Information on PEG (Percutaneous Endoscopic Gastrostomy) & DPEJ (Direct Percutaneous Endoscopic Jejunostomy)

Description of the Procedures:

PEG tube placement involves the insertion of a flexible video instrument called an endoscope through the mouth and into the stomach. The endoscope will allow physicians to determine a site for the placement of a feeding tube that passes through the abdominal wall and into the stomach. After selecting a safe area for the tube, they will inject a local anesthetic, make a small skin incision, and place the feeding tube.

Topical anesthetics are often applied to the back of the throat to minimize any discomfort from inserting the endoscope. Most patients sleep through the procedure, which typically takes 20-40 minutes.

DPEJ is very similar to PEG placement, but the tube is placed into the small intestine rather than the stomach. The types of risks, benefits, and alternatives are otherwise very similar to those of PEG placement.

Risks:

Complications occur in 5-10% of PEG placements, often related to the other medical problems that are often present in patients who require tube feeding. Serious complications occur in 1.5 to 4% of cases. The following risks have been associated with PEG tube placement:

1. **Slowing of breathing and abnormal heart rhythms.** Intravenous medications may cause a slowing of breathing and in rare cases may cause breathing to stop. Lowering of blood pressure, abnormal heart rhythms, and cardiac arrest (sudden stopping of breathing or heart action) may occur and can be fatal.

2. **Wound infection.** Fluid can leak from the stomach into the abdomen, especially if the tube becomes dislodged. This may result in a serious infection, which could require surgery to repair. Infections involving the skin and abdominal wall can occur but are rarely life threatening. An antibiotic will be given intravenously before the procedure to prevent skin infection if you are not already receiving antibiotics for another reason.

3. **Aspiration of stomach contents.** Aspiration of stomach contents into the lungs can occur to some extent in patients undergoing this procedure, especially in individuals with severe neurological problems. Use of a tube for feeding may also lead to aspiration pneumonia, which can be fatal.
5. Other complications may occur. Inadvertent placement of the PEG tube through the intestine, bowel obstruction, injury to internal organs, and perforation may all occur and could require surgery. Other complications may include bleeding requiring blood transfusion, tube malfunction, pain at the site of the tube placement, adverse drug reactions, inflammation or infection at the intravenous site, a sore throat, and dental injury.

6. Death. Because most individuals requiring PEG placement are in poor health, approximately 15% of patients will die within a month of the tube placement. Deaths related to the PEG placement itself occur in about 1 of every 200 procedures.

Benefits:

The purpose of PEG placement is to provide a long-term feeding option for people who are unable to take food by mouth, without the need for surgery. PEG tubes are a good alternative to the continued use of a nasogastric feeding tube, which passes through the nose into the stomach. Nasogastric tubes are often uncomfortable for the patient and may carry a risk of aspiration of stomach contents into the lungs, pneumonia, and other complications. PEG tube placement is generally well tolerated and often allows patients to meet their nutritional needs; however, the patient’s overall condition may fail to improve. If the patient regains the ability to take food by mouth, a physician can easily remove the PEG tube.

Alternatives:

A feeding tube can often be placed in the stomach or small intestine by use of fluoroscopy (x-rays) either through the nose or through the skin, or by means of surgery. Continued use of a nasogastric or a nasointestinal feeding tube is another option.