Central Access Screening

Hunter Waldau RN, Allison Ziober RN/COA, Alexis Mosher RN, Meaghann Riffle RN, Beth Ann Meluni RN, Luke Bottar RN, Shelby Meade RN.
Upstate Medical University Hospital, Nurse Residency Program

UPSTATE
Nurse Residency Program

Problem / Significance

- Lack of policy driven form to streamline assessment of clinical necessity for central access
- Central access reduces risk for infection, risk of vascular damage from vesicants and vasopressors, and increases ease of drug administration for the critically ill patient or those with poor vascular access

Clinical Question

1. Medical history related to clotting disorders? Recent surgery or trauma?
2. Does patient have poor vascular access?
3. Is the patient on any vasoactive medications or medications effecting coagulations?
4. Does this patient require frequent blood draws?
5. Any long-term medication administration? (Chemo, TPN, vasoactive, or any caustic medications)

Methods

A literature search was conducted using the databases NCBI, Medline, Elsevier, PubMed. Keywords used in our search were central line, infiltration, IV infiltration, IV extravasation, and vasopressors.

Discussion

In adult inpatient units the need for a screening for indications of central access vs. PIV access. This can lead to the decrease in infection, infiltration, extravasation, IV/IV medication complications, caustic medications, and long-term use of medications. With this assessment/ screening the team would have 3 hours to assess patient's need for central access.

Table 4. Peripherally Inserted Central Catheter (PICC) Indications

- Patient requires intravenous access for longer than 14 days. For proposed treatment of six or more days ultrasound-guided or mid-line catheter preferred over PICC.
- Clinically stable patient requiring intravenous therapy with peripherally incompatible solutions. Hemodynamically unstable patients where cardiac monitoring or use of vasopressors is necessary in cases less than 14 days and more than 15 days. (Central Venous Catheter favored over PICC).
- For use with continuous infusions of vesicant, parental nutrition, chemically irritating or non-peripherally compatible solutions for any duration. For cyclic chemotherapy with active cancer where treatment is more than three months.
- Use with patients receiving frequent phlebotomy of every eight hours or more often with duration of six days or more.
- For burn patients where early implementation of PICC decreases risk of bacteremia
- For use in patients with palliative treatment, actively dying or in hospice requiring intravenous solutions.
- For use in chronic or lifelong access populations (sickle cell, short gut, cystic fibrosis) or those hospitalized more frequently than six times per year. (Tunneled catheter preferred

(Moreau, Chopra, 2016)

Conclusion

In conclusion, the need for central access screening is beneficial for patient's care, safe access for medications, but also for patient safety, decreasing risks for necessary medications to life saving measures.

Implications for Practice

Implementing a standardized screening process will not only prevent complications from peripheral IV access, such as infiltration in high-risk patients, but also promote safer and more effective clinical practices. Shouldn't every central line access decision follow a streamlined policy-driven assessment to ensure patient safety and optimize outcomes?

References

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