Risks in Handling of Gastrostomy Tubes

Key points for safe use

(Case) After replacing the gastrostomy tube and infusing nutrients, the patient started complaining about abdominal pain. His face turned pale, and blood pressure decreased. Peritonitis caused by an accidental dislodgement of the gastrostomy tube was suspected.

1. Precautions to prevent gastrostomy tube dislodgement

- Make sure to confirm proper position of the gastrostomy tubes in the stomach after replacement.

Several cases of peritonitis have been reported including fatal cases. The cases were accidentally infused nutrients into the peritoneal cavity due to dislodgment of the gastrostomy tubes.
An example of mechanism of gastrostomy tube dislodgement

Special monitoring is needed in patients with the following conditions due to fistula damage being likely to occur:
- Early post-gastrostomy → Incomplete fistula formation
- Malnutrition → Weak gastric wall

The pictures explain a case of fistula damage that occurred when a gastrostomy tube was removed. Damaged fistula may also occur when a gastrostomy tube is intubated.
Proper placement of gastrostomy tubes can be confirmed in several ways. Use an appropriate method to check the tube position based on the patient’s condition and/or recuperation environment.

- Trans nasal endoscopy/Per oral endoscopy
- Trans gastrostomomic endoscopy
- Radioscopy
- Pigment solution injection
- Others
  - Listen for air bubbles in the stomach
  - Check for stomach contents

(Reference)
PDN Lecture, Chapter 1. PEG
Non-profit organization PEG Doctors Network
http://www.peg.or.jp/lecture/index.html
During daily gastrostomy tube management, make sure the tube can pass freely without much resistance.

2 Precaution to prevent buried bumper syndrome

- Do not fasten the external and internal bumper too tightly.

Notice from organizations and groups that are related to this medical safety information is available at the Pharmaceuticals and Medical Devices Information website (in Japanese language only)
http://www.info.pmda.go.jp/anzen_gyoukai/keisyou/file/keishou03.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.

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