



Service Priorities and Programmes
Electronic Presentations

Convention ID: 316

Submitting author: Mr Y H KWIT

Post title: Registered Nurse, United Christian Hospital, KEC

Improvement Project for Changing Current Practice on Endotracheal Tube Fixation in an Adult Intensive Care Unit

Kwit YH, Chung WY, Ng WP, Law KI

Intensive Care Unit, United Christian Hospital

Keywords:

Endotracheal tube fixation

Intensive care unit

Introduction

Endotracheal tube (ETT) is used for establishing a patent airway to ensure gaseous exchange. ETT dislodgement may put patients at a life-threatening situation. Hence, a good practice for securing ETT is of the utmost importance. From the survey of Hospital Authority's ten intensive care units (ICUs) in 2011, five ICUs have used cotton band plus adhesive tape for ETT fixation and the rest adhesive tape only. The survey showed that ETT dislodgement was no significant relationship between the two securing methods. However, some cases using cotton band plus adhesive tape were reported to develop ulcer at the back of neck because of the friction generated between cotton band and back of neck. Therefore, in our ICU, a project was developed to introduce a good practice on using tape method for securing ETT to prevent back of neck ulcer formation.

Objectives

1. To choose a good quality adhesive tape for securing ETT 2. To increase health care team (HCT) members' confidence to support the change of current practice in our unit

Methodology

Established a workgroup in November 2011 to:

1. Perform literature review for the best method to test the adhesion from eight brands of tape, naming from A to H
2. Determine the most cost-effective brand of tape
3. Site visit other ICUs for learning and sharing their ETT securing methods
4. Develop an ETT securing procedure guide for consistency in practice
5. Provide doctors and nurses the briefing sessions which stressed on the benefits to patients with ETT and procedure guide which was user-friendly
6. Arrange demonstration/return-demonstration sessions to nurses for increasing their confidence and competence to perform the new practice
7. Conduct a pilot study to test the security of new ETT securing methods and to allow nurses to perform new practice under supervision from May to September 2012

Result

By using weight bearing test, brand-A tape was chosen because of good adhesion and the price which was the lowest. Three new ETT securing methods were chosen including: single-tape method for calm patients; double-tape method for irritable

patients; and duoderm-plus-tape method for skin allergic patients. During pilot study, no ETT dislodgement was reported and 100% nurses had chances to practice on the new securing methods. This good practice has been adopted in our ICU after the pilot study. It was a successful improvement project because it allow staff to adopt change to good practice gradually and systematically.