Naso Gastric (NG) Tube Insertion – Decision Tree

Are there any contraindications to NG tube intubation? ¹ e.g.
• Severe facial trauma
• Altered anatomy
• Abnormal clotting results
• Oesophageal varices
• Oesophageal pouch
• Skull fracture

No

Are there any contraindications to NG tube intubation? ¹ e.g.
• Severe facial trauma
• Altered anatomy
• Abnormal clotting results
• Oesophageal varices
• Oesophageal pouch
• Skull fracture

Potential

Is the GI tract functioning sufficiently for adequate absorption of nutrients?²

Yes

Do you feel confident/competent to insert a nasogastric tube? Have you been competency assessed for confirmation of placement?³

Yes

No

Do you feel confident/competent to insert a nasogastric tube? Have you been competency assessed for confirmation of placement?³

Seek expert specialist advice from Nutrition Support Team (NST)/competent person
Consider:
1. Orogastric feeding tube (ventilated patients)
2. Gastrostomy feeding
3. Parenteral nutrition

Consider if clinically appropriate⁵
1. Post pyloric feeding
2. Post ligament of trite feeding
3. Parenteral Nutrition
Seek expert specialist advice from NST/competent person

Yes

No

Request assistance from a competent practitioner

Go to page 2

KEYNOTE: Naso Gastric Feeding is a medical intervention and as such indications for this treatment should be clearly documented in the patient’s medical notes acknowledging patient informed consent or best interest decision.
Naso Gastric (NG) Tube Insertion – Decision Tree

Has the patient been screened/assessed to have a safe swallow?

- Yes
  - Encourage patient to sip water during the procedure may ease insertion
  - KEYNOTE: Do not water flush the inner lumen of the tube prior to insertion

- No
  - Encourage patient to perform a dry swallow

Gently advance the tube to the predetermined mark NEX measurement

- Is this achieved with ease?
  - Yes
    - Check gastric position
      - KEYNOTE: Do not remove the guide wire or flush the inner lumen of the tube before confirmation
      - Go to page 3
  - No
    - Is the patient coughing?
      - Yes
        - Gently pull the tube back until coughing stops and wait for the patient to stop coughing before reattempting to advance the tube
      - No
        - Inspect mouth for coiled tube
          - Still difficult advancing tube? – never force – possible obstruction – seek specialist advice NST/competent person

Never exceed 3 attempts at insertion.
Naso Gastric (NG) Tube Insertion –
Decision Tree

Is aspirate obtained?

Yes

Test aspirate using CE marked pH paper/strips for use with human gastric aspirate *

No

Attempt each of the interventions 4
If possible, turn adult onto left side
Inject 10-20ml air into the tube using a 60ml syringe (Do not use air to confirm placement)
Wait for 15-30 minutes before aspirating again
Check length of tube against NEX measurement –using NEX measurement as reference point
advance or withdraw tube by 5-10cm
Give mouth care to patients who are nil by mouth (stimulates gastric secretion of acid)
Try and obtain an aspirate again

Is pH 5.5 or below? (pH 5.5 or below Confirms gastric placement) 4, 6

Yes

Aspirate obtained?

No

Is the patient:
1. On a Proton pump inhibitor 4, 6
2. Received fluid/feed within the last 2-4 hours
These may affect a pH reading of above 5.5

Consider rechecking the pH after 1-2 hours

Yes

Is an aspirate obtained with pH 5.5 or below?

No

Go to page 4

X-ray is required, secure the tube. The request must state the rationale for x-ray ie; pH unobtainable or above 5.5. Competent medical staff should interpret and document tube position in patient notes 4
Naso Gastric (NG) Tube Insertion –
Decision Tree

1. pH 5.5 or below$^4,6$

2. Secure tube at nose using hypoallergenic tape$^1,4$
   - 1. Remove guidewire and flush the tube with water
   - 2. Commence treatment plan

3. Remove guidewire and flush the tube with water$^1$
   - Commence treatment plan

4. X-ray confirms gastric position$^4$

5. Competent medical staff confirms position of the tip of the naso-gastric tube and states it is safe to use$^4$
   (refer to NPSA Alert example)

6. X-ray confirms misplaced tube

7. Tube should be removed immediately$^4$

8. Seek Specialist support/ advice from NST$^4$

Naso Gastric (NG) Tube Insertion –
References


