Abstract # *06*

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Cutting Edge Technology: Central Venous Line Securement Device

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Introduction

This poster represents our search to find a securement device that would not only hold the catheter securely, but would provide stability during the cleaning process, prevent migration of the catheter inward and or outward, and prevent the risk of sharps injury. Central catheter securement has long been a challenge for vascular access, along with the potential for needlestick injury with suturing. These factors can lead to increased patient mortality rates secondary to blood stream infections and result in additional cost and resources for facilities when treatment regimens are needed for patients with infections or for clinician exposure to needle sticks. According to the CDC a good stabilization device not only holds the device, it helps to decrease the risk for phlebitis, migration and dislodgement which may be beneficial in preventing CRBSIs

Objectives

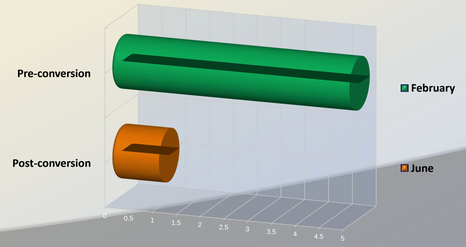
- Eliminate potential for suturing/needle sticks
- Increase cleaning access at the insertion site
- One stabilization device for life of the catheter
- Prevent catheter migration and pistoning
- Increase patient satisfaction and safety
- Decrease CRBSI potential

Methods

- Research was conducted to find a more technologically advanced securement device to use with central catheter placement.
- A device was chosen, and a clinical trial was established to determine if a positive outcome could be achieved.
- Patients were chosen at random and two PICC nurses inserted and followed the patients until device removal.
- Data included: securement success, device malfunctions, time of insertion to time of removal and patient/staff satisfaction.
- Data was recorded on the device at the time of insertion, during the device use and when the device was removed.

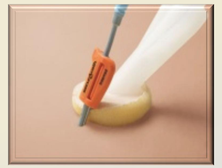
Results

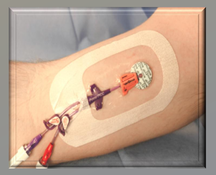
- Conversion from suture and/or topical securement of central venous catheters to a subcutaneous securement device.
- Securement of the PICC catheter without pistoning or migration occurring.
- Enhanced cleansing of insertion site without catheter movement.
- Time and product cost savings due to additional adhesive products not needed to maintain device on the patient's skin for the life of the catheter.
- ICU physician began use of the device for central line placement as a result of the positive outcome from the trial.
- Decrease in the number of replacements needed for catheter migration or accidental removal.



Conclusion

The results of the trial were encouraging. The device proved to hold the catheter more securely, allowed for easier access to do a 360 degree cleaning at the site, decreased catheter migration and dislodgement, and increased patient and staff satisfaction.





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