Screening and management practices for renal disease in the HIV-positive patient population of an inner metropolitan sexual health service

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Background: Renal disease is a commonly encountered comorbidity in HIV infection. The aetiology of renal disease in these patients is multifactorial, with direct effects of the HIV virus, the use of potentially nephrotoxic anti-retroviral therapy (ART) and high prevalence of non-HIV related renal risk factors being major contributors. It is therefore important that patients with HIV are screened and managed appropriately. While Australia lacks national management guidelines for renal disease in HIV-infected patients, international guidelines suggest screening algorithms based on renal function tests and the presence of renal risk factors. There is limited information regarding the prevalence of renal disease, renal risk factors and screening practices for renal disease in this patient population.

Methods: A retrospective case note review was conducted of all HIV-positive patients who attended RPA Sexual Health Clinic, an inner city sexual health service in Sydney, from August 1, 2013 to July 31st, 2014 for HIV management. Patient demographic and clinical data was collected with a focus on renal risk factors and the screening undertaken for renal disease.

Results: Of 188 patients who attended the clinic, the prevalence of established renal disease was low. There was a high prevalence of renal risk factors in the population, including potentially nephrotoxic ART therapy (61%), smoking (38%), hypertension (12%), dyslipidemia (11%) and hepatitis C co-infection (7%). The most frequent screening tests included CD4+ T cell count, HIV viral load and serum creatinine/eGFR. Other tests including blood lipids, urine protein:creatinine ratio, phosphate and glycosuria were less frequent.

Conclusion: This patient population demonstrates a high prevalence of renal risk factors. Despite this, screening was not undertaken as recommended by available guidelines, which limits opportunities for early intervention. This represents a potential area to improve patient care.