Tube Feeding Considerations

Tube feeding provides calories and water (*nutrition*) by means of a:

- A tube that goes through the nose to the stomach (*nasogastric tube*).
- A tube that goes through the nose to the first part of the small intestine (*nasojejunostomy tube*).
- A tube surgically placed through the skin into the stomach (*gastrostomy tube*).
- A tube surgically placed through the skin into part of the small intestine (*jejunostomy tube*).

This feeding approach is most often used in long term care for people who are unable to eat by themselves or who have difficulty swallowing.

The decision to use a feeding tube must take into consideration the risks and benefits involved.
Advantages of tube feeding may include:

- Providing adequate nourishment.
- Prolonging life.
- Enhancing comfort and quality of life.

Disadvantages may include:

- Pneumonia caused by breathing food or liquid into the lungs (*aspiration pneumonia*).
- Diarrhea.
- The need for restraints.
- Fluid and electrolyte imbalances.

There may also be medical, ethical, and financial aspects to consider in deciding whether to use tube feeding. The preferences of the person involved and his or her family should also be considered.

Feeding tube placement should be considered only if it is likely to improve the person's overall health **and** if it is in line with goals of care.

A sound decision to use tube feeding requires at least the following:

- Deciding if there is a medical need for tube feeding.
- Determining the goals of tube feeding.
- Deciding if those goals can be met.
- Assessing the wishes of the person (or the individual designated to make decisions for the person) in regard to tube feeding.

In conditions that may improve, such as a recent stroke that results in difficulty swallowing, tube feeding may be needed short-term to provide adequate nutrition. However, not all such situations require tube feeding. In some cases, feeding tubes are used long-term despite lack of evidence that they are needed.

Treatment goals of tube feeding should be determined before the feeding starts. At that time, the family should also discuss a plan for discontinuing tube feeding if those goals are not met within a given time. Once tube feeding has begun, there should be reevaluation from time to time to see if the person is still benefiting from it. And when treatment goals are not being met, the likely benefit of continued tube feeding must be reassessed.

USE OF TUBE FEEDING IN THOSE WHO HAVE PROBLEMS WITH THINKING (*DEMENTIA*)

- In its later stages, dementia is associated with weight loss and malnutrition. Use of tube feeding for people with advanced dementia has not been shown to work better to prolong life than careful hand feeding.
- In people with dementia, the positive effects of tube feeding, such as weight gain, have not been shown to outweigh the negative effects, such as getting pneumonia from breathing in food or liquid. In addition, such people are often restrained indefinitely to prevent them from pulling on the feeding tube.

NUTRITIONAL REQUIREMENTS

Successful tube feeding requires sufficient:

- Calories.
- Protein.
- Fluids
- Vitamins.

There should be an assessment of the person's nutritional needs that establishes a baseline, objective record of his or her nutritional status. Periodic reassessment is needed to ensure that feedings meet:

- The person's changing nutritional needs.
- The goals of weight maintenance or weight gain and fluid balance.

There must also be a plan to provide for the person's nutritional and fluid needs if tube feeding must be interrupted, such as when fasting is required for a medical test.

Feeding tube placement does not mean it will be impossible for a person to eat by mouth in the future. Some people can be retrained to eat normally again.

RISK OF BACTERIAL CONTAMINATION

Contamination is usually traced to:

- The feeding formula itself.
- Incorrect handling procedures of nutrient solutions.
- Incorrect feeding methods.

Tube feeding can lead to infections and diarrheal illnesses.

In order to prevent germ (*bacterial*) contamination:

- Use germ-free processes when preparing the feeding formula.
- Be sure that the people preparing the formula are properly trained.
- Use extra care to prevent contamination when using an open feeding system.
- Use germ-free (*sterile*), closed systems for feeding when possible.
- Follow the manufacturer's instructions to avoid contaminating the feeding equipment when a sterile system is used.

RISK OF ASPIRATION

There is no evidence that tube feeding lowers the risk of food and water getting into the lungs, which is called aspiration. In fact, tube feeding is a significant risk factor for aspiration, which can result in pneumonia and death.

DETERMINING THE NEED FOR TUBE FEEDING

- If the person swallows normally, oral feeding is better and safer than tube feeding.
- If the person swallows normally but does not take in enough calories, dietary supplements are better than tube feeding.
- Determine whether there are changes that can be made to keep up nutritional intake without tube feeding. (For example, do dentures fit properly?)
- Determine whether there are conditions that prevent the person from meeting nutritional needs through normal eating. For example:
  - Medical conditions.
  - Psychological problems.
  - Physical problems.
- Determine whether digestion and absorption of food is normal.
- Find out if there is help for eating, if that is required.
- See if there are issues keeping the person from getting his or her nutritional needs met. Issues may include:
  - Language barriers.
  - Ethnic or cultural dietary restrictions.
  - Religious beliefs.

If the person is unable to eat or is not taking in enough nutrition, answer the following questions before considering tube feeding:

- Are the family's and patient's wishes to not use tube feeding being respected?
- Is conservative treatment a better option? Has it been tried? If not, why not?
- In the present situation, is tube feeding a better option than intake by mouth?
- Are there reasons not to use tube feeding in this person?
- Has a nutritional assessment been completed?
- What are the person's nutritional needs and what type of tube feeding formula is needed to meet their needs?
- Has a nutritional care plan been developed?
- Does this plan provide enough calories and required nutrients for the person?
- When and how will the effectiveness of and the continued need for tube feeding be monitored to be sure it is helping the person reach treatment goals in a timely manner?

CARE PLANNING

- Reasonable use of artificial feeding is patient-centered and based on studies that show tube feeding can provide a health benefit. Facilities and caregivers are not required to furnish treatment that affords no benefit.
- Once tube feedings are begun, the goals of nutritional therapy and the need for continuing artificial nutrition and hydration must be reassessed regularly.
- Tube feeding can have harmful effects. People receiving tube feedings must be regularly checked for these potential problems so that the facility can intervene quickly when they develop.

CONSIDERING A FACILITY TO CARE FOR A LOVED ONE WITH A FEEDING TUBE

- Is there a process that involves family in starting and stopping tube feeding?
- Is there an ethics process that supports withholding treatment that provides no benefit?
- Is there a system in place that ensures:
  - Nutritional requirements are used to determine the needs of tube-feeding candidates?
  - Specific and measurable medical goals are agreed to if tube feeding is prescribed?
  - Tube feeding goals are assessed to see whether they provide enough benefit to the resident?
  - Regular reassessment of a person's food needs and intake is done to make sure that these needs are always being met?
  - There is a specific time frame for reevaluation to see if the treatment goals of feeding tube placement are being met?
  - There are medical, legal and ethical processes for stopping tube feeding when the intended medical goals cannot be reached?

DOES THE FACILITY USE A NUTRITIONAL CLASSIFICATION SYSTEM THAT IDENTIFIES THE FOLLOWING?

- A person's potential nutritional risk.
- How much nutritional support that person requires.
- How much and how often monitoring is needed.

The facility should also provide for early detection and reporting of potential problems related to tube feeding such as:

- High blood sugar (*hyperglycemia*).
- Undesirable weight gain.
- Fluid overload.
- Diarrhea and aspiration.

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