Nasogastric Tube (NGT) Insertion - Summary Clinical Guideline - UHDB

Reference No: CG-T/2014/210

Introduction and scope
This guideline provides a framework for assessing the need for, inserting, confirming position and managing NG feeding tubes across University Hospitals of Derby and Burton NHS Foundation Trust; it is to compliance with patient safety alert NPSA/2011/PSA002 10 March 2011.
This guideline does not apply to drainage NG tubes (eg. Ryles tubes).
For further information refer to the nasogastric tube insertion -full clinical guideline or local policy for enteral nutrition.

Competency to insert NG feeding tubes
NG feeding tubes must only be inserted by practitioners who have been trained, competency assessed and recorded on the trust database. Registered nurses, ACPs and Doctors (not foundation programme) may sign a self-certification form (appendix 2 and 3, Nasogastric tube Insertion - Full Clinical Guideline)
Foundation programme Doctors must have training at UHDB

A drainage/ feeding tube NG tube that has initially been inserted for drainage, (NOT ryles tubes) may be used for feeding if required, providing the position is confirmed using pH testing as with fine bore feeding tubes. NG tubes to be used for drainage **only** can be inserted by any practitioner who has had appropriate training/experience, they do not need to be recorded on the trust database for fine bore NG tube insertion.

Assessment for NG feeding
Before a decision is made to insert an NG feeding tube, an assessment must be undertaken to identify if nasogastric feeding is appropriate for the patient. The rationale for any decision must be recorded in the patient's medical notes. An NG tube must not be inserted unless this is recorded.

Bedside insertion of NG feeding tube
NG tube insertion can be dangerous, as well as difficult in patients with altered anatomy.
Care should be taken when inserting NG tubes into patients with tracheostomies and it should be established whether the cuff is inflated or deflated before attempting insertion and cuff pressure should be checked.
Nurses would not be expected to insert feeding tubes in patients who have had: maxillo-facial or head and neck surgery, laryngectomy, recent oesophagectomy/oesophageal cancer or stricture, known oesophageal fistula, pharyngeal pouch, basal skull fracture or recent nasal fracture. In these situations, or if these are suspected, NG tube insertion should only be attempted under fluoroscopic control.

Timing of NG tube placement
Under normal circumstance NG feeding tubes must always be inserted between 7am and 9pm at RDH, 8am and 4pm at QHB. The only exception to this is patients admitted to ICU with requirement for critical enteral medication e.g. post cardiac arrest patients who have had stents placed and required urgent antiplatelet drugs to be administered

Confirmation of position
- **First line method** to confirm position is pH testing, with pH 5.5 or less used as confirmation of correct position.
- **Second line method** to confirm position is x-ray, used only at the time of insertion, when no aspirate can be obtained (despite trying all appropriate techniques, see appendix 1, full clinical guideline) or pH indicator strip has failed to confirm the correct position.

If chest x-ray is required
A chest x-ray is only required to confirm NG feeding tube position, if it is not possible to aspirate fluid with a pH 5.5 or less. Chest x-ray request must be phoned through as urgent, and an urgent report requested.

Royal Derby Hospital
Paediatrics: 09:00 – 16:30 Monday – Friday: ext 85540. Adult & all 'out of hours' requests: ext 83223 / 88916
Queens Hospital Burton
8am to 4pm Monday to Friday ext 5158

Note: Guide wires must be removed prior to x-ray as NG tubes used within the Trust are still radio-opaque (visible on x-ray) without the guide wire.

The chest x-ray must be requested by a doctor and clearly state that the purpose of the examination is to confirm NG tube position as well as other relevant clinical information. Radiographers must satisfy themselves that appropriate first line tests have been attempted before performing the X-ray. This information must be provided before the examination can proceed.

The referrer is responsible for cancelling an X-ray request if the NG tube is removed prior to X-ray.
If a chest x-ray is performed it must only be reported by a radiologist or an appropriately qualified reporting radiographer who will make an assessment of NG tube position. No doctor other than a radiologist is permitted to assess NG tube position on an x-ray.

Radiologists report.
Please note: there are some differences in out of hours x-ray reporting of NG feeding tube position at RDH and QHB, please refer to the nasogastric tube insertion -full clinical guideline for site specific instructions.

If the tube is correctly positioned the report will include the following phrase:-

"NG tube noted in situ with its tip projected over the stomach beneath the left diaphragm. The radiological assessment, valid at the time the image was obtained, is that it is safe to proceed with administration of liquids via the tube."