

Medical Safety Information

Pharmaceuticals and Medical Devices Agency

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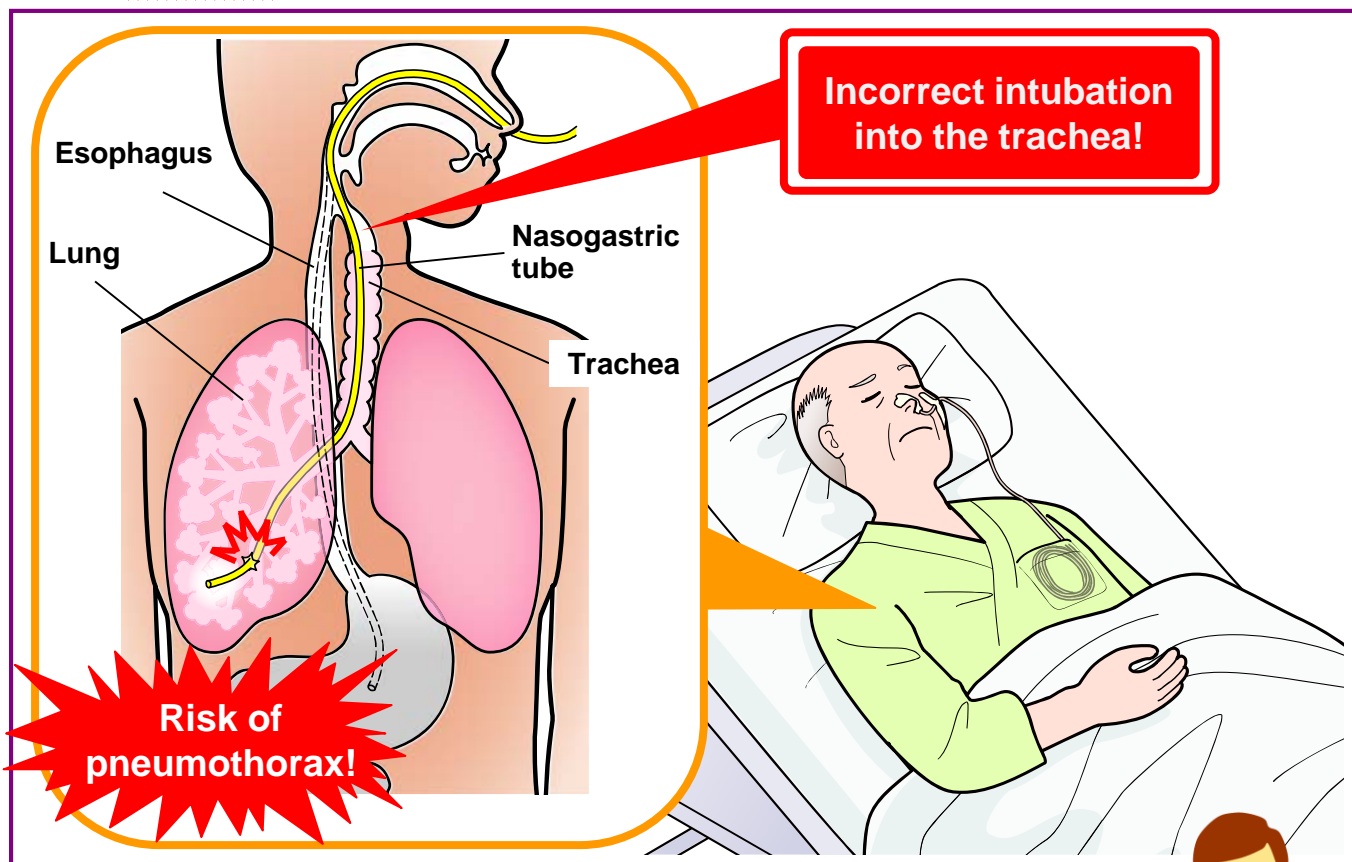
Precautions in Handling of Nasogastric Tubes

POINT Key points for safe use

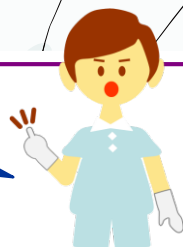
(Case 1) The position of the nasogastric tube was confirmed by a distinctive whooshing sound after intubation. The patient thereafter complained of dyspnoea, and a chest x-ray revealed that the tube had been inserted into the trachea.

