



Our study shows that PVCs carry a significant risk for bacteremia in Spanish IMDs” Guembe et al (2017).

Summary:

Background: The use of peripheral venous catheters (PVCs) has increased outside the intensive care unit, as have rates of peripheral venous catheter associated-bloodstream infection (PVC-BSI). The internal medicine department (IMD) is one of the main wards where PVCs are widely used. However, data on the incidence of PVC-BSI and its characteristics in the IMD are scarce.

Aim: Our objective was to assess the incidence of PVC-BSI episodes detected in IMDs in Spain.

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Methods: We performed a 1-year multicenter prospective observational cohort study in 14 Spanish IMDs. We included adult patients admitted with at least one PVC and bacteremia. Demographic and clinical data were provided by local coordinators.

Findings: We recorded 70 episodes of PVC-BSI, representing an overall rate of 1.64 PVC-BSI episodes/1,000 IMD admissions. Patients had a mean (SD) age of 67.44 (16.72) years. It was

estimated that 25.7% of PVCs were no longer necessary. *Staphylococcus aureus* was the most frequently isolated microorganism (41.7%). Phlebitis was clinically evident in 44 (62.9%) episodes and proved to be an independent predictor of catheter insertion in emergency departments (OR=5.44). The crude and attributable mortality rates were 12.9% and 5.7%, respectively.

**Conclusion:** Our study shows that PVCs carry a significant risk for bacteremia in Spanish IMDs. Phlebitis is not always clinically evident in patients with bacteremia in this population. Our findings support the need for educational and interventional preventive measures both in IMDs and in emergency departments to reduce the rate of PVC-BSI and associated comorbidities and costs.

**Reference:**

Guembe, M., Pérez-Granda, M.J., Capdevila, J.A., Barberán, J., Pinilla, B., Martín-Rabadán, P. and Bouza, E. (2017) Nationwide Study on Peripheral Venous Catheter Associated–Bloodstream Infections in Internal Medicine Departments. *The Journal of Hospital Infection*. July 14th. .

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