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Nasogastric Feeding : NG Feeding






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All information above has been reviewed by Gastroenterology specialists
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A. Why insert a nasogastric tube ?

Nasogastric feeding can provide nutrition, give medication, drain fluid and gas from the gastrointestinal tract to avoid bloating and vomiting.

B. Types of nasogastric tubes :

		
Normal nasogastric tube, replaced in 7 days, hard texture.	Silicone nasogastric tube, replaced once a month, soft texture.	Two-piece nasogastric tube, replaced once a month, soft texture.

C. Introduce two feeding methods :

(A) **Bolus Feeding** : pour into the feeding syringe, feeding diet with 70c.c. syringe, slowly push, the diet can use the homemade or commercial formulations, generally, feeding 250c.c. every 2-4 hours , not to exceed 300 c.c. in total. (Figure 1)



Figure 1. Bolus Feeding

(B) **Feeding bag drip feeding:** pour diet into the feeding bag, use gravity and control bolt to control speed, continue and slowly drip diet, avoid the uncomfortable sensation, the diet dripping should be slow down. The one who has poor gastrointestinal function need high-calorie, and high-concentrated formula can choose this method. (Figure 2).



Figure 2. Feeding bag drip feeding

D. Feeding steps and precautions:

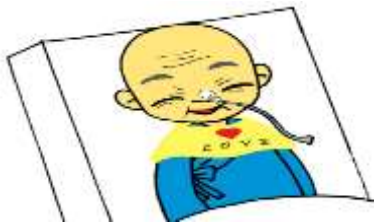
(A) Before the feeding:

- a. Wash hands, prepare force-feeding formula, warm water, empty needle or force-feeding bag, and towel.
- b. Place the patient in a semi-sitting position at 30-45 degrees and do not lie down, if suction is required, suction is drawn first and then feeding.



Semi-sitting position at 30-45 degrees

- c. Put a towel on the patient's chest.



Put a towel on the patient's chest

- d. Open the spigot of the nasogastric tube by folding it back near the opening.



Folding nasogastric tubes



Open the lid of the nasogastric tube

- e. Insert a feeding syringe at the end of nasogastric tube then withdraw the syringe, to determine the nasogastric tube is in the stomach, and observe the residual amount of gastric fluid. If the total amount of remains in the stomach falls below 100ml or last feeding in the

stomach seem to less than 50%, then push it back into the stomach ,
and tube feeding is allowed to proceed.



Pull back on feeding syringe



Nasogastric tube feeding

- f. If there is black or coffee colored substance in the residue,
immediately stop the feeding and observe the stomach contents again
at the next meal, if no improvement should to seek treatment in
hospital.

(B) Feeding in progress:

- a. Wet the lining of the nasogastric tube with 30 c.c. of warm water. If
you feel that the tube is not filling easily, it may be (a) obstruction of
the nasogastric tube: reverse the pumping with the empty needle, then
flush the tube with warm water and repeat this action several times. (b)
obstruction of the tube against the stomach wall: pull out the tube
gently by about 2 cm and try filling with warm water, if it still does
not work, ask your doctor or home care provider to renew it.

- b. The temperature of the feeding formula should be close to body temperature.
- c. The slower the speed the better, 10-15 minutes per meal. if side effects such as nausea, vomiting or diarrhoea occur, consider changing the diet ingredients such as concentration, temperature and speed.
- d. If the patient keeps coughing or vomiting during the feeding process, stop the feeding immediately, observe closely and contact your home health care provider or take the patient to a nearby hospital.

(C) After the feeding:

- a. Rinse the tube with 30-50 c.c. of warm water and cover the opening of the tube to avoid food residue and bacterial growth.
- b. It takes 30 minutes to lie down or turn over after feeding.
- c. When finished, wash and dry the utensils in a covered container.

F. Precautions for nasogastric tube care:

- a. Daily cleaning of the mouth with a sponge toothbrush and nasal cavity with cotton swabs.

