



## Health & Safety Alert #17-3-07

### Enteral Tube Feeding

This alert is to inform families and people who work in this field about issues that impact the health and safety of people for whom we provide services. There have been a number of serious issues arise associated with complications of feeding tubes.

#### Basic Facts:

Enteral feeding tubes are tubes placed in the gastrointestinal tract through an opening in the upper abdominal wall into the stomach. Gastric tubes (G-tube, PEG) are placed in the stomach and jejunostomy tubes (J-tube) are placed in the small intestine. These feeding tubes are used for a variety of reasons, including problems swallowing, recurrent aspiration and pneumonia, and inability to maintain adequate nutrition or fluid intake. Most of the research on the efficacy of tube feeding has been done in the long-term care setting (nursing homes). The populations studied are somewhat dissimilar to the individual with developmental disabilities who develops dysphagia and difficulty swallowing. However, the decision process to proceed with placement of a tube for feeding, the complications of the procedure and subsequent feeding, and, the long-term outcomes are similar between the nursing home population and the adult population with developmental disabilities. It is important for all stakeholders to have the opportunity to understand the benefits and risks of initiating enteral tube feeding for dysphagia or malnutrition (see list of articles at end of alert).

1. Critical steps to take following enteral feeding tube placement:
  - ◆ Discuss with the physician performing the procedure when to start using the feeding tube and the type of tube feeding to use.
  - ◆ Leakage from the gastrostomy site (opening in the abdominal wall through which the tube enters the stomach) is a potential complication of feeding tube placement.
  - ◆ Some advocate feeding tubes not be used for 24-48 hours after placement, to allow for healing of the gastrostomy site to begin. However, this is not universal practice, and many persons do well with more immediate initiation of tube feedings. If use of an enteral feeding tube is delayed, then other means of providing adequate fluids is necessary.
2. Potential complications of enteral tube feedings
  - ◆ Gastroesophageal reflux (reflux of tube feeding from stomach into esophagus)
  - ◆ Aspiration (of tube feed, of saliva, into airway)
  - ◆ Peritoneal leak, peritonitis (irritation or infection in the abdomen, causes abdominal pain, change in behavior, fever, vomiting)
  - ◆ Infections, as the insertion of the tube and the feeding tube solutions are not necessarily sterile
  - ◆ Agitation
  - ◆ Gastric perforation (another hole in the stomach in addition to the hole for placement of the feeding tube)
  - ◆ Migration or displacement of tube
  - ◆ Clogging of tube
  - ◆ Bleeding at insertion site
  - ◆ Hematoma (bruising) of abdominal wall
  - ◆ Erosion of bumper/button into abdominal wall
  - ◆ Wound dehiscence (separation of the wound in abdominal wall where feeding tube enters stomach)

- ◆ Cellulitis (infection of the skin around the feeding tube opening in the abdominal wall)
  - ◆ Closure or stenosis of stoma (opening through the abdominal wall into the stomach)
  - ◆ Ileus (bowel stops working, may have abdominal pain, vomiting, constipation, fever, dehydration)
  - ◆ Diarrhea
  - ◆ Fluid and electrolyte imbalance
  - ◆ Nutritional concerns
  - ◆ Altered sense of self (loss of social aspects of eating, loss of dignity)
3. Positioning during feeding and afterwards.  
To reduce the danger of food and fluid coming back up out of the stomach and causing aspiration, keep the individual in a position which elevates their head and shoulders at least 30 degrees from horizontal during feeding and at least one hour afterwards. Please note that some individuals may need to be raised to a 45 degree angle.
4. Obtain medical help immediately if the individuals have any of the following symptoms
- ◆ Vomiting
  - ◆ Abdominal pain
  - ◆ Leakage or bleeding from the tube site
  - ◆ Leakage from the tube
  - ◆ Constipation or diarrhea
  - ◆ Fever
  - ◆ Individual exhibits unusual behavior

**Recent literature concerning benefits and risks of tube feeding:**

1. Gillick M. Sounding Board: Rethinking the Role of Tube Feeding in Patients with Advanced Dementia. *NEJM*. 2000;342(3):206-210.
2. Finucane TE, Christmas C, Travis K. Tube feeding in patients with advanced dementia: a review of the evidence. *JAMA*. 1999;282:1365-1370.
3. Lo B, Dornbrand L. Editorial: Understanding the Benefits and Burdens of Tube Feedings. *Arch Intern Med*. 1989;149:1925-1926.
4. Marik PE. Aspiration Pneumonitis and Aspiration Pneumonia. *NEJM*. 2001;344(9): 665-671.
5. McCann R. Lack of Evidence About Tube Feeding-Food for Thought. *JAMA*. 1999;282(14):1380-1381.

For questions or comments regarding the above Alert, please contact the MUI/Registry Unit at (614) 995-3810.