

Is central venous catheter placement overrated for inotropic support: A voice from low-resource setting

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Dear Editor, I am reaching out to shed light on the prevalent issue regarding the perceived necessity of placing central venous catheters in the emergency department for delivering inotropic agents to critically ill patients as Central venous catheter (CVC) placement remains a gold standard for delivering such medications.¹ Recent studies have suggested that peripheral norepinephrine can be safely administered, challenging the notion of its indispensability.²

In a low-resource country, cost-effectiveness is paramount, with patient care being a prime priority. A study by Yerke JR et al. piqued my interest regarding the need for CVC for inotropic support. Their analysis showed a remarkable result regarding the need for CVC. Peripheral administration can decrease 1 day of CVC, and 51.6% of patients never required a CVC after peripheral administration with no significant ischaemic injury as it is the foremost feared complication resulting from peripheral administration.³ To support their results later on, the Systemic Review by Fernández-Ginés FD et al. showed that peripheral administration appears safe and beneficial.⁴

Initiating Peripheral inotropic administration offers greater benefits than central catheter placement by being simpler, time effective, requiring less expertise, reducing the risk of potential complications associated with CVC insertion, and being cost-effective. A study conducted by Sara M Powell et al. reports that initiating peripheral norepinephrine

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reduced the need for CVC insertion in almost 37% of their study population and almost cost avoidance of \$8900.⁵

Unfortunately, In Pakistan, CVC is still preferred for norepinephrine administration and lacks any literature regarding the safety profile for peripheral administration. Witnessing the impressive outcomes of the research mentioned above, we aspire for similar investigations to be carried out here. In conclusion, Peripheral inotropic administration appears to be a cost-effective and safe alternative, saving patients from unnecessary invasive procedures, challenging the traditional paradigm, and providing clinicians with a broader armamentarium for managing haemodynamically unstable patients.

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