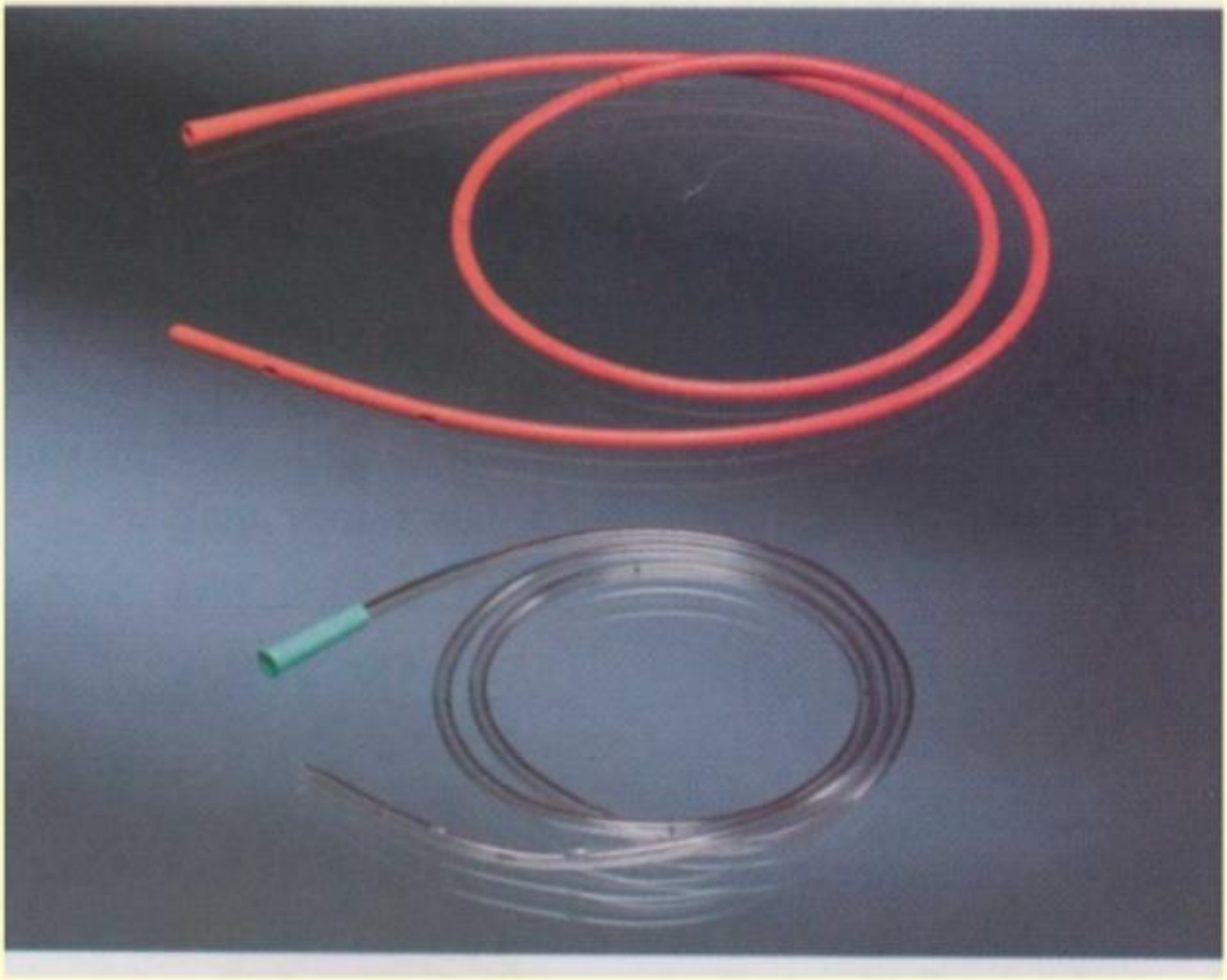
NASOGASTRIC INTUBATION

Nasogastric tube

- Gastrointestinal intubation deals with the inserting of a rubber or plastic tube into the stomach, duodenum or small intestine.

