora Treated

- **PTB:**
 - Rifampicin
 - Isoniazid
 - Pyrazinamide
 - Ethambutol
- **Isospora:** Septrin 960mg QDS

4/6/9 – CT head, LP & MRI

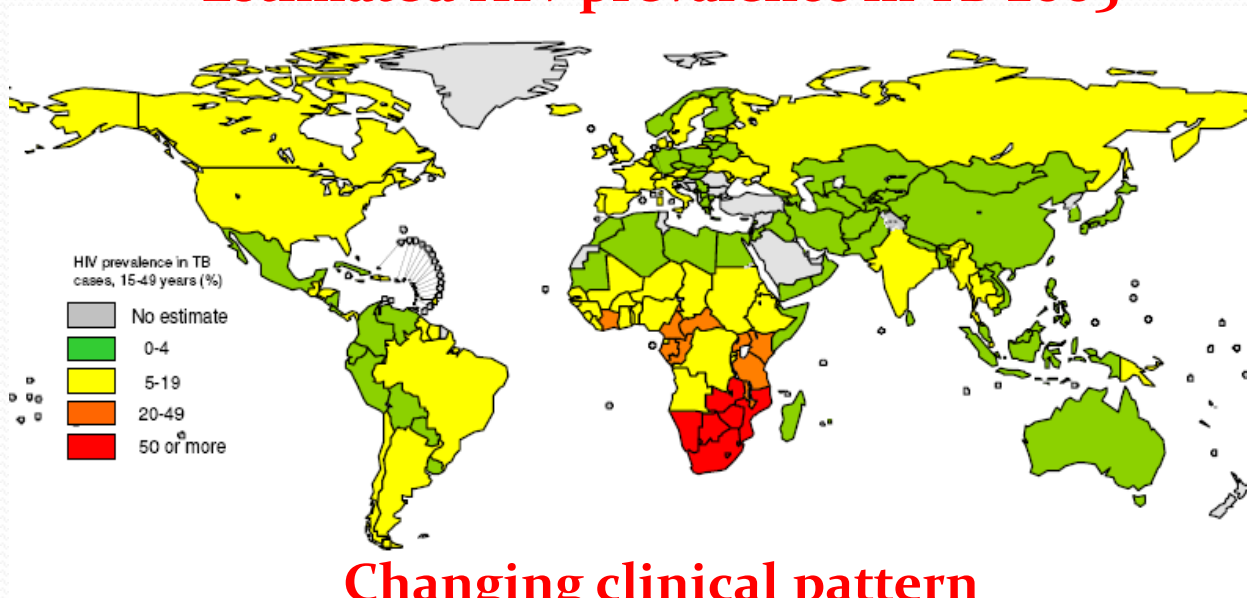


Week 3 – Developments

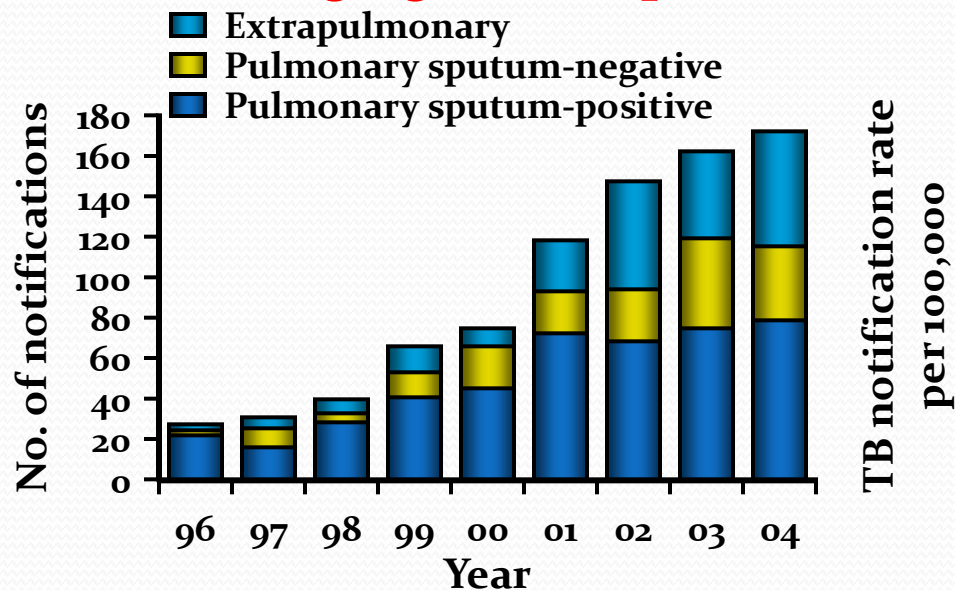
- HIV adherence nurse review:
 - **“It’s too early”**
- TB nurse review:
 - **“I don’t want to speak to you”**
- Psychology referral made

