

Epidemiology of Vascular Access Infections in Dialysis – A Multicenter Retrospective Analysis



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Summary

Vascular access (VA) infections are a major cause of morbidity and mortality in patients undergoing hemodialysis treatment. The risk of infection varies significantly depending on the type of access used, with central venous catheters (CVC) having a higher incidence of infections compared to arteriovenous fistulas (AVF) and vascular grafts (AVG).

Methodology

Material and Method

- Study design: Multicenter retrospective study conducted over a two-year period in 26 dialysis centers from one country of a large dialysis provider.
- Study population: 4000 patients undergoing hemodialysis treatment, divided according to the type of vascular access (CVC, AVF, AVG).

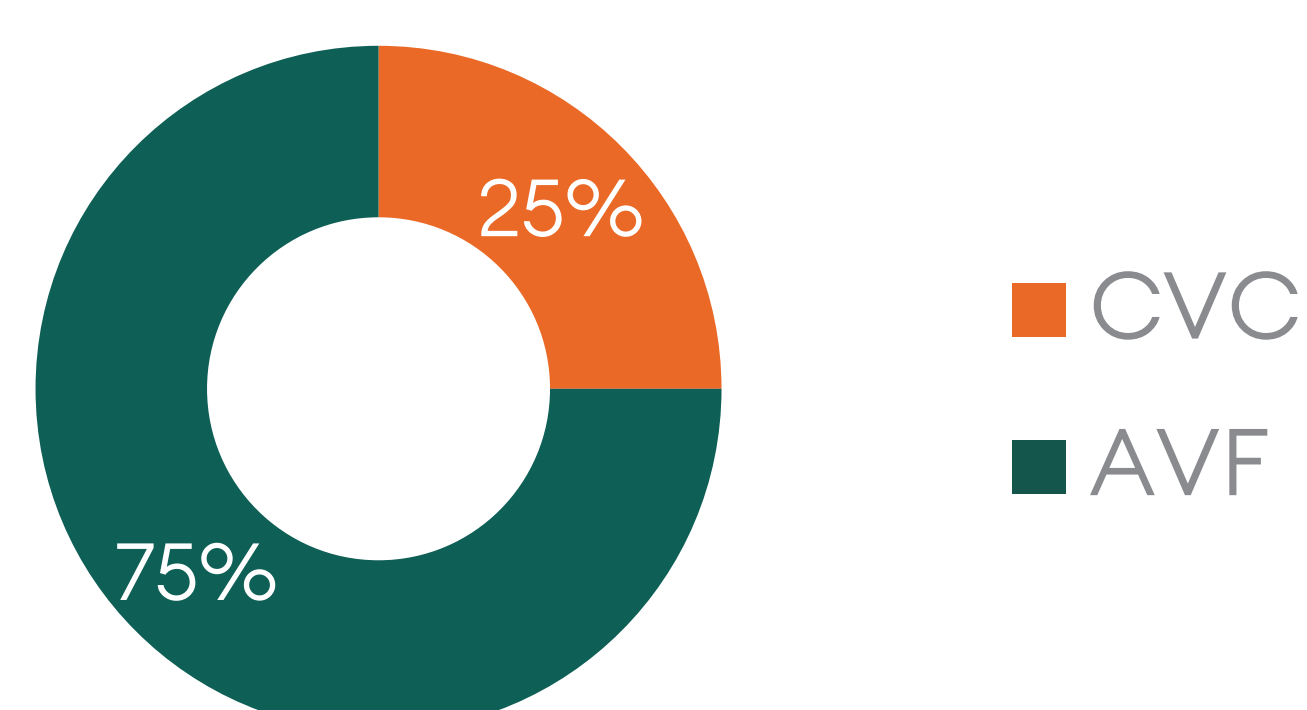
Results

4000 patients were included.

- 75% had a AVF (3000 patients) and 25% a CVC (1000 patients).
- Global rate of vascular access related infectious episodes was 0.4 patients/year.