Types of Tubes

- Short tubes: passed through the nose into the stomach
- Medium Tubes: tubes are passed through the nose to the duodenum and the jejunum. Used for feeding
- Long tubes: passed through the nose, through the esophagus and stomach into the intestines. Used for decompression of the intestines



- Nasogastric tubes come in various sizes (8, 10, 12, 14, 16 and 18 Fr).

Indications for GI Intubation

- To decompress the stomach and remove gas and liquids
- To lavage the stomach and remove ingested toxins
- To administer medications and feeds
- As part of the management of an obstruction
- As part of the management of haematemesis
- To aspirate gastric contents for analysis

Intubating the client with an NG tube

- Assessment:
  - Who needs an NGT:
    - Surgical patients
    - Ventilated patients
    - Neuromuscular impairment
    - Patients who are unable to maintain adequate oral intake to meet metabolic/nutritional demands
  - To assess patency of the nares

Assessment cont.

- Assess patient's medical history:
  - Nose bleeds
  - Nasal surgery
  - Deviated nasal septum
  - Anticoagulation therapy
  - GI history
- Conduct a thorough physical examination.
- Assess patient's gag reflex.
- Assess patient's mental status.

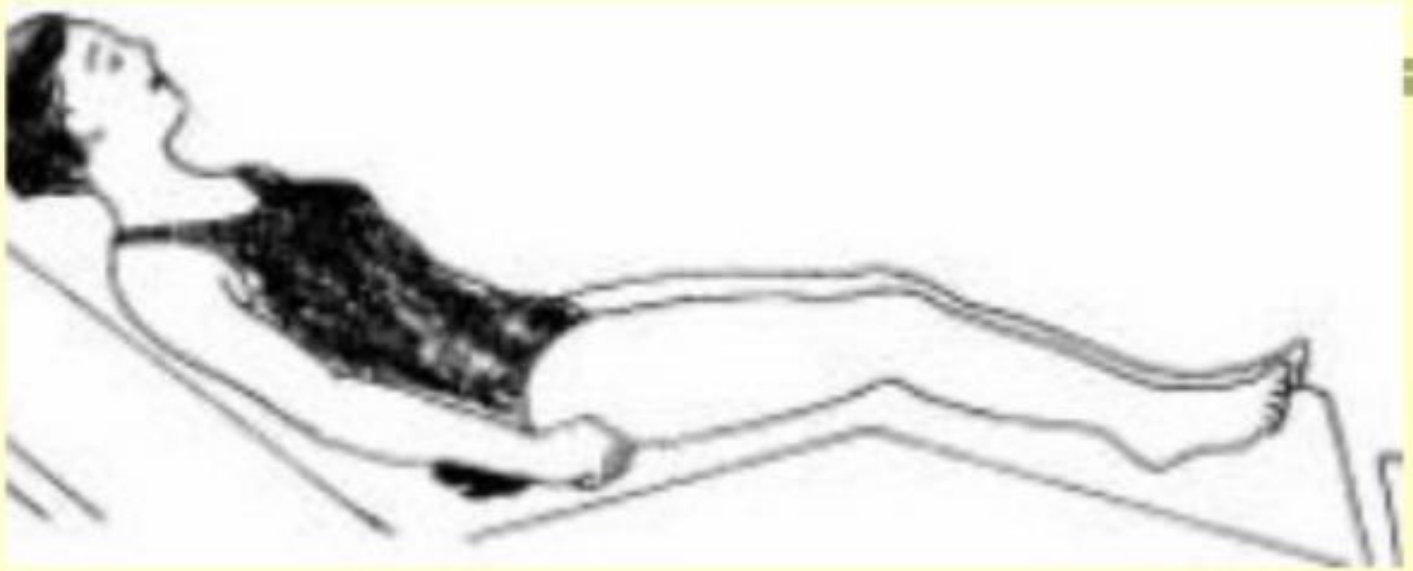
Technique

Equipment:

