

Fastidious Enteric Pathogens in HIV

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Abstract : A 25-year-old male HIV patient (CD4 cells 20/ μ L and HIV viral load 14200000 copies/ml) with a past medical history of duodenal ulcer, pneumocystis carinii pneumonia, oesophageal candidiasis presented with fever and a seizure to hospital. The only recent travel had been a religious pilgrimage from Singapore to Malaysia 5 days prior; during the trip he sustained skin abrasions. The patient had recently started highly active antiretroviral therapy 2 months prior. Clinical examination was unremarkable other than a temperature of 38.8°C and perianal warts. Laboratory tests showed a leukocyte count 12.5x10⁹ cells/L, haemoglobin 9.4 g/dL, normal biochemistry and a C-reactive protein 121 mg/L. CT head and MRI head were unremarkable and cerebrospinal fluid analysis performed after a delay (due to technical difficulties) of 11 days was unremarkable. Blood cultures (three sets) taken on admission showed Gram-negative rods in the anaerobic bottles only at the end of incubation with culture result confirmed by molecular sequencing showing *Helicobacter cinaedi*. The patient was treated empirically with ceftriaxone for seven days and this was converted to oral co-amoxiclav for a further seven days after the blood cultures became positive. A Transthoracic echocardiogram was unremarkable. The patient made a full recovery. *Helicobacter cinaedi* is a gram-negative anaerobic fastidious organism affecting patients with comorbidity. Infection may manifest as cellulitis, colitis or as in this case as bloodstream infection - the latter is often attributed to faeco-oral infection. Laboratory identification requires prolonged culture. Therapeutic options may be limited by resistance to macrolides and fluoroquinolones. The likely pathogen inoculation routes in the case described include gastrointestinal translocation due to proctitis at the site of perianal warts, or breach of the skin via abrasions occurring during the pilgrimage. Such organisms are increasing in prevalence as our patient population ages and patients have multiple comorbidities including HIV. It may be necessary in patients with unexplained fever to prolong incubation of sterile sites including blood in order to identify this unusual fastidious organism.

Keywords : fastidious, *Helicobacter cinaedi*, HIV, immunocompromised

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