

Nursing experience in the placement of midline catheters using ultrasound in a General Hospital in Mexico City.

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Abstract:

Midline Catheters (LM) are indicated for patients with difficult access, non-vesicant and non-irritant medications, and a stay of less than 30 days (1,2). This implies significant challenges in decision-making for the Nursing Staff (NS) responsible for the installation (3,4). They are associated with lower infection rates compared to central catheters and a lower risk of mechanical complications compared to other devices (4,5,6,7). Ultrasound-guided insertion is associated with a higher success rate and clinically indicated permanence (8).

Objective:

To describe the Nursing Staff's experience in installing LM Catheters using ultrasound in a hospital in Mexico City.

Methods:

Observational, descriptive, retrospective, cross-sectional study; the population consisted of clinical records of patients who had an LM catheter installed by ultrasound, placed by the Nursing Staff, during a two-year period from 01/01/2022 to 12/31/2023. Convenience sample; main variables include the number of attempts, insertion site, complications, reason for removal, bloodstream infection.

Resultados



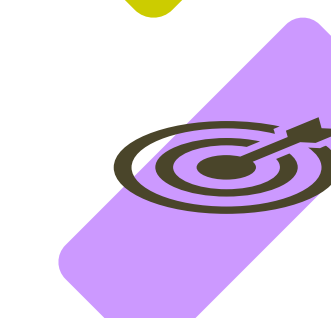
The Nursing Staff installed 456 4Fr LM catheters, 1 lumen; 64.2% were placed in the basilic vein, 72.8% on the first attempt.,



7% had complications during installation, 8.9% of the catheters had complications during follow-up, 79.6% were removed due to patient discharge.

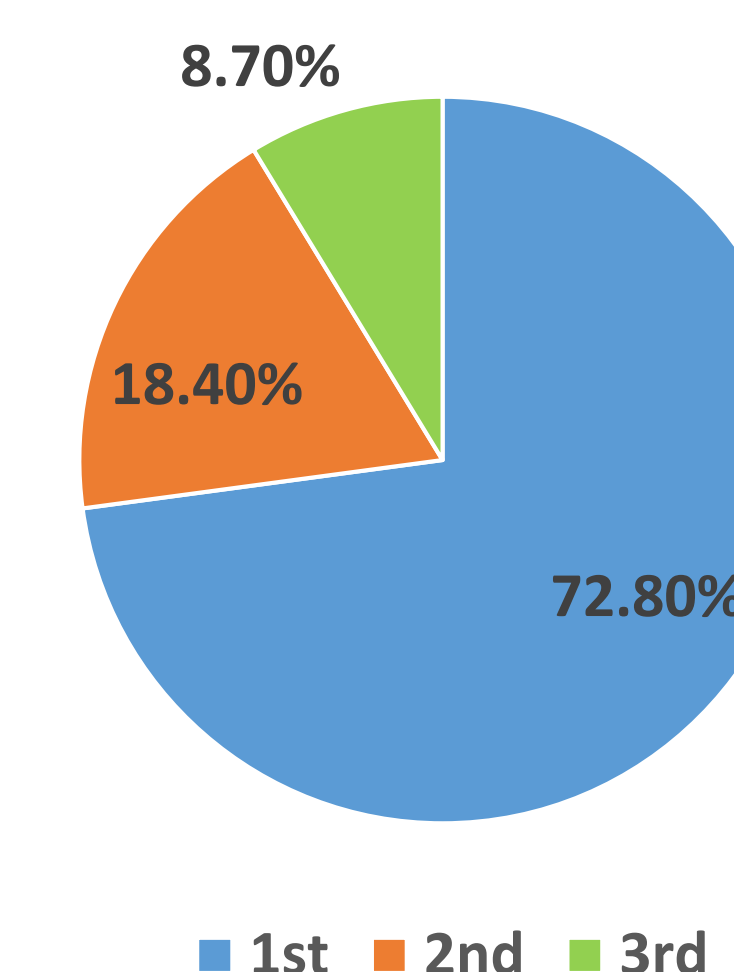


0.2% of the total patients had a catheter-related bloodstream infection with an infection rate of 0.02% per 1000 catheter days

