In response to the spread of COVID-19, use of tracheal tubes is increasingly required in clinical settings. Key points for safe handling and use of tracheal tubes in past issues of PMDA Medical Information have been extracted and organized as a reminder.

(Case 1) When changing the body position of a patient with a ventilator without holding the tracheostomy tube and breathing circuit, the tracheostomy tube was dislodged.

1. Precautions when changing body position

- When changing the body position while using a ventilator, the tracheostomy tube should be held in place.

• Be careful of dislodgement of the tubes inserted in patients when changing the body position.
(Case 2) A SpO2 lower limit alarm in the monitor went off. Medical staff checked the patient and found that the endotracheal tube was mistakenly intubated into the esophagus.

2 Precautions in case the tube is coming out

- When you find that the tracheal or endotracheal tube is coming out, do not try to re-intubate by pushing in the tube immediately.

If you find that the tracheal tube is coming out, notify a physician immediately. When the tube is replaced, make sure of its proper insertion in the trachea by listening to the patient’s breathing sounds or other means.

(Case 3) The ventilator’s alarm went off. Medical staff found that the tracheal tube was partially dislodged.

3 Precautions while tubes are indwelled

- Check that there is a proper fixation of the tracheal or tracheostomy tube.

To prevent the dislodgement of a tracheostomy tube, regularly check the tightness of the fixing strap and see that the tube has not been pulled out by the weight of the circuit.
(Case 4) • The low minute ventilation alarm of the ventilator went off. Medical staff checked the patient and found that the cuff inflation line had been bitten off.

4. Precautions in tracheal tube fixation

• When fixing the tracheal tube, be careful to avoid the cuff inflation line coming into contact with the patient’s teeth.

If the patient bites off the cuff inflation line of the tracheal tube with his/her teeth, the cuff may deflate, leading to leakage of inspired gas.

Inspired gas leakage

Please confirm the guidelines and other materials on COVID-19 infection published by related academic societies!

Past related issues are as follows:
- PMDA Medical Safety Information No. 30 Precautions in Handling Endotracheal Tubes
- PMDA Medical Safety Information No. 35 Precautions in Handling Tracheostomy Tubes
- PMDA Medical Safety Information No. 36 Accidental Removal Tubes and Lines

About this information
* PMDA Medical Safety Information is issued by the Pharmaceuticals and Medical Devices Agency for the purpose of providing healthcare providers with clearer information from the perspective of promoting the safe use of pharmaceuticals and medical devices. The information presented here has been compiled, with the assistance of expert advice, from cases collected as Medical Accident Information Reports by the Japan Council for Quality Health Care, and collected as Adverse Drug Reaction and Malfunction Reports in accordance with the Law on Securing Quality, Efficacy and Safety of Pharmaceuticals and Medical Devices.
* We have tried to ensure the accuracy of this information at the time of its compilation but do not guarantee its accuracy in the future.
* This information is not intended to impose constraints on the discretion of healthcare professionals or to impose obligations and responsibility on them, but is provided as a support to promote the safe use of pharmaceuticals and medical devices by healthcare professionals.

Access to the most up to date safety information is available via the PMDA medi-navi.