



Studies showing the actual prevalence of colonization of peripheral IV cannulas and its role in BSI are lacking. Hence, this study was aimed to estimate the prevalence of colonization of the injection ports of peripheral IV cannulas” Rai et al (2019).

Abstract:

**BACKGROUND:** The use of intravenous (IV) cannulas is an integral part of patient care in hospitals. These intravenous cannulas are a potential route for microorganisms to enter the blood stream resulting in a variety of local or systemic infections. Studies showing the actual prevalence of colonization of peripheral IV cannulas and its role in BSI are lacking. Hence, this study was aimed to estimate the prevalence of colonization of the injection ports of peripheral IV cannulas.

**METHODS:** This cross sectional study was conducted on patients admitted in ICU and wards in an 800 bedded tertiary care hospital. Swabs were taken from lumens of peripheral IV cannulas and cultured. Patient demographic data and practices followed for maintenance of IV line were noted.

**RESULTS:** A total of 196 injection port samples were taken, out of which 11 tested positive for microbial growth (5.61%). Staphylococcus aureus was the predominant organism contributing 64% of the microbial growth. A significant association was seen between presence of local signs, old age and positive cultures. Flushing IV cannula every 6 h was

associated with negative cultures.

**CONCLUSION:** Peripheral IV cannulation has significant potential for microbial contamination and is largely ignored. Most of the risk factors associated with growth of microorganisms in the injection ports of peripheral intravenous cannulas (which has a potential to cause catheter-related blood stream infections) can be prevented by improving protocols for management. To prevent infection from occurring, practitioners should be educated and trained about the care and management of IV.

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#### Reference:

Rai, A., Khera, A., Jain, M., Krishnakumar, M. and Sreevastava, D.K. (2019) Bacterial colonization of peripheral intravenous cannulas in a tertiary care hospital: A cross sectional observational study. Medical Journal, Armed Forces India. 75(1), p.65-69.

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