Endovascular infections in a new haemodialysis unit

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Abstract

Introduction: Central venous catheters (CVCs) are used to provide temporary access in haemodialysis. However, one of the most serious complications associated with these catheters is endovascular bacteraemia.

Method: We conducted a retrospective and descriptive study over eight months from January 2023 to August 2023, which included all patients who received a jugular catheter in our unit.

Results: In our unit, 12 patients received a jugular catheter (KT). The average age of the patients was 58 years, with a male predominance (M/F sex ratio = 5). The reasons for catheter installation were the need to start haemodialysis sessions in urgent situations (7 cases), dysfunction of the vascular access (4 cases), and depletion of venous capital (1 case). The catheters had a lifespan of 52 days. During this period, three patients (25%) presented with infections, but none of them were endovascular in origin. The infections were an infection of the KT orifice (n=1) and bacteraemia (n=2). One patient developed infective endocarditis (IE). Staphylococcus aureus (SA) was identified in two cases, and Klebsiella pneumonia was identified in one case. The patients were initially treated with 1 gram of vancomycin three times a week and three doses of amikacin. One patient showed good clinical-biological progress, while the antibiotic for the patient with Klebsiella pneumonia bacteraemia was changed to tienam after the blood culture results. The patient with IE was transferred to cardiology where they received prolonged antibiotic therapy (vancomycin for 6 weeks) and showed good progress.

Conclusions: Endovascular infections are serious. The best therapeutic strategy is prevention through compliance with aseptic rules.