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A CLINICAL AUDIT ON IMMEDIATE POSTOPERATIVE DOCUMENTATION OF TRACHEOSTOMIZED PATIENTS

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ABSTRACT **Background:** Accurate postoperative documentation for tracheostomized patients is crucial for patient safety. Despite departmental protocols, inconsistencies persist, leading to potential risks. **Objective:** To evaluate the completeness of immediate postoperative documentation in tracheostomized patients and implement improvements through a revised Standard Operating Procedure (SOP). **Methods:** A retrospective audit of 40 patient records assessed compliance with documentation standards. Identified gaps led to the implementation of a new SOP, with a follow-up audit conducted four months later. **Results:** Phase I Audit: Tracheostomy tube size sticker placed in 60% of cases. Site of tracheostomy placement and postoperative care instructions documented in 100% of cases. Phase II Audit: Compliance improved to 100% across all parameters. **Conclusion:** The audit identified gaps in documentation, particularly in tube size recording. Implementing a revised SOP significantly improved compliance, highlighting the value of structured documentation protocols in patient safety.

KEYWORDS : Clinical audit, tracheostomy, postoperative documentation, quality improvement, patient safety

INTRODUCTION

Tracheostomy is a critical procedure performed for airway management in patients with respiratory compromise. Proper postoperative care and meticulous documentation are essential to ensure patient safety, prevent complications, and facilitate continuity of care. Despite the existence of standardized protocols, inconsistencies in documentation remain a concern, potentially leading to miscommunication among healthcare providers and adverse patient outcomes.

Inadequate documentation of tracheostomy care has been associated with an increased risk of airway obstruction, infection, and accidental decannulation, emphasizing the need for structured recording practices (Raimonde et al., 2023). Recognizing these risks, this clinical audit aimed to evaluate current postoperative documentation practices for tracheostomized patients and implement structured improvements to enhance compliance and patient safety.

METHODS

Study Design (Figure 1)

A two-phase retrospective audit was conducted in the Department of ENT:

- **Phase I Audit:** 40 medical records were reviewed over four months to assess compliance with existing documentation protocols.
- **Root Cause Analysis:** Identified key barriers to compliance, leading to the formulation of a new SOP.
- **Phase II Audit:** 40 additional medical records were reviewed four months post-SOP implementation to evaluate improvements.

Data Collection

A standardized data collection tool was used to assess:

- Documentation of tracheostomy tube type and size with a placement sticker. The sticker is provided with the Portex tracheostomy tube we use in our institute.(Figure 2)
- Documentation of the tracheostomy site and anatomical landmarks.
- Documentation of postoperative care instructions, including suctioning, humidification, and cuff management.

Figure 1 *Methodology*

SOP (Standard Operating Procedure) Implementation (Figure 3)

The revised SOP mandated:

- Immediate documentation of tracheostomy tube type and size with a placement sticker.

- Clear recording of tracheostomy site, including anatomical specifications.
- Comprehensive documentation of postoperative care plans.
- Staff training on the importance of documentation.
- Random audits every six months for sustained compliance.

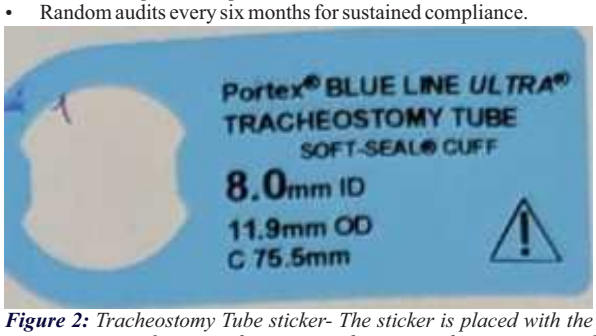

Figure 2: *Tracheostomy Tube sticker- The sticker is placed with the operative notes thus providing easy and accurate documentation of type and size of the tracheostomy tube place.*

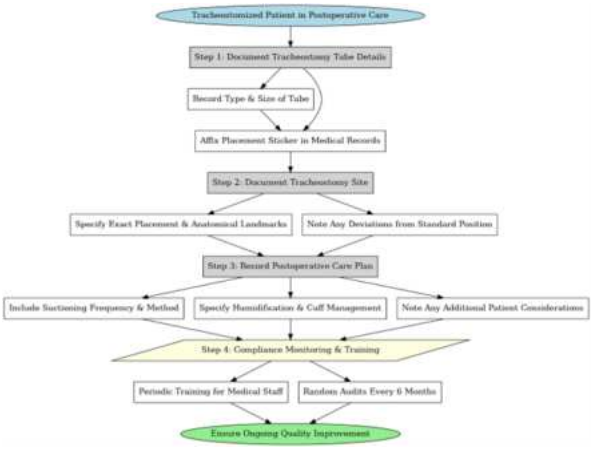

Figure 3: *Revised Department Standard Operating Procedure (SOP)*

RESULTS

The primary gap identified in Phase I was the inconsistent documentation of tracheostomy tube size, which was present in only 60% of cases. (Figure 3) In Phase II, after implementing the new SOP, compliance improved to 100% across all assessed parameters.

Figure 4: *Results*

DISCUSSION

The findings highlight the need for structured documentation practices. Factors contributing to the documentation gap in Phase I included a lack of emphasis on the importance of tube size recording and the absence of a standardized process. However, compliance with site documentation and postoperative care was high due to well-established practices. Tracheostomy care protocols emphasize that inadequate documentation can contribute to post-procedure complications such as airway obstruction, infection, and accidental decannulation (Raimonde et al., 2023; Ng et al., 2024).

Following the implementation of a new **Departmental SOP**, documentation compliance improved significantly:

1. Accurate documentation of tracheostomy tube type and size, including placement sticker, became mandatory, ensuring proper tube changes and reducing the risk of complications (Ng et al., 2024).
2. Mandatory documentation of the site of tracheostomy placement was reinforced.
3. Comprehensive documentation of postoperative care, including suctioning frequency, humidification, and cuff management, is critical for reducing airway obstruction and infection risks (Ernstmeyer & Christman, 2021; Raimonde et al., 2023).

The Phase II audit demonstrated the effectiveness of these measures, achieving 100% compliance in all categories. This reinforces the importance of structured documentation protocols in improving patient safety.

CONCLUSION

This audit identified and addressed key gaps in immediate postoperative documentation of tracheostomized patients. The implementation of a revised SOP resulted in significant improvements, as evidenced by the Phase II audit results. Future periodic audits will ensure sustained compliance and ongoing quality improvement.

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