

Piece of Surgical Blade as Foreign Body Trachea: Highly Uncommon Complication of Tracheostomy

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1. Introduction

Tracheostomy is a commonly performed procedure and is intended to provide long-term surgical airway for patients who are dependent on mechanical ventilatory support or require an alternative airway conduit.¹ Tracheostomy has been associated with serious complications, including tracheal stenosis, increased bacterial colonization, and fatal haemorrhage. This case report is about the piece of surgical blade occurring as foreign body in trachea via stoma made in trachea and its removal by bronchoscope.

2. Case report

This case report is that of a 64-year-old male who presented with hypoxic respiratory failure requiring intubation and mechanical ventilation. He underwent tracheostomy in the operating room for failure to wean from the ventilator. During tracheostomy while removing cartilaginous ring, the surgical blade broke down and part of it went in to trachea lodging as foreign body which was removed by bronchoscope.

3. Case Description

Our patient is a 64-year-old male who was admitted to the intensive care unit for ventilator support. When patient came to emergency, he was hypoxic and was intubated and put on ventilator. On general examination, patient was conscious and following commands. Subsequent to his admission to ICU, after attaining parameters for spontaneous breathing, extubation was tried. He failed extubation and was reintubated within an hour. Multiple attempts were made to wean the patient from ventilator but he failed the trials of extubation. The ICU team after getting consent from the patient and family opted to proceed with tracheostomy.

The patient was taken to the operation theatre by ENT team and open tracheostomy was performed. Vertical incision was given between cricoid and sternal angle and subcutaneous tissue and strap muscles were separated by blunt dissection. Thyroid was lifted up and pretacheal fascia was separated. While giving nick over second cartilaginous ring for creating a stoma in trachea, the surgical blade broke in to 2 pieces and one piece went into trachea from the stoma. Emergency bronchoscopy was performed and part of surgical blade was recovered from carina. 8mm tracheostomy tube with cuff was inserted through stoma secured in position after inflation of cuff.

Oxygen saturation was maintained by the patient and patient was shifted back to ICU.



Figure 1: xray chest of patient



Figure 2: Piece of blade

4. Discussion

Tracheostomy is the standard procedure for management of long term ventilator dependent patients. It has various advantages over endotracheal intubation including, lower airway resistance, smaller dead space, more patient comfort and efficient suctioning.² Our case displayed very rare iatrogenic complication of tracheostomy. There occurs calcification of tracheal cartilages in old age, making them hard. So it is better to use scissor to cut and remove tracheal ring.

References

- [1] Barquist et al. Journal of Trauma and Acute Care Surgery. 2006 :60:91-7.
- [2] Solh A, Jaafar A. A comparative study of the complications of surgical tracheostomy in morbidly obese critically ill patients. Critical Care. 2007:11.