TB/HIV situation

Estimated HIV prevalence in TB 2005



Changing clinical pattern



Potential Benefits and Risks of Starting ART Immediately With TB Treatment

Benefits

- Reduced morbidity^{1,2}
- Reduced mortality^{1,2}
- Improved TB outcome

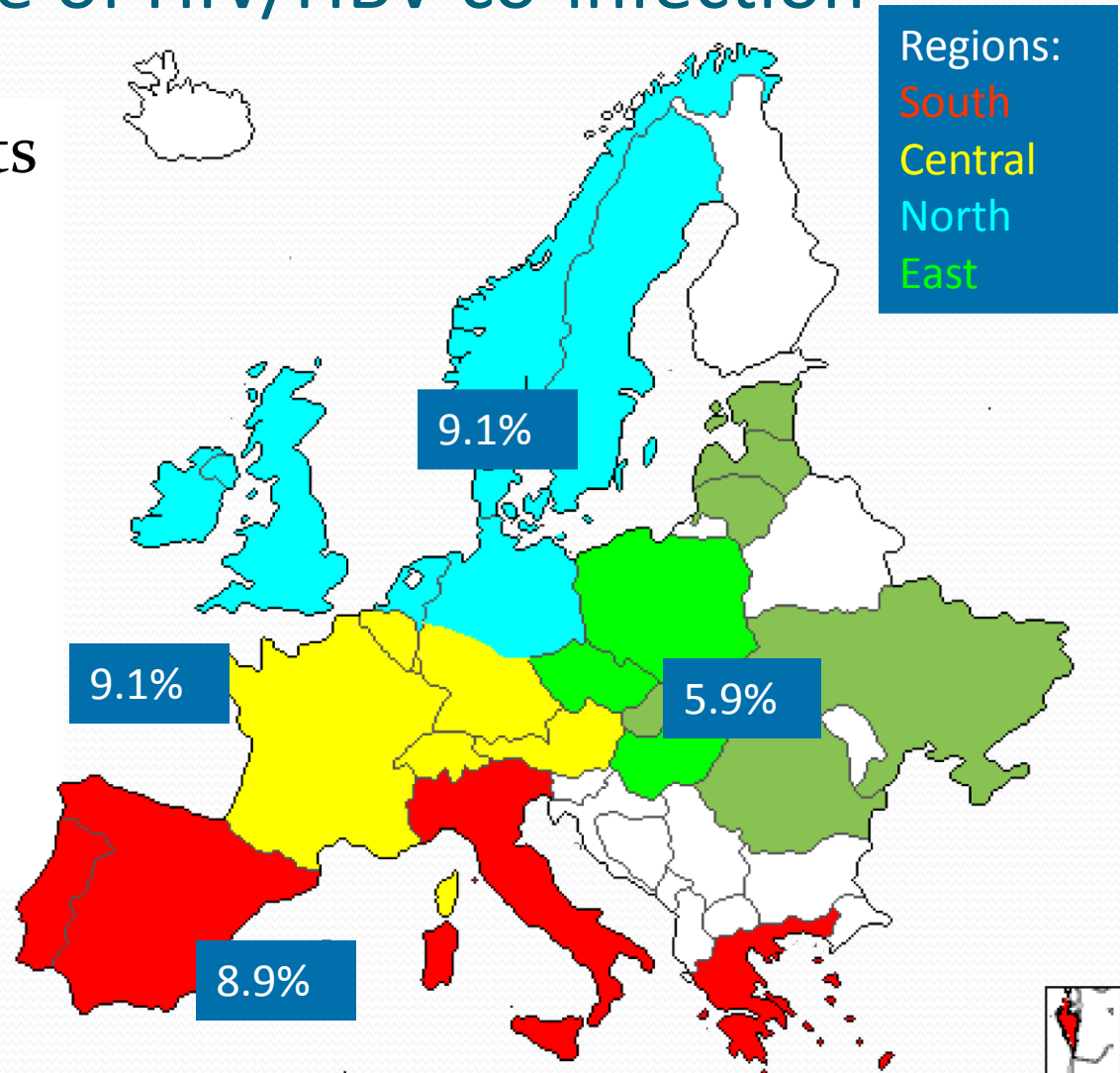
Risks

- Increased toxicity³
- Increased interactions³
- Pill burden

¹Dean, AIDS, 2002; ²Pedral-Sampaio, 2004, Brazil JID; ³Harries, Lancet, 2006

Europe: Prevalence of HIV/HBV co-infection

- Among 9802 subjects in the EuroSIDA Cohort:



End of Week 3

- Refused full psychological assessment
- Suspicious and paranoid
 - “My father told me to be a private person”
 - “Will I ever be HIV negative?”
 - “I hope God will help to cure me”
 - “.....I am a private person...”

