A QI Project To Improve Patient Outcomes:

PREVENTING TRACHEOTOMY RELATED SKIN BREAKDOWN

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BACKGROUND

Within a one year period there was an increased incidence of tracheotomy related skin breakdown while using only thin hydrocolloid under tracheotomies in an ICU step down unit. The ENT service stated a preference for use of thin hydrocolloid only to decrease manipulation of the tracheotomy. A literature search revealed little existing research comparing the effectiveness of split gauze versus thin hydrocolloid. The goal of this project was to prevent tracheotomy skin breakdown by improving current practice.

PURPOSE

Under current practice, thin hydrocolloid is placed under a tracheotomy. The hypothesis was that split gauze worked better at preventing breakdown than the thin hydrocolloid. The goal was to collect data to measure the incidence of breakdown depending on which type of intervention was utilized.

METHODS

A quantitative descriptive randomized study involving a total of 45 patients comparing the use of thin hydrocolloid versus split gauze under tracheotomies. If the patient’s tracheotomy was placed by ENT, nurses used thin hydrocolloid underneath and if general surgery placed the tracheotomy then the nurse used the split gauze underneath. The following information was collected for all patients with tracheotomies: patient name, date the tracheotomy was placed and who placed it. Signs were placed at the bedside denoting which dressing to use for individual patient. Tracheotomy skin checks were implemented weekly and any tracheotomy breakdown that occurred was noted. All data was stored in a secure locked office.

RESULTS

Out of the 45 patients that were evaluated during the study, thin hydrocolloid was used on 24 patients and split gauze on 21 patients. From this study, results noted that the incidence of breakdown was much higher when using Thin Hydrocolloid dressing (32%) than using Gauze (10%). Further analysis looked at nutritional status by looking at the patient’s preablum level. Investigators went back and recorded each patient’s preablum level closest to admission and if they acquired breakdown then the preablum level closest to their date of breakdown. There was no significant difference in preablum levels with those that developed tracheotomy related skin breakdown compared to those who did not develop breakdown.

CONCLUSIONS

The results support the use of split gauze under tracheotomies as more effective in preventing skin breakdown than the thin hydrocolloid. Limitations of the quality study were: physician preference, original tracheotomy ties not being changed within 7 days and tracking length of patient stay in relation to breakdown.

REFERENCES


DATA COLLECTION FORM

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