Prevention of Occipital Pressure Ulcers In Neonates

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August 1, 2012
Disclosure Information

• I have no conflict of interest to disclose
Learning Objectives

• At the end of this session the learner will be able to:
  – Identify risks involved in the development of occipital pressure ulcers in neonates
  – Identify at least two different interventions that can be used for the prevention of occipital pressure ulcers in neonates
Acknowledgments

• Skin Wound Assessment- Treatment Team (SWA-T)
• Pediatric Intensive Care Unit Nurses
• Children’s Miracle Network: for awarding a grant to the SWA-T team for this project to reduce pressure ulcers in the pediatric population
Background Information

- Immobilized acutely ill children and neonates are at risk for developing pressure ulcers (PU).
- Most evidenced based research in PU development in the pediatric population has been based on adult studies.
- Pediatric open heart surgery patients are at a greater risk due to ECMO and low diastolic BP.
- The most common area for neonates to develop PUs is on the occipital area.
Problem Statement

In a 650 bed University Hospital, eight hospital acquired pressure ulcers (HAPU) were developed in neonates on ECMO in 2009.
Purpose of The Project

To reduce HAPUs in neonates on ECMO
Previous Practice

• The use of an expensive gel mattress
• These patients were restricted from repositioning and thus repositioning was sporadic at best
• We needed:
  – Pressure redistribution and not padding
  – something radiolucent for daily x-rays
  – Something which allowed minimal repositioning
  – Appropriate documentation
Interventions

A multidisciplinary team (led by an NP) which consisted of a Plastic Surgeon, Registered Nurses, Physical Therapist, and a Dietician met weekly to develop plans and interventions specific for patient needs.
Interventions (continue)

- Implementation of a risk assessment tool in neonatal population (Braden Q or NSRAS)
Interventions (continue)

• Pressure redistribution surfaces and silicone foam dressings were stocked on the pediatric peri-operative carts and in the Pediatric Intensive Care Units (PICU) for immediate use in immobilized patients.
Interventions (continued)

A nurse champion for pressure ulcer prevention was selected for the PICU who:

- Educated nurses and physicians
- Promoted the interventions
- Monitored the patients for pressure ulcer development
- Collected data for the quarterly pressure ulcer surveys
Results

- Twenty three months after the intervention there have been no hospital acquired pressure ulcers in the PICU despite the high risk nature of this patient population.
Summary

• The use of pressure redistribution surfaces and silicone foam padding provided significant improvement in the prevention of occipital PU in neonates on ECMO

• Evidenced-based clinical practice guidelines for the prevention of pressure ulcers in the pediatric population are needed
Questions?

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