

HIV coinfection in patients with pneumococcaemia in East London

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Recently, the Chief Medical and Nursing Officers for England issued a joint letter highlighting the need to diagnose more HIV infections in specialties such as thoracic medicine [1]. The aim of this study was to determine minimum estimates for the HIV coinfection rate and the prevalence of new HIV diagnoses in patients admitted to hospital with pneumococcaemia. Patients with *Streptococcus pneumoniae* isolated from blood cultures were identified at King George Hospital, Barking, Havering and Redbridge Trust between June 2003 and December 2006. Information was prospectively collected on patient demographics, sites of infection, HIV serostatus, haematology and biochemistry results and 30-day mortality.

Ninety-seven patients had pneumococcaemia. Five (5.2%) patients were known to be HIV seropositive at presentation. Nine additional patients were tested for HIV: four (44.4%) tested positive and five negative. Among the four newly diagnosed patients, mean CD4 counts and viral loads were 263 cells/ μ L and 108 551 genomic HIV-1 RNA copies/mL, respectively. Compared with patients with unknown or negative HIV serostatus, HIV-positive patients were significantly more likely to be aged 16–30 years ($P = 0.015$), to have been born in sub-Saharan Africa ($P = 0.004$) and to have elevated globulins ($P < 0.001$). Overall, 30-day mortality was 14/97 (14.4%) and there was

no significant difference in mortality between the two groups.

Within the UK, this is the first study to estimate a minimum HIV coinfection prevalence for patients admitted to hospital with pneumococcaemia. Five thousand patient episodes of pneumococcaemia are reported to the Health Protection Agency each year and, based on our findings, HIV testing of all patients with pneumococcaemia could result in an additional 250 new HIV diagnoses per annum. In view of limited testing, a larger study to estimate the true prevalence of HIV infection in patients with pneumococcaemia is required.

Acknowledgement

I would like to acknowledge Dr Sandra Lacey who assisted with data collection.

Reference

- 1 Donaldson L, Beasley C. *Improving the detection and diagnosis of HIV in non-HIV specialities including primary care*. London, Department of Health, 2007. Available online: www.dh.gov.uk/en/Publichealth/Healthimprovement/Sexualhealth/HIV/HIVgeneralinformation/