1 Precautions when inserting nasogastric tubes

- After tube intubation, confirm the position of the tube by using multiple methods.



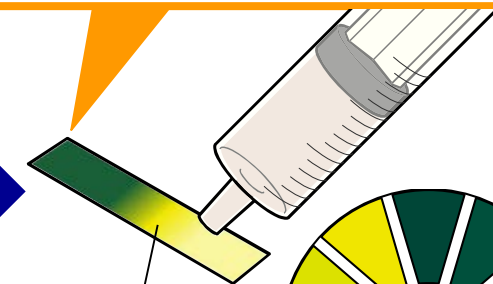
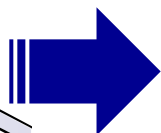
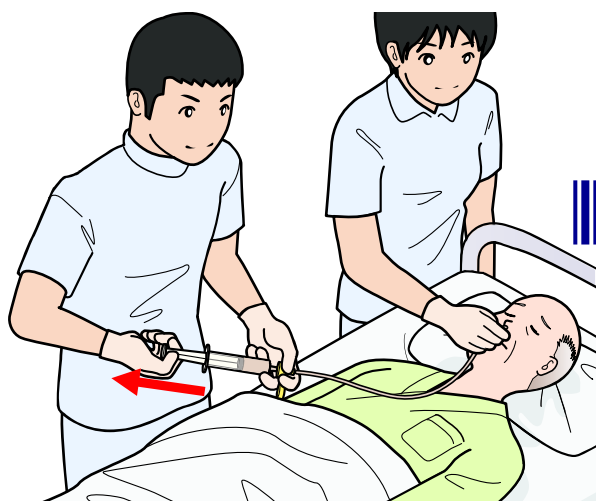
Confirmation of correct tube positioning may be difficult to determine by the whooshing sound alone.



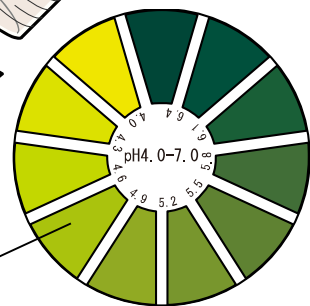
How to confirm the tube position

pH testing by aspiration

Confirm the pH value is **less than 5.5!**



pH test strip



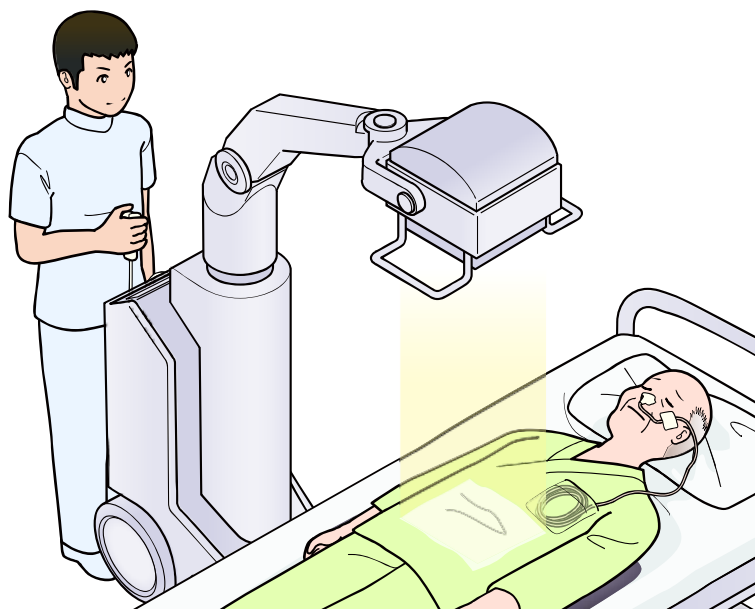
Standard pH scale

Note) Use a pH test strip to check pH, as litmus paper cannot measure the value of pH accurately.



Check aspirate with a pH test strip to make sure if it is stomach contents!

Chest X-Ray verification



Other methods

- CO₂ detector
- The whoosh test

etc.

