

## **ADVANCED HIV – CHALLENGING THE OCCAM’S RAZOR, YET AGAIN**

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### **Background:**

A young female Papua New Guinean presented with 9 months of recurrent episodes of diarrhoea, nausea, vomiting, fevers and significant weight loss. She was diagnosed with gastroenteritis secondary to Cryptosporidiosis and Salmonella spp., oral candidiasis, Escherichia coli urinary tract infection Staphylococcus aureus vulvar cellulitis and renal impairment, likely multi-factorial in aetiology. HIV was diagnosed with a CD4 T-cell count of 28 cells/uL. Her symptoms mostly resolved on antibiotics and was discharged home on antiretrovirals (ART) via compassionate access.

Two weeks later, she was readmitted from clinic with anaemia (haemoglobin 60g/L), ongoing fevers and a mild central abdominal pain. CT scan of her chest, abdomen and pelvis revealed scattered pulmonary nodules, retroperitoneal and mesenteric lymphadenopathy. Sputum PCR was positive for Pneumocystis jiroverci. Despite treatment with cotrimoxazole, she continued to be febrile.

A PET/CT scan confirmed widespread FDG avid lymphadenopathy with a large mesenteric nodal mass, and a pelvic ultrasound revealed bilateral hydrosalpingitis and an enlarged right ovary. She subsequently underwent laparoscopic mesenteric node, tubal and ovarian biopsies.

An acid-fast bacilli (AFB) was identified on blood culture and multiple tissue cultures after a month. This was identified as Mycobacterium simiae.

### **Approach:**

Prior to final identification of the AFB, she was empirically commenced on Mycobacterium avium complex and tuberculous treatment. ART selection was difficult to avoid potential drug interactions, and with consideration to her low weight, renal impairment and lack of Medicare access. Adherence problems associated with polypharmacy and complex psychosocial issues further complicated her management.

### **Outcome:**

Despite sub-optimal adherence to her mycobacterium treatment, the patient improved as her CD4 count increased with ART.

### **Significance:**

This case highlights the diagnostic and management challenges that remain in those presenting with advanced HIV, particularly in those with culturally diverse backgrounds, despite our current range of available ART. Nontuberculous mycobacterial immune reconstitution syndrome is well-recognised and will be discussed.

**Disclosure of Interest Statement:** All authors declare no conflict of interest.