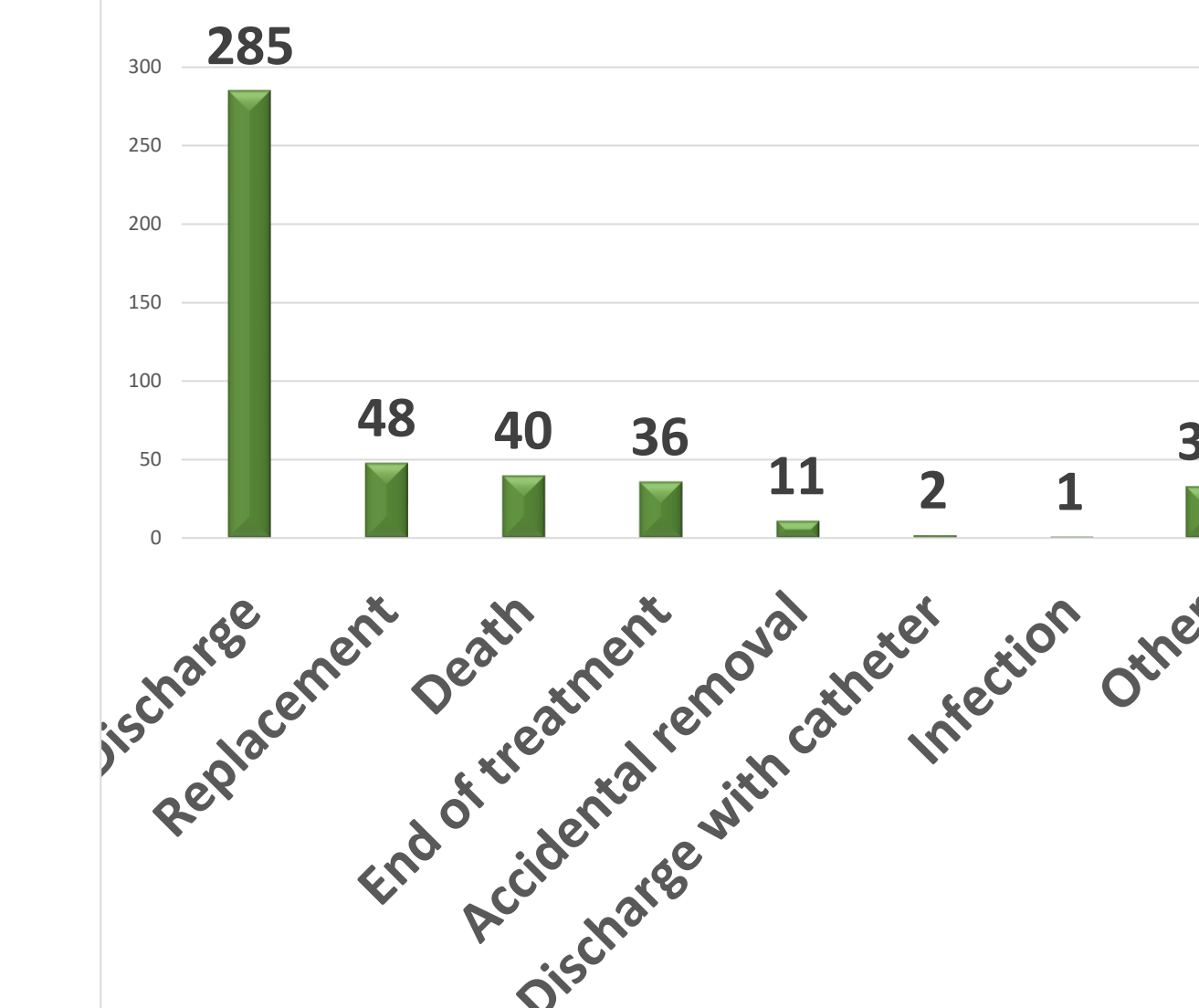


With an average stay of 8.7 days, and finally, 2.6% remained installed for more than 30 days.

