

Beyond the Dressing for PICCs - Strategy for Cost-Savings and Work Efficiency

Jocelyn Hill

MN, RN, OCN, CVAA(c), VA-BC™

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World Congress Vascular Access

Disclosure

- Product discussion with no support or influence from Interrad Medical/Securacath.
- Employed by Providence Health Care, **St. Paul's Hospital – Vancouver, BC Canada**
 - Nurse Educator for IV Therapy, Vascular Access and Home Infusion Programs
- President – The Canadian Vascular Association for Vascular Access (**CVAA**)
- Co-Chair – The DTeam for the Scientific Meeting for Association for Vascular Access (**AVA**)
- Board of Directors – Vascular Access Certification Corporation (**VACC**)
- Consultant & Speaker Bureau for:
 - Carefusion, Angiodynamics, Hoffman La-Roche

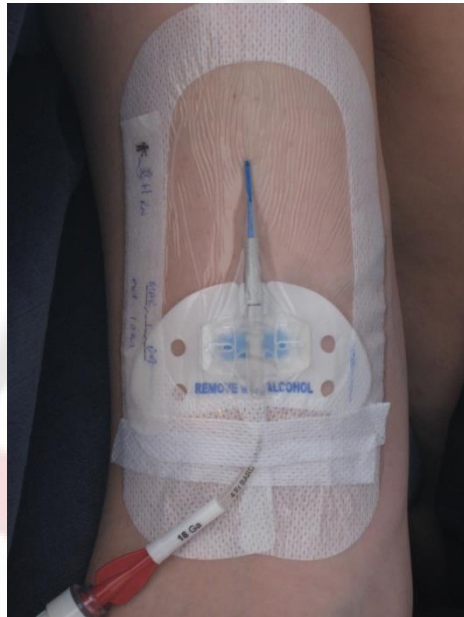
Objectives

- Describe the experience of a 600-bed hospital challenged with PICC malpositions.
- Discuss challenges with PICC securement.
- Discuss the evaluation process for a securement device.
- Describe the outcomes of the evaluation and goals for future use of a new securement device.

Background

- PICC Team – bedside insertions
- ~1200 PICC insertions / year
- Care and maintenance (dressing changes) performed by **general unit staff**, not IV Team staff
- PICC dressing: Use of adhesive securement device plus transparent adhesive dressing.

- PICC with adhesive securement, transparent dressing.



Problems

- Malposition occurs *after* the dressing is removed during the dressing change procedure.
- Dressing change procedure “taking too long” = staff anxious, afraid to do dressing change.
 - Time for procedure: ~40-45 minutes

“What’s a cm here and there?”

“Oops”

- PICC with dressing off, for cleaning



Beyond the Dressing

With adhesive securement and dressing only:

- Issues:
 - Pistoning = mechanical phlebitis
- Malposition rate: 15-20%
 - During dressing change procedure: 88%
 - Accidental pull (attached to pump, wheelchair, etc.): 12%

Impact

~ 200 PICCs affected:

- Cost implication
- Resource drain
- Workload inefficiencies
- Unnecessary procedures – unscheduled dressing changes; malposition – confirmation by CXR, removable and replacement due to malposition

Hard Costs

Issue	Estimated \$\$\$ (Cdn)
Unscheduled dressing changes <ul style="list-style-type: none">• estimates for dressing supplies• estimates for time for clinician	\$75 Total time = 1 hour
Repeat CXR	\$150
Exchange of malpositioned PICC <ul style="list-style-type: none">• estimates for supplies• estimates for time for clinician	\$275 Total time = 2 hours
Removal and replacement of malpositioned PICC <ul style="list-style-type: none">• estimates for supplies• estimates for time for clinician	\$275 Total time = 2 hours

Soft Costs

- Workload inefficiencies
- Patient satisfaction
 - Increased length of stay
- Delay in treatment
- Suboptimal outcomes, therapeutic levels not achieved

Essentially can become “hard cost” issues

Contributing Factors

- Untrained staff (~2000 nurses)
 - Lack of confidence
 - “The last time I did a PICC dressing was 2 months ago”
- Unstable patients; combative, restless
- Limited space in rooms for aseptic dressing change procedure

Contributing Factors

- Cleaning PICC site:
 - Manipulation of PICC catheter at site when using swab pads or swab sticks for cleaning skin (gentle friction)
 - Allowing to dry adequately: risk for malposition during wait time

Options

- Sutures?
 - Not since 1995
- Steristrips?
 - Not since 2001
- Adhesive dressing - new stronger adhesives work with dressing on skin (change weekly)
- Anchoring device – no change required for life of PICC

Thinking “Outside the Box”

- Staff feedback – not comfortable with “just dressing” (even if claim with securement)
- Anchoring device “novel”
 - Easy to educate for dressing change procedure
 - Easy for staff to learn; no risk of PICC dislodgement at all
 - Patients surveyed: specific patient population (cystic fibrosis)



Challenges

- Focused education for PICC Team for proper insertion of anchoring device with PICC insertion
- Education for general unit staff to not remove device.
- Patients for discharge or transfer out of hospital – other hospitals, communities not aware or using device.

Success

Total 60 devices used for pilot evaluation

- 0 – malpositions with device use
- 2 – accidental removal (delirious patients)
 - ****No skin tearing, damage**
- Increased staff satisfaction
 - Increased confidence with dressing change
 - Decreased anxiety, fear with dressing change
 - Increased efficiencies, workload management



Unexpected Outcome

- Patients with skin integrity issues
 - Adhesive component of dressing
 - Cleaning solution: “allow to dry completely”
 - Malposition risk
- Anchoring device use successful – without adhesive dressing allowing skin to heal
 - No clear transparent dressing
 - Securement provided

Moving Forward

- Clinicians on general units demanding device on PICCs
- Cost implication – ongoing work on business plan to implement throughout hospitals (~1200 PICCs / year)
- Using device on more patients:
 - High-risk for malposition (delirium, alcohol withdrawal, drug use)
 - Other: on request by patient, clinical team

Summary

- Challenges with PICC securement
- Moving away from adhesive securement device
- Goal to maintain skin integrity

Conclusion

Use of new securement device not only made additional PICC insertions possible, but surveys of staff revealed that PICC dressing change procedures became:

- less stressful (for staff and patient)
- less time-consuming
- generally easier to do.

Conclusion

- Change equated to:
 - increased work efficiencies
 - overall satisfaction with the product – clinician and patients (Yes we surveyed patients for pain, comfort and overall satisfaction)

Full implementation of this new securement device is in progress.

Thank you

Jocelyn Grecia Hill
jocelyngrecia@hotmail.com

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