Week 4

- DISCHARGED
- Refuses home visit from TB nurse
- Alternative visits organised

Week 7

- 1 Spontaneous Sputum Sample:
 - Mycobacterium TB Growth
 - **Resistant** to Rifampicin and Isoniazid
 - **Sensitive** to Pyrazinamide and Ethambutol

Now what are you going to do?

MDR TB

Our Plan: Week 7

- Admit to negative pressure room
- Start appropriate TB medicine orally and IV

Jo's Plan: Week 7

- “I’m in Leeds”
- “I need to speak to my solicitor”
- “How did you get my treatment wrong?”
- “Don’t want to talk about contacts”
- “Owe money on my flat”



.....2 days later

- Jo arrives on ward

Week 7: Treatment

- Tolerating MDR TB regime well
- Increasingly frustrated and wants to leave
- Welfare team inform us:
 - no work permit or visa
 - self-employed

What to do if he tries to leave?

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“You never helped us dig, so you go last.”

TB sufferer under guard in hospital

October 09, 2007

A PATIENT from Rochdale is being held under guard to prevent him from leaving a hospital ward and spreading TB.

Public Health Act 1984

Section 37: Forced admission to a suitable hospital

Section 38: Detention in that hospital

Recent change to law combines the two in UK

Rochdale
Observer



Week 8-9: Compromises

- Ongoing treatment tolerated
- Allowed out of room for walk around hospital grounds 20 mins per day

Hospital “grounds”.



Beautiful.

Week 9: Final resistance profile

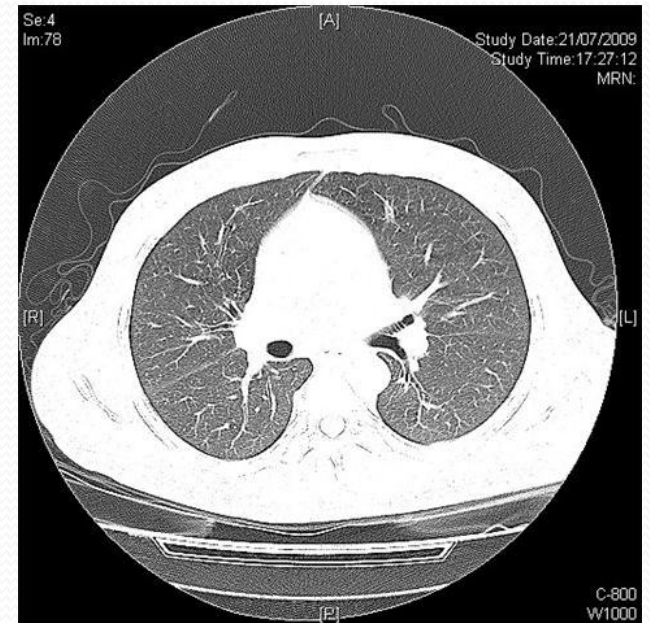
Sensitivities

Organism

Antibiotic	1
Isoniazid	R
Ethambutol	S
Rifampicin	R
Pyrazinamide	S
Rifabutin	R
Ciprofloxacin	R
Azithromycin	S
Clarithromycin	S
Streptomycin	R
Amikacin	S
Ethionamide	-
Capreomycin	S
Clofazimine	-
Kanamycin	S
Moxifloxacin	R
Ofloxacin	S
Prothionamide	R

Week 9: Review of TB samples

- **Spontaneous** sputum – 31/5/9: MDR TB (with additional resistances)
- Induced sputum x3 AAFB negative
- Stool x3 AAFB negative
- Blood culture x2 negative
- CT normal



Week 9

- What about the boy next door?
- Now discharged

Boy next door's CXR



Week 9: Sputum Doppelganger

Jo's Sputum

Sensitivities

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Antibiotic	1
Isoniazid	R
Ethambutol	S
Rifampicin	R
Pyrazinamide	S
Rifabutin	R
Ciprofloxacin	R
Azithromycin	S
Clarithromycin	S
Streptomycin	R
Amikacin	S
Ethionamide	-
Capreomycin	S
Clofazimine	-
Kanamycin	S
Moxifloxacin	R
Ofloxacin	S
Prothionamide	R

