Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta
National Treasury Management Agency

An Ghníomhaireacht um Éilimh ar an Stát
State Claims Agency

Patient Safety Notification

Nasogastric Tube Misplacement

14

The number of incidents relating to misplacement of nasogastric (NG) tubes reported on NIMS in a 12-month period

Examples of incidents relating to nasogastric tube misplacement:

- NG tube misplaced in lung
- X-Ray not undertaken to check position
- Aspirate pH not checked
- Dislodged by accidental pulling of NG tube

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T +353 (0)1 238 4900 **E** stateclaims@ntma.ie **W** www.stateclaims.ie

The State Claims Agency has provided this advice with reasonable care and skill, based on analysis of the information available on NIMS.

Advice for enhancing management of NG tube placement

NG tubes are used to provide liquid nutrition, fluid and medication to patients who require short-term nutritional support. They can also be used for the removal of gastric contents. NG tube placement is common practice and many are placed daily without incident. There is, however, a risk that the tube can be placed in the lungs in error during insertion or dislodge from the stomach at a later stage. This has the potential for serious consequences for the service user. The Clinical Risk Unit in the State Claims Agency has noted a small number of incidents related to misplacement of NG tubes reported on NIMS and has prepared the following advice.

Risk Considerations

A number of risk factors have been identified, which may contribute to the misplacement of NG tubes or associated complications:

- Complex service user conditions e.g. stroke, significant burns
- Inadequate provision of information / inadequate consent process
- Position of NG tube not checked by measuring pH of gastric aspirate
- Imaging not performed to confirm NG tube position
- Imaging of NG tube placement misread
- Poor documentation i.e. NG tube tip position not recorded
- Lack of experience or appropriate supervision by health and social care professionals in placing NG tubes
- Lack of availability or awareness of guidelines / procedures for NG tube insertion

References:

1. *A Position Paper on Nasogastric Tube Safety "Time to put patient safety first"* (2020) Nasogastric Tube Special Interest Group of BAPEN
2. Good Practice Guideline (2016) – Safe Insertion of Nasogastric (NG) Feeding Tubes in Adults and Ongoing care- National Nurses Nutrition Group.
3. Thomson, M.A., Lawson, L., and Shaw, M. (2007) 'Best practice with regard to confirmation of nasogastric tube placement', Malnutrition Matters, Joint BAPEN and Nutrition Society Meeting.

Advice for Safe Practice

- Be familiar with the local **procedures / guidelines** for NG tube insertion
- Ensure local policies and procedures for **assessing NG tube** placement are in line with **best practice standards**
- Ensure the procedure is undertaken only by appropriately trained staff
- **Explain the risks** associated with insertion and placement to the service user
- **Secure NG tube** on the nostril with hypoallergenic tape and **check skin integrity** around nasal pressure areas regularly
- **Document** date, time, size, type, length and position of tube inserted, including the date the tube is due for a change / removal
- Follow local procedures to ensure correct placement of the NG tube, which may include:
  - Use of **automated pH readers** to reduce observer error in pH reading;
  - **Radiology for complex cases** to confirm position
- The **length of tube** at the nostril should be **marked, checked, and documented** at least daily
- **Aspirate NG tube** at least **once daily** when in use - **pH** of gastric aspirate must be **5.5 or below**
- If the **pH is above 5.5** ***do not use***; promptly **seek assistance and advice**
- Caution should be exercised when a service user is on **proton pump inhibitors** as they may alter the pH of the gastric aspirate

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