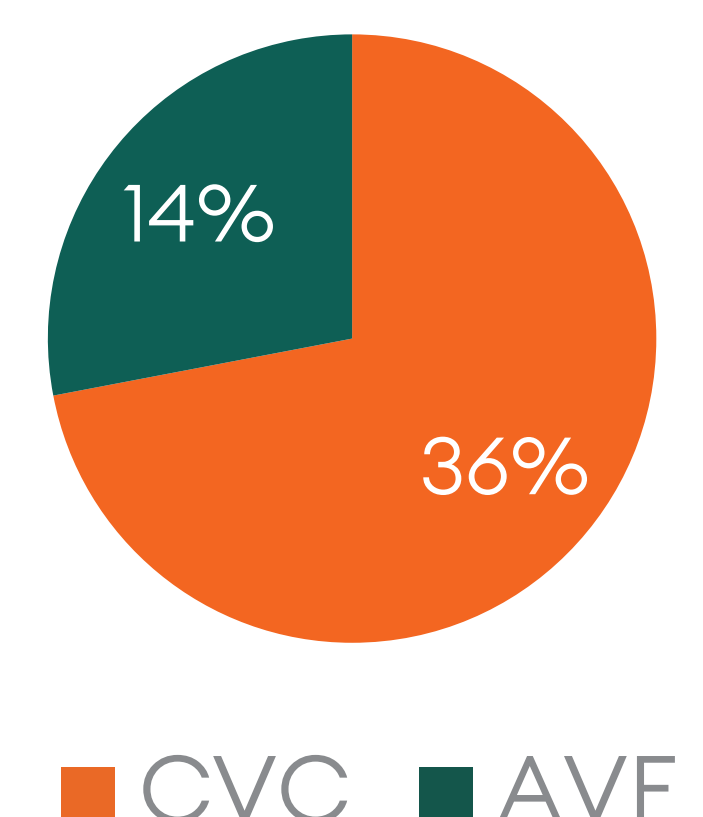


Vascular access

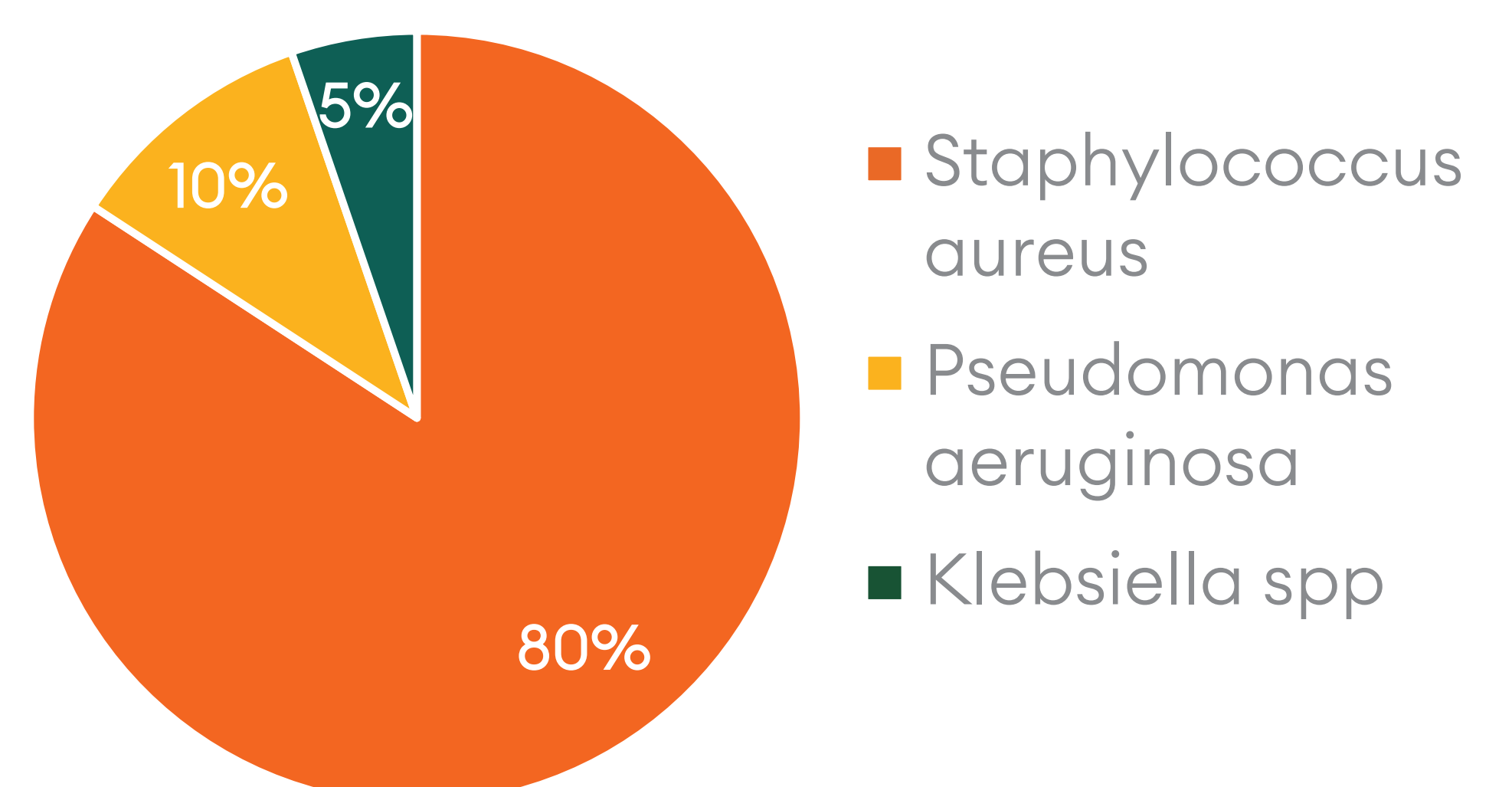


Vascular access infections were associated with hospitalizations: 7% of all hospitalizations were caused by VA related infections and 3% of VA infectious events were treated in the hospital.

Infections episodes



Patogens



Conclusions

Even that the vascular access (VA) related infections represent a significant proportion of total infectious episodes, especially among patients with central venous catheters (CVC), the global rate of VA episode patient/year its low. This emphasizes importance of our uniform strategies for the prevention of vascular access infections in dialysis and a judicious use of antibiotic treatments.. Arteriovenous fistula (AVF) should be promoted as the preferred option for vascular access, and compliance with rigorous hygiene and surveillance measures can significantly reduce the incidence of infections, thus improving the prognosis of HD patients.



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