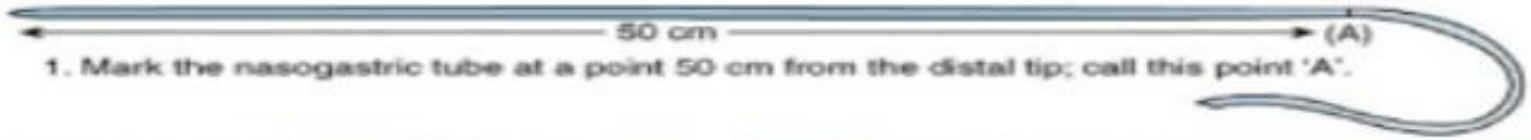
- 14 or 16 Fr NG tube
- Lubricating jelly
- pH test strips
- Tongue blade
- Flashlight
- Emesis basin
- Syringes
- 1 inch wide tape or commercial fixation device
- Suctioning available and ready
- Urobag/Collection bag
- Stethoscope

Technique continued…

- Explain procedure to patient and relatives
- Position the client in a sitting or high Fowler's position. If comatosed, semi Fowler's.
- Examine feeding tube for flaws.
- Determine the length of tube to be inserted.
- Measure distance from the tip of the nose to the earlobe and to the xyphoid process of the sternum.
- Prepare NG tube for insertion.



Fowler's position. Used to promote drainage or ease breathing. Head rest is adjusted to desired height and bed is raised slightly under patient's knees

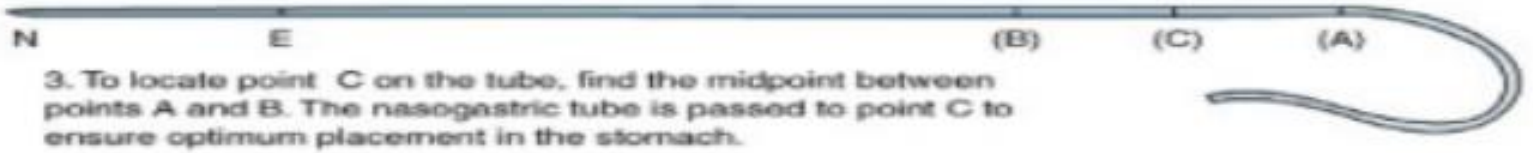


1. Mark the nasogastric tube at a point 50 cm from the distal tip; call this point 'A'.

Measuring distance from nostril to tip of earlobe.

Measuring distance from earlobe to tip of xiphoid process.

2. Have the patient sit in a neutral position with head facing forward. Place the distal tip of the tubing at the tip of the patient's nose (N); extend tube to the tragus (tip) of the ear (E), and then extend the tube straight down to the tip of the xiphoid (X). Mark this point 'B' on the tubing.



3. To locate point C on the tube, find the midpoint between points A and B. The nasogastric tube is passed to point C to ensure optimum placement in the stomach.

Figure 36-3 Measuring length of nasogastric tube for placement into stomach.

Implementation

1) Wash Hands
2) Put on clean gloves
3) Lubricate the tube
4) Hand the patient a glass of water
5) Gently insert tube through nostril to back of throat (posterior naso pharynx).

Have the patient flex the head towards the chest after tube has passed through nasopharynx.

Implementation Cont.

6)Emphasize the need to mouth breathe and swallow during the procedure.

7) Swallowing facilitates the passage of the tube through the oropharynx.

8) When the tip of the tube reaches the carina stop and listen for air exchange from the distal end of the tube. If air is heard remove the tube.

9) Advance tube each time client swallows until desired length has been reached.

