

Infectious Disease case

Mr JJ is a 50 year old gentleman weighing 50kg on admission.

Presenting Complaint (PC): Lethargy, tiredness

History of PC (HOPC): Unwell for the past month, productive cough with green sputum, SOB on minimal exertion, night sweats, tired, decreased appetite and weight loss

Past Medical History (PMH): 1987 Pulmonary tuberculosis – admitted and was followed up for one year after discharge

Medicines History: Nil

Social History: Lives in a hostel for men, alcoholic

Observations: Looked very unwell. Pyrexial (T = 38.2). Smelt strongly of alcohol but alert and orientated. Dehydrated, thin and cachectic. Clinically anaemic. Clubbing.

RS: Expansion poor R=L. PN - increased but dull in left upper zone. BS - coarse crackles in R and L upper zones.

CVS: P = 100, BP = 110/60, JVP normal

Plan: Rehydrate orally, antibiotics

Day 1 medication: Amoxicillin 500 mg PO tds
Metronidazole 400 mg PO tds
Thiamine 100 mg PO m

Investigations/results:

Investigation	Result	Reference range
Hb g/dL	10.9	14-18
WCC 10 ⁹ /L	10.2	4-11
Platelets 10 ⁹ /L	263	100-400
Na ⁺ mmol/L	127	133-149
Sputum for AFB	AFB seen	
CXR	Hyper-inflated lungs with old upper zone fibrosis. Patchy shadowing in both upper zones with cavitation	

Day 2 medication: Isoniazid 300 mg PO od
Rifampicin 600 mg PO od
Pyrazinamide 1.5 g PO od
Ethambutol 750 mg PO od
Pyridoxine 20 mg PO od
Streptomycin 600 mg IM od (Amoxycillin and metronidazole discontinued)

Progress: Mr JJ was reviewed on the ward by the dietician who provided him with supplements to try and increase his weight. On the antibiotics he became afebrile and felt much better. He was discharged on Day 11 with plans made for him to be followed up.

Q1. Comment on WCC. What further information might have been useful in relation to WCC?

Q2. In a patient diagnosed as having pulmonary tuberculosis, for how long is it necessary to isolate them once antituberculosis therapy has been started?

Q3. Do you anticipate any problems with compliance with the drug regime in this particular patient? If so, how will they be overcome?

Q4. Why does the patient need to take pyridoxine? Is this dose appropriate?

Q5. What monitoring is needed in relation to JJ's drug therapy?