INSERTION OF NASOGASTRIC TUBE IN ADULTS

OUTCOME
The nasogastric (NG) tube is safely and accurately placed in the stomach with minimal discomfort to the patient

Rationale
To aid decompression of the bowel
To aspirate gastric contents, and for gastric lavage
A route for administration of medications and nutrition

Accredited personnel
Registered Nurse, Medical Officer

EQUIPMENT
1. Salem sump (PVC) NGT 12-16Fr, Ryle’s Tube (PVC) 12-16Fr or fine bore feeding tube (radiopaque polyurethane coated with hydromer) 8-12Fr as indicated
2. water based lubricant and water
3. Kidney dish
4. 60 ml irrigation syringe (or 10 ml for feeding tube)
5. Hypafix/ tape to secure NG to nose
6. Safety pin
7. NG drainage bag and holder - or spigot - or feeding bag
8. pH indicator strips
9. cotton buds and normal saline
10. Blue Mackintosh undersheet
11. Non-sterile gloves
12. Ice to suck or Water to drink

PROCEDURE
1. Explain procedure and rationale to patient
2. Offer simple analgesia
3. Perform Baseline observations - temperature, pulse, respiratory rate, blood pressure and oxygen saturation
4. Organise equipment. Read manufacturer’s instructions.
5. Screen patient for privacy
6. Establish a distress signal with the patient
7. Assess nostrils for patency by instructing patient to blow each nostril individually and assess which nares is most patent. Ask patient if they have any sinus conditions.
8. Perform hand hygiene and don Personal Protective Equipment (non-sterile gloves, apron, goggles)
9. Assist patient perform nasal toilet with cotton buds and normal saline
10. Assist patient into High fowler’s position (unless contra-indicated by medical team)
11. Measure and mark the required cm length of the NGT for this patient, ie. the distance from - the lobe of the ear - to the tip of the nose - to the end of the xiphoid process.

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INSERTION OF NASOGASTRIC TUBE IN ADULTS  cont’d

12 Ensure guide-line placement is locked within tubing.
13 Lubricate the NG tube from distal end for 5-10cm. If not self lubricating, apply water soluble lubrication. If self lubricating, apply water as per manufacturers instructions.
14 Insert lubricated tube into the selected nostril, directing it posteriorly and inferiorly.
15 Ask patient to sniff to ease passage of tube from nose to oropharynx. Ensure the patient is not coughing.
16 When the tube reaches the pharynx the gag reflex might be stimulated - instruct patient to keep swallowing (ice or water assists this) and advance tube with each swallow
   If resistance is met, withdraw 1-2cm and rotate it slowly with downward advancement towards the closest ear. Do not force tube
17 Abandon procedure and withdraw NG if significant resistance or undue force is encountered, or if it causes gagging, coughing, cyanosis, coils in mouth or distress
18 Continue advancing the tube until the cm marked reaches the nostril
19 Secure NGT to nose with adhesive tape. Leave guidewire in until Xray confirmation
20 Check placement of NG tube by:
   a) Aspirate fluid and test pH of aspirate with indicator strips.
   b) pH must be < or equal to 5. If pH is >5 obtain an Xray to verify placement before using NGT NB. pH test not effective if patient on acid suppression therapy (antacids)
21 If no aspirate can be withdrawn, and the patient has no signs of distress, gently advance the tube 2 - 3 cm further and re-aspirate as 20.
22 Secure NG tube to nose with adhesive tape
23 Secure tubing to patient’s gown with tape and safety pin
24 Attach drainage bag - or spigot - or feeding tube
25 Repeat observations – temperature, respiratory rate, oxygen saturation, pulse and blood pressure and compare to pre-procedure observations. Report if variance.
26 Terminate encounter appropriately
27 Dispose of rubbish appropriately
28 Perform hand hygiene
29 Document procedure in patient’s Integrated Notes (reason for tube insertion, nostril used, type and size of tube, insertion distance in cm and nature and amount of aspirate if any. Document output on fluid balance chart

Notes for Feeding Tubes
Proceed as above for 1 - 15, then
16 Confirm correct placement by X-Ray - this is the only way to confirm placement of feeding tubes
17 Remove introducer
18 Secure NG Tube to nose with adhesive tape
19 Irrigate NG with 30 mls normal saline to ensure patency of tube
20 Attach spigot or feeding bag and commence feeding regime as ordered
21 Terminate encounter appropriately
22 Dispose of rubbish appropriately
23 Wash hands
24 Document procedure in patient’s Integrated Notes and on the Fluid Balance Chart

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Insertion of nasogastric tube in adults cont’d

References


NSW Health Policy directive PD2009_019 “Fine Bore Nasogastric Feeding tubes for Adults Policy”


Switakowski, P., and Di Milo, AM. Nasogastric Tube Insertion, University of Ottawa (2003), web page at http://intermed.med.uottawa.ca/procedures/ng/


Hand RW, Kempster M, Levy JH, Rogol PR, Spirn P. Inadvertent transbronchial insertion of narrow-bore feeding tubes into the pleural space. JAMA 1984; 251(18):2396 -7


MHRA Notice MHRS/MS/2004/026