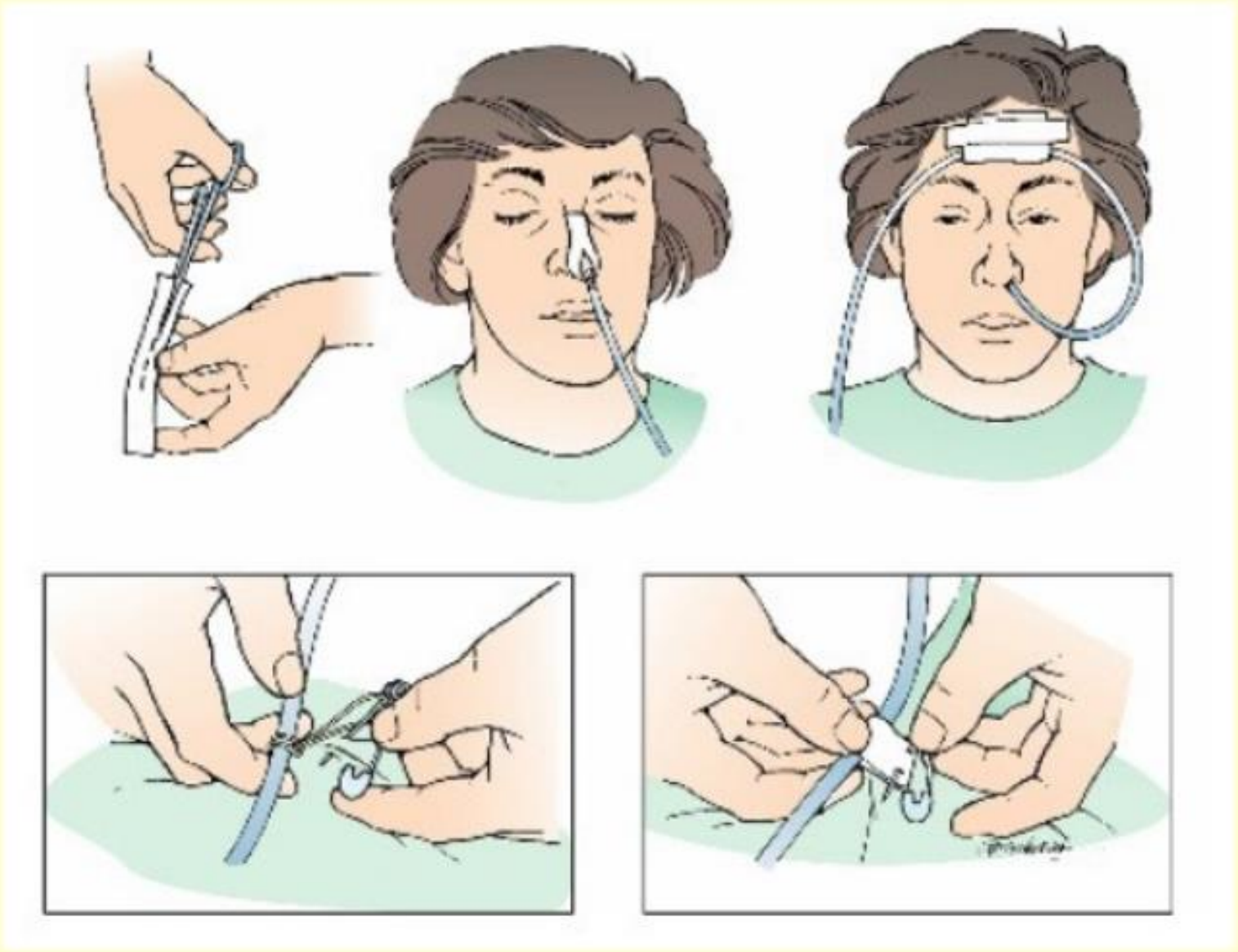
10) Do not force tube. If resistance is met or client starts to cough, choke or become cyanotic stop advancing the tube and pull back.

Implementation Cont.