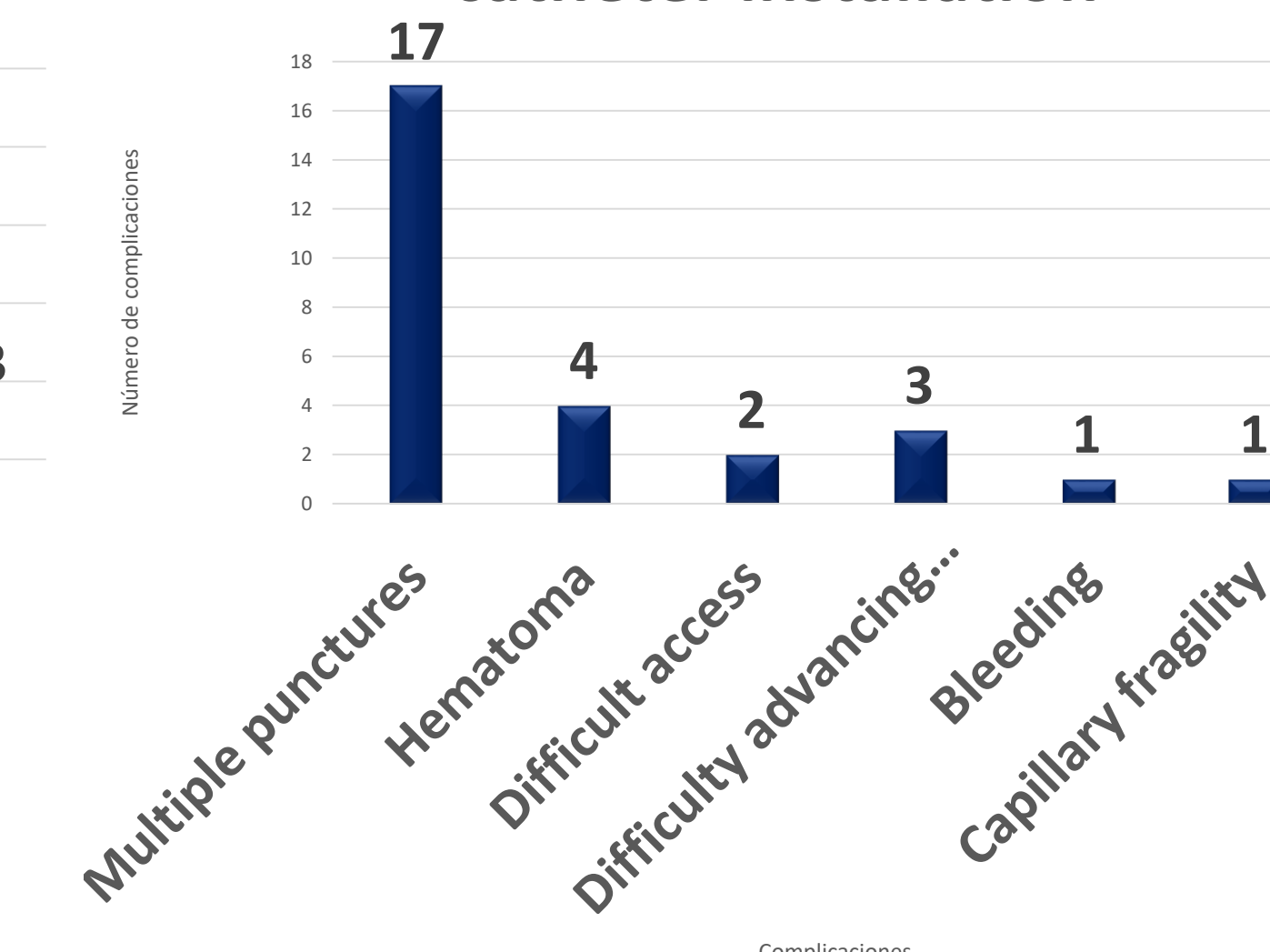
Number of attempts to insert a midline catheter



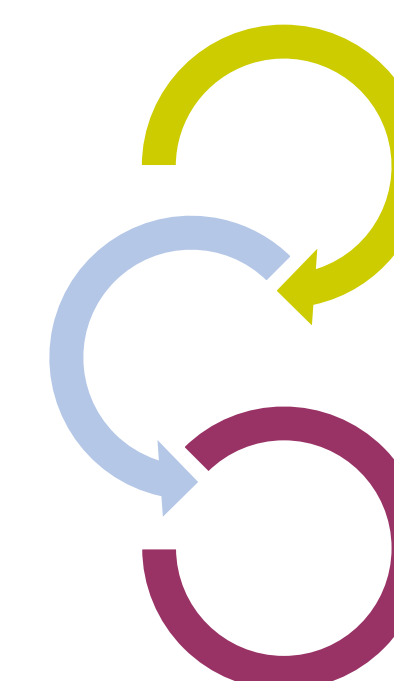
Reason for Withdrawal



Complications during LM catheter installation



Conclusions:



The Nursing Staff's experience in installing LM catheters concludes that it is a safe and effective alternative for peripheral venous cannulation in patients, with a higher success rate on the first attempt, allowing the preservation of the venous asset, reducing the frequency of mechanical and infectious complications.

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