

재활보조기구

게시일시 및 장소 : 10 월 19 일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소 : 10 월 19 일(토) 11:00-11:30 Room G(3F)

P 3-123

Persistent airway bleeding in stroke patient caused by tracheal opening retainer: a case report

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Introduction

A tracheal retainer is an airway management tool use on tracheostomies. The retainer is fixed with an anterior tracheal flange, there is little intraluminal component. The benefits of a tracheal retainer include less frequent exchanges and the absence of a cord for fixation. The application of a tracheal retainer allows a safe decannulation of patients with persisting respiratory failure. We incidentally found a case of persistent airway bleeding caused by tracheal retainer, which was confirmed by consultation with otorhinolaryngology department and checked by x-ray. Bloody discharge was subsided after reinstalling tracheostomy tube instead of tracheal retainer.

Case reports

We describe the case of 82-year-old woman with quadriplegia caused by traumatic intracranial hemorrhage and subarachnoid hemorrhage. She was in tracheostomy state, and she had installed tracheostomy tube. After a series of breathing rehabilitation after few weeks, her pulmonary function test results were improved enough to change her tracheostomy tube to retainer. We proceeded to change her tracheostomy tube to retainer, and monitored any side effects such as oxygen desaturation, increased discharge or sputum, dyspnea, etc. Her oxygen saturation was secure, but persistent bloody discharge was seen through her tracheostomy retainer. Epinephrine nebulizer was used to control the bleeding after the consultation to otorhinolaryngology department, but symptom didn't disappear. After 5 days, Neck and chest computed tomography was taken to find the bleeding focus. We found that she had a tracheal deformity (abrupt angulation) and there was tracheal stenosis just above her tracheostomy stoma site. We concluded that inner flange of tracheal retainer can irritate her posterior tracheal wall. We immediately reinstalled tracheostomy tube to her tracheostomy site, and bloody discharge was subsided after 2 days.

Discussion

Bloody discharge can be seen in many other conditions, and she had an underlying recurrent pneumonia. We performed airway evaluation and chest X-ray follow up while weaning of tracheostomy tube, but pneumonia, too, can aggravate the symptom or make

airway fragile to bleed. Bleeding focus can not be found by X-ray and laryngoscopy, and persistent bleeding can make patient's condition worse.

Conclusion

We report a case of persistent bloody discharge caused by inserted tracheal opening retainer. We should check neck X-ray before inserting a tracheal retainer, and inner flange's length should be 2-3mm longer than distance from skin to anterior wall of airway. Neck X-ray can't diagnose tracheal deformity or stenosis, and laryngoscopy can only evaluate inner airway near tracheostomy tube site. Checking neck CT might be helpful for patients who has a past history of intubation, or is planned to have tracheal retainer for a long time.