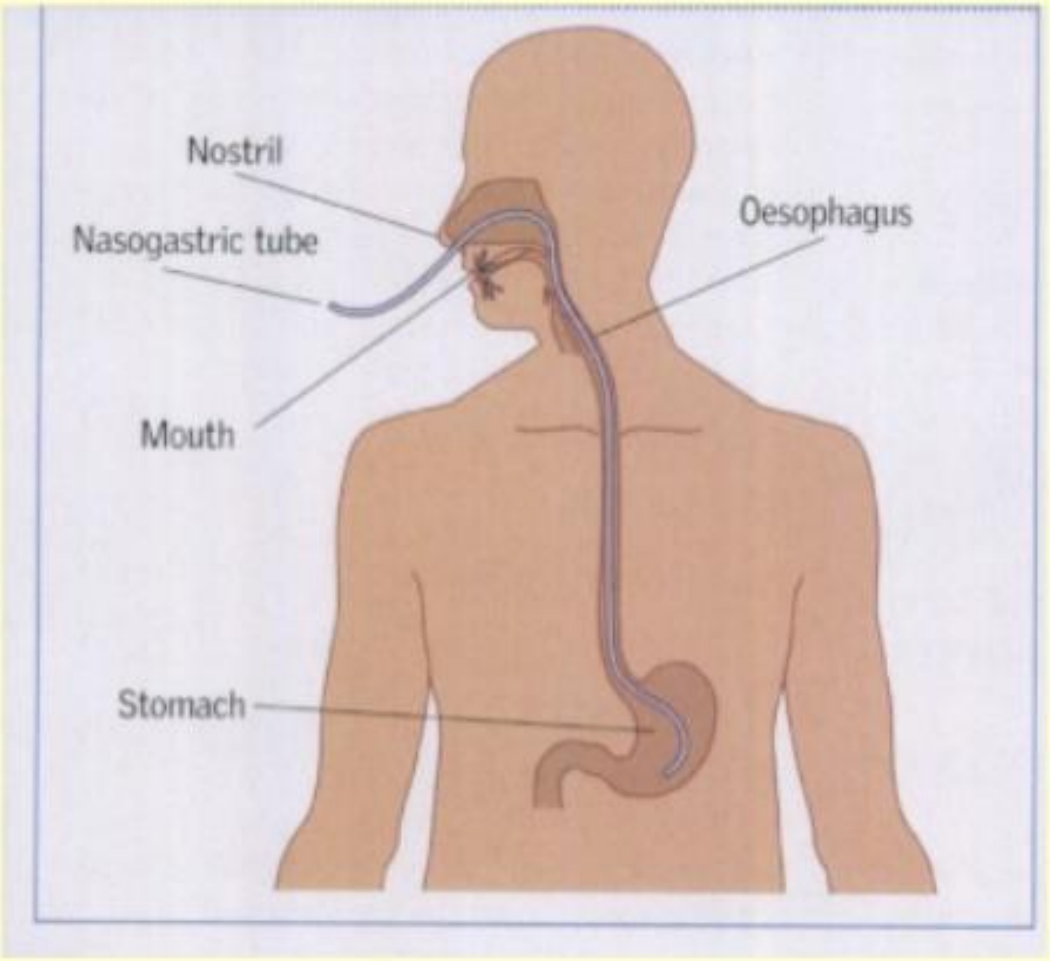
11) Check placement of the tube.

- X-ray confirmation
- Testing pH of aspirate

12) Secure the tube with tape or commercial device.



Nasogastric Tube Position



Evaluation

- Observe the patient to determine response to procedure.
- ALERT! Persistent gagging – prolonged intubation and stimulation of the gag reflex can result in vomiting and aspiration.
  - Coughing may indicate presence of tube in the airway.

Evaluation Cont.

- Note the location of external site marking on the tube
- Documentation
  - Size of tube, which nostril and patient's response.
  - Record length of tube from the nostril to end of tube.
  - Record aspirate pH and characteristics

Complications

- Clogged/Blocked Tube- most common
- Dumping Syndrome: solution with high osmolality- water moves into stomach and intestines from the fluid surrounding the organs and vascular system causing dehydration, hypotension and tachycardia
- Aspiration : ensure head of bed is elevated at least 30 degrees while feeds are being administered

Complications Cont.

- Dehydration- diarrhoea is a common problem.
- Electrolyte imbalance: hyperkalaemia and hypernatraemia
- Oral mucosal breakdown
- Nasal irritation

thank you
danke
謝謝
ngiyabonga
teşekkür ederim
gracias
спасибо
Баярлалаа
dank je
tapadh leat
mochchakkeram
go raibh maith agat
dziękuję
bedankt
hvala
maururu
obrigado
sukriya
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grazie
terima kasih
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