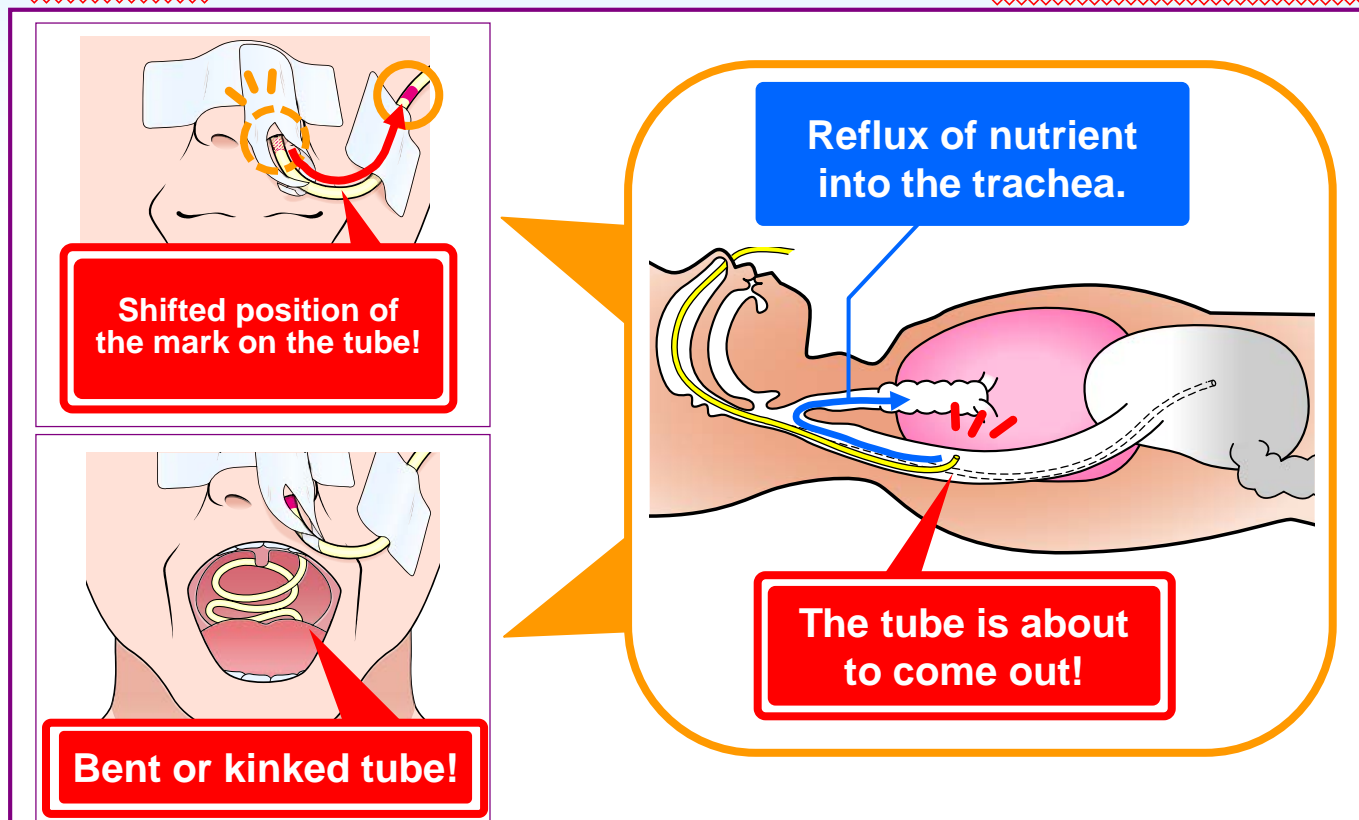
Use multiple methods to confirm whether the tube is correctly placed in the stomach after intubation.



(Case 2) The medical staff did not notice the tube was about to come out and injected the nutrient, which went into the trachea and caused pneumonia.

2 Precautions before injecting nutrient

- Ensure that the correct length of tube is placed in the stomach before injecting nutrient.



There may be a risk of reflux into the trachea if the nutrient is injected with incorrect tube location! Refer to the following safety information provided by the relevant specialist organizations, including the recommended methods to confirm the tube position before injecting nutrient.

* Patient Safety Information, Japanese Nursing Association

- Patient Safety Management Information "Preventing incorrect intubation of nasogastric tubes and injection of feeding formula into lungs via misplaced nasogastric tubes" (August 15, 2002)" (in Japanese language only) http://www.nurse.or.jp/nursing/practice/anzen/pdf/no_8.pdf
- Urgent Safety Information "Fatal accident caused by incorrect intubation of nasogastric tube (May 2, 2005)" (in Japanese language only) <http://www.nurse.or.jp/nursing/practice/anzen/pdf/050502.pdf>

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 Pharmaceutical Affairs Law.

* 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.