Other Gent's Sputum

Sensitivities

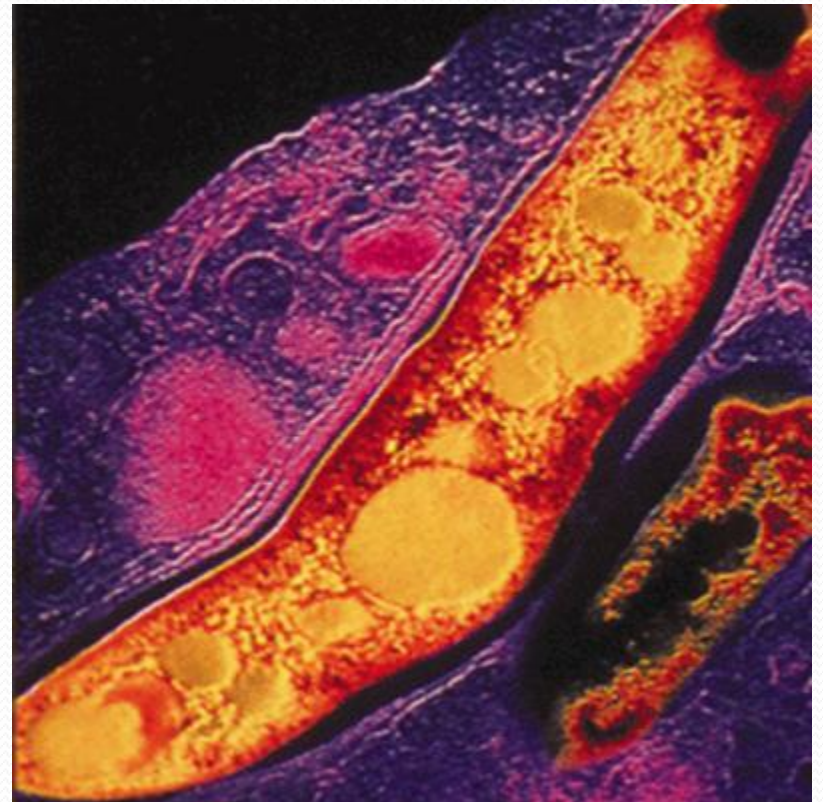
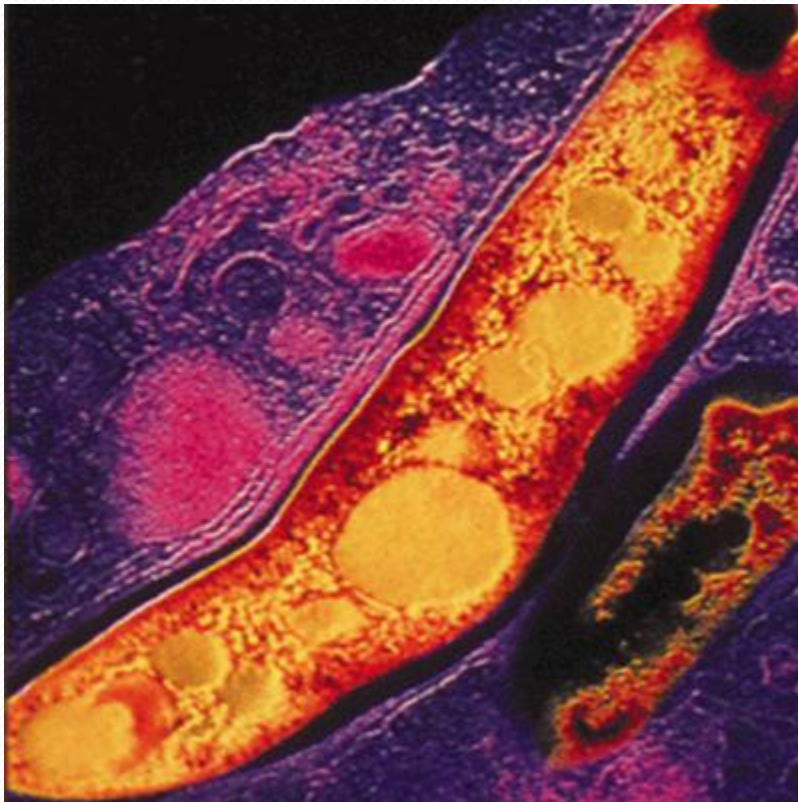
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Ethionamide	-
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Clofazimine	-
Kanamycin	S
Moxifloxacin	R
Ofloxacin	S
Prothionamide	R

Week 9: Now what?



Week 12, 21/8/9 - News

- 2 Strains of MDR TB are identical by DNA fingerprinting



Week 12

- Jo does not have MDR TB or XDR TB

Week 12

- Jo does not have TB

Week 12

- You are the consultant
- What do you do now



Week 12: Plan of action

- Inform pt, invite in for discussion
- Stop TB meds
- Inform HPA / TB nurse / press officer
- Continue other prophylaxis
- Complaints service info given
- Incident forms
- Root cause analysis

Week 15, 16/9/9: OPD review 1

- Feels better off TB meds
- 100% compliant with HIV medications
- Re-requesting HIV and Hep B tests from GP
- “Doesn’t trust anyone”

Any questions? Spot Diagnosis



Summary

- HIV with co-infections complicated management
- Holistic care
- Public health law
- Management / risk management issues

Thanks

