

## DUAL DIAGNOSTIC DILEMMAS: OPPORTUNISTIC INFECTIONS IN ADVANCED HIV

(Trainee breakfast case presentation. Theme: B. This is a clinical case presentation presented in accordance with abstract guidelines for practice based abstracts)

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### Background/Purpose:

A 44 year old man was referred by his General Practitioner with newly diagnosed HIV following a 4 month history of dry cough, fatigue, night sweats and weight loss. He identified as homosexual, having tested negative for HIV 4 years earlier. Recent Computerized Tomography imaging revealed a clear chest but para-aortic and mesenteric lymphadenopathy (largest 4.8mm in diameter) and hepatosplenomegaly.

### Approach:

Vital signs, neurological, gastrointestinal and respiratory examinations were unremarkable. CD4 count was  $20 \times 10^7$  (3%). Viral load was 1,031,690 copies/ml (subtype B, fully susceptible genotype). FBC revealed pancytopenia with lymphopenia. Renal and liver function, syphilis, hepatitis and toxoplasma serology and serum cryptococcal antigen and interferon gamma release assay were all unremarkable. Cytomegalovirus (CMV) IgG was positive, IgM negative. CMV DNA was detected on induced sputum but microscopy, culture and *Pneumocystis jirovecii* (PJP) PCR were unremarkable. Blood (and mycobacterial) cultures were negative. Peripheral blood CMV DNA was detected. Once hospitalised, Ophthalmology diagnosed left-sided CMV retinitis (CMV detected in vitreous fluid). Positron Emission Tomography revealed glucose avid lesions above and below the diaphragm suggesting an infiltrative process. Para-aortic lymph node (core biopsy) and bone marrow examinations found no evidence of lymphoproliferative disorders but were consistent with *Mycobacterium Avium Complex* (MAC) infection.

### Outcomes/Impact:

Clarithromycin, Ethambutol and Ganciclovir (oral, intra-vitreal) were commenced with ongoing ophthalmology review. Antiretroviral therapy (TAF/FTC+DTG) was commenced two weeks later. The patient remained well at follow-up with good medication adherence and tolerability. His symptoms resolved within 4 weeks of commencing antimicrobials. He remained on CMV and MAC treatments and (Cotrimoxazole) PJP prophylaxis, following up with Counselling, Immunology, Haematology, Ophthalmology and Sexual Health.

### Innovation and Significance:

Advanced HIV with profound, life-threatening immunosuppression is still seen in Australia. Clinicians must be alert to opportunistic infections, which often have multi-

system manifestations requiring an index of suspicion for diagnosis. A multi-disciplinary approach was essential in the management of this case.