Nasogastric Tube Feeding

Clinical Skills
School of Medicine
2015/16
Learning Objectives

Students should be able to

– Understand the indications for Enteral & NG feeding.
– Understand the contra-indications NG feeding.
– Demonstrate knowledge of possible complications of NG feeding
– Correctly insert an NG tube on a simulation model.
Enteral Nutrition

Enteral Nutrition (EN):- Feeding through a tube.

It is important to decide on site and size of the tube.

Site; Can be nasal, oral or percutaneous (e.g. stomach, duodenum, jejunum)

Site depends on concurrent injuries, disease, impaired gastric motility, risk of aspiration & duration of nutritional support. (Williams 2009)

Fine bore (5-12 Fr), large bore (>14Fr)

Size; Depends on need for medications, feeding, gastric suctioning, decompression, measurement of pH or residual volumes (Willaims, 2009)

EN can be cyclic, bolus and intermittent
INDICATIONS

Nutritional support for pt’s with a functioning GIT
Pre-op if the patient is malnourished
Coma
Metabolic abnormalities: malabsorption, chronic pancreatitis
Hypercatabolic states: sepsis, burns, major trauma, major surgery
Chemotherapy or radiation therapy
IBS, Crohn’s disease, ulcerative colitis
Psychological problems causing lack of appetite
INDICATIONS contd.

Therapeutic

– Administration of food/medication/oral agents
– Feeding - Being unable to eat, e.g.
  » Loss of swallowing reflex, e.g. a stroke (fine bore tubes),
  » facial fractures (fine bore tubes),
  » Inflammation of the mouth/throat (fine bore tubes),
  » Non-functioning gut e.g. complete obstruction (Wide bore tubes)
– Gastric decompression, including maintenance of a decompressed state after endotracheal intubation
– Relief of symptoms and bowel rest in the setting of small-bowel obstruction
INDICATIONS contd.

Diagnostic

– Evaluation of upper gastrointestinal (GI) bleed (presence of blood, volume)
– Aspiration of gastric fluid content
– Identification of the oesophagus and stomach on a chest radiograph
– Administration of radiographic contrast to the GI tract
COMPLICATIONS

- Patient discomfort
- Intracranial placement
- Trauma to nasopharynx
- Epistaxis
- Respiratory tree intubation
- Oesophageal perforation
- Metabolic imbalance: Hyperglycaemia, Hypoglycaemia (need dietician input)
- Liver Failure
- Nausea
- Re-feed syndrome- U&E imbalance (SJH, 2005)
- Blockage of tube
CONTRAINDICATIONS

Maxillofacial Trauma/ base of skull fracture
Oesophageal abnormalities/ strictures/varicies
Upper GI disorders/ carcinomas
Altered Mental status & impaired defences
Patients with severe coughing.
Caution with patients with coagulation disorders – discuss with team
Caution with facial burns

Confirm position by aspiration in each of the following circumstances:

- Prior to commencing each feed
- Prior to administering medications
- Prior to flushing
- If the patient has vomited or coughed violently
- If the marking of the tube has slipped
- If the patient can feel the tube in their throat
- If you suspect malposition of the tube
Total Parental Nutrition

Given IV – may be given if Enteral feeding not possible

The nutrient solution consists of

- water
- electrolytes
- glucose
- amino acids
- Lipids
- essential vitamins
- minerals and trace elements are added or given separately

Need individual prescription by dietician
References

AMNCH Hospital Policy


