



There is a paucity of data on the prevalence and pattern of pathogenic organisms in haemodialysed HIV-infected versus non-HIV-infected patients with end-stage kidney disease” Avila-Danguillecourt et al (2018).

Abstract:

BACKGROUND: Central venous catheter (CVC) haemodialysis (HD) to implement renal replacement therapy is the preferred choice in the urgent setting. Unfortunately, CVC placement is associated with multiple complications including nosocomial bloodstream infections. There is a paucity of data on the prevalence and pattern of pathogenic organisms in haemodialysed HIV-infected versus non-HIV-infected patients with end-stage kidney disease.

METHOD AND RESULTS: We undertook a retrospective study of 228 patients who were dialysed using a CVC at a tertiary referral hospital in KwaZulu-Natal, South Africa. Seventy-eight patients (34.2%) complicated with bacteraemia and sepsis requiring antibiotics. Removal of the catheter was necessary in 58 patients (74.0%). The most common organisms isolated were *Staphylococcus aureus* (30.8%), *Staphylococcus epidermidis* (24.4%) and *Klebsiella pneumoniae* (15.4%). There was no statistically significant difference between HIV-infected and non-infected patients with regards to infection rate, time interval from insertion of CVC to infection and final outcome. However, HIV-infected patients took longer to recover; 54.3% of non-infected patients versus 10.3% HIV-infected patients had their sepsis controlled

within one week. Acidosis, hypotension, line malfunction and line discharge were infrequent signs of sepsis. Fever, rigors and raised white cell count occurred in over 80.0% of patients.

CONCLUSION: The infection rate in CVC HD is not more frequent in HIV-infected patients, provided that CD4+ count is ≥ 200 cells/ μ L and the patient is virologically suppressed. Outcomes following intravenous antibiotic and removal of the CVC are similar in HIV-infected and non-infected patients but response to treatment is slower in HIV-infected patients. A high index of suspicion is needed in detecting CVC-related bacteraemia.

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Reference:

Avila-Danguillecourt, N., Moodley, A.A. and Makinga, P. (2018) Prevalence and outcomes of central venous catheter-related bacteraemia in HIV-infected versus non-HIV-infected patients undergoing haemodialysis treatment for end-stage kidney disease. Southern African Journal of HIV Medicine. 19(1), p.859. eCollection 2018.

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