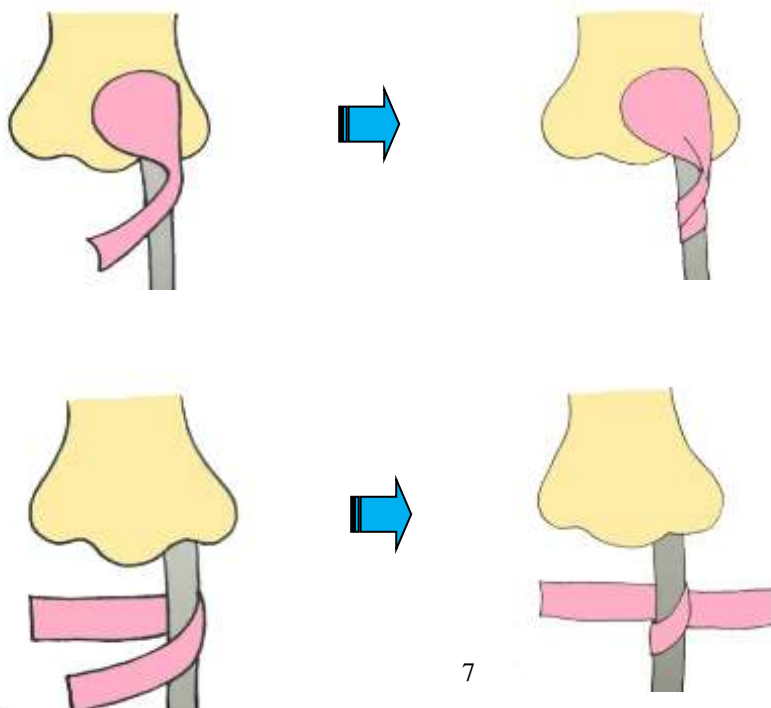


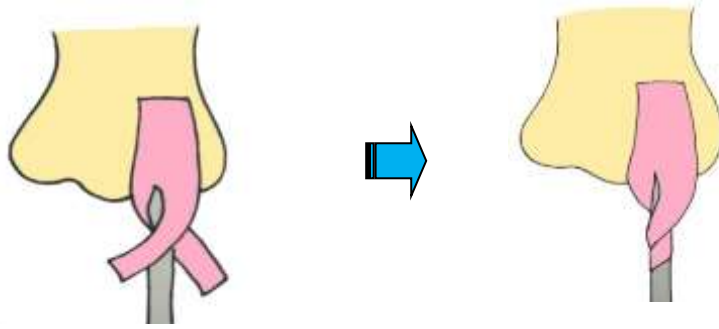
Oral hygiene



Nasal cleansing

- b. Change the fixed tape daily and check the position of the nasogastric tube to prevent the tube from shifting, the choice of tape should be plain paper tape or pull-together tape, the use of hypoallergenic paper tape is not recommended as it does not fit well and can be easily loosened. increase frequency of replacement if nasal discharge is high or if the nose is prone to oiliness, the paper glue is fixed to the same part of the skin and needs to be replaced in different positions.
- c. When changing the tape, wipe the nasal skin with water and do not move the insertion depth of the nasogastric tube, which is usually fixed at 45-55 cm (between the 1st and 2nd mark of the nasogastric tube). If the tube is not more than 10cm out, check that there is no tangled nasogastric tube in the mouth, then gently push it in to the original position and re-fix it, then inform the home healthcare provider.
- d. If there is vomiting, dry nausea, severe coughing, or shortness of breath or a drop in oxygen concentration, re-check the position of the nasogastric tube to see if it has shifted.
- e. Tapes fixing method :





- f. The nasogastric tube should be protected from pressure, twisting or pulling out during feeding. if necessary, the patient's hands should be restrained to prevent injury from self-extraction of the tube in unconscious, agitated patients.
- g. Depending on the material, the nasogastric tube can be replaced at 7 days, 1 month or 3 months. you can apply for home care service or go to a hospital near your home for replacement.

G. Conclusion:

When a nasogastric tube is placed for a long period of time after hospital, the patient or a family must learn how to take care of the tube in order to maintain the function of the tube, improve the quality of care at home and reduce the harm caused by blockage or slipping of the tube.

F. References:

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Let us take the quiz to make sure you understand

1. Before each tube feeding, withdraw the nasogastric tube to observe the residual content in the stomach. After observation, any withdrawn material should be pushed back into the stomach.

Yes No Don't know

2. If the patient experiences persistent coughing, vomiting, or any abnormal conditions during the feeding process, feeding should be immediately stopped.

Yes No Don't know

3. Feeding should be administered with the patient in a supine position.

Yes No Don't know

4. After feeding, the tube should be flushed with 30-50 C.C. of warm water.

Yes No Don't know

5. The fixation tape should be replaced daily, and the position of the nasogastric tube should be checked.

Yes No Don't know