

An Oral Care Protocol to Decrease Hospital Acquired Pneumonia (HAP) in SCI

Anna Cunningham BSN, RN and Kathy Dunn MS, RN, CRRN, CNS-BC
SCI Center, VA San Diego Healthcare System

Introduction

In the Spinal Cord Injury (SCI) inpatient population, will implementing a new oral care protocol, versus current practice, decrease the incidence of non-ventilator Hospital Acquired Pneumonia (NV-HAP)?



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Implementation

Summary of Evidence

- The leading cause of death of people with a SCI is respiratory disease (DeVivo et al, 2013).
- "Identify modifiable risk factors for HAP, and develop programs to reduce the risk of pneumonia through changing these risk factors." (CDC, 2003)
- Pneumonia is an indicator of future mortality in SCI patients.
- Guidelines for management of HAP recommend the use of oral antiseptics (American Thoracic Society, 2005).
- Periodontal organisms play a significant role in incidence of HAP.
- Thorough oral hygiene decreases bacterial retention and growth thereby resulting in reductions in bacterial colonization.
- The use of chlorhexidine in oral care is a protective factor against pneumonia.

Step 1

Baseline Data Collection & Analysis

- Two year retrospective analysis of discharged SCI patients using ICD 9 codes for pneumonia, not identified upon admission.
- 6 Identified cases of NV-HAP in past 2 years.

Step 2

Nurse Driven Oral Care Protocol Established

- Literature review.
- Identified high risk patient characteristics.
- Develop evidence based protocol.
- Meet with ICU nurse, Sage Representative, and I.C. nurse to learn best practices & products.
- Correspondence with supply department to ensure supply availability.

Step 3

Disseminate Knowledge

- In-Services, posters, & 1:1 Teaching.

Step 4

Documentation

- High risk patients identified.
- Oral care order in electronic Kardex by nursing.
- Documentation of oral care (shift progress note).

Step 5

Audits & Policy Approval

- Internal auditing form developed.
- Weekly audits conducted.
- Unit-based oral care policy approved.

Oral Care Protocol

- Oral Care Kit hangs above patient bed & contains 6 pre-perforated brush packets.
- Obtain chlorhexidine solution and 1 suction toothbrush packet from kit.
- Saturate toothbrush with chlorhexidine, brush patient's teeth, gums, cheeks, and tongue.
- Apply moisturizer to entire oral mucosa.
- Repeat oral care Q4 hours.

Conclusion

The cost of NV-HAP has been estimated to be between \$40K- \$150K. Since the August 2013 SCI HAP Protocol implementation, no incidence has been detected. Unit goals are to continue audits of implementation, documentation, and incidence of NVHAP.

References

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