Guidelines for Percutaneous Endoscopic Gastrostomy (PEG Tube Insertion)

1. Referrals
Referrals for PEG tube insertion are made by the medical staff throughout the hospital to the Nurse Endoscopist directly or via the Endoscopy Coordinator. A designated form needs to be completed by the referring team and faxed to the Endoscopy department. It is important to consult with the ward dietician to discuss alternative forms of nutritional support if appropriate. The nutrition sister should also be contacted (Mrs Carol Muir) who would be available subsequently for advice regarding PEG care. Information is available on the Trust intranet site (Lothian Tube Feeding Best Practice Statement).

2. Role of the Dietician
The dietician would provide advice and information on assessment of nutritional status assessment of nutritional intake, assessment of nutritional requirements and advice on the route for nutritional supplementation, as PEG may not be the only or the best option.

3. Percutaneous Endoscopic Gastrostomy (PEG)
In general, all patients who have not been eating for over three days should be considered for nutritional support. Enteral feeding should always be regarded as the most appropriate, parental feeding should always be a second choice. In the short term, nasogastric tube feeding is the method of choice, but for patients who are likely to require nutritional support for over 3-4 weeks a PEG is indicated. This includes patients who cannot swallow due to failure of swallowing mechanism or because of reduced level of consciousness.

4. Indications for PEG insertion
- Patients unable to eat or cannot eat adequate diet for periods longer than 5 days and who are likely to be fed for periods more than 3 or 4 weeks.
- Patients who are unconscious or who have a reduced level of consciousness therefore are not able to eat.
- Patients with swallowing difficulties e.g. after a stroke. Stroke patients often resume swallowing within 2-4 weeks, and during that period feeding through a NG-tube is more appropriate. They should be considered for PEG insertion if after 4 weeks following the stroke swallowing problems still persist.
- Patients with neurological conditions such as head injury, motor neurone disease, multiple sclerosis, cerebral palsy, myotonic dystrophy.
- Head and neck malignancy.
- Cystic fibrosis.
- Gut dysmotility.
- Oesophageal involvement in AIDS.
- Psychiatric patients with eating disorders (if patient agrees).
- Patients unable to tolerate a nasogastric tube or patients that for certain reasons long-term nasogastric tube feeding is not appropriate.
- Therapeutic; e.g. tethering of a gastric volvulus.

5. Contra-indications to insertion of a PEG
Absolute contra-indication is the inability to access the stomach either endoscopically or trans-abdominally e.g. a large previous gastric resection can be a contra-indication.
- Extensive previous abdominal surgery as adhesions may increase the risk of bowel perforation.
- The poor general condition of the patient e.g.: cardio-respiratory failure.
- The presence of abdominal skin infection is also a short-term contra-indication as this may increase the risk of infection around the PEG tube.
- Presence of ascites.
The Nurse Endoscopist will assess these patients on an individual basis and decide upon safety of PEG insertion.
6. Patient preparation and psychological Care

For many patients PEG insertion can be quite a traumatic procedure. It is therefore important that the patient has been prepared adequately, particularly for those patients who are mentally alert. There is a leaflet entitled ‘Making the Decision’ available from Sr Carol Muir and via the Trust intranet site. The Lothian Best Practice Guidelines for enteral nutrition also give an outline of the procedure and the type of tube used. For any problems following a PEG insertion the Nutrition Sister and Nurse Endoscopist are available for advice regarding stoma care, care routines, mouth care and common problems.

Physical preparation prior to PEG insertion

- The patient should have a standard pre-op checklist completed as per routine endoscopy.
- Should wear a theatre gown.
- Should wear wrist name bands.
- Prior to transfer to endoscopy written informed consent should be obtained. This should be obtained from either the patient or under the Adults with Incapacity legislation, the consultant. The issue of Adult Incapacity Consent is particularly relevant to this procedure because a substantial number of patients requiring PEGs may be unable to provide informed consent. The family and next of kin should also be consulted before a decision is made but are never able to provide consent.
- Medical/Nursing notes should be available.
- The PEG request form completed should be available at the Endoscopy room.
- Corsodyl mouth wash 10mls should be given at 10 pm on the day before insertion.
- Patients should be Nil by Mouth or by nasogastric tube from 6 am on the day of the PEG insertion.
- Another Corsodyl mouth wash 10mls should be given at 8 am on the day of insertion.
- Augmentin 2.4g or Cefotaxime 2g IV should be given 1 h prior to PEG insertion.

7. Post Insertion Care

The patient will return to the ward with an endoscopy report filed in the medical notes stating which type feeding tube has been inserted. Normally a self-adhesive label indicating the type and batch number of the tube inserted would also be attached to the endoscopy report. This is information can prove to be very useful should the patient experience any problems with the particular tube or for advice should the tube be required to be removed. The latter is particularly important as certain tubes (very rarely used in our Unit) can only be removed endoscopically. The endoscopy unit however at the present time uses routinely the Abbot PEG tube that can be removed blindly through the anterior abdominal wall.

On return to the ward the following are important:
- Observations.
  1) Half-hourly pulse and blood pressure for 2 hours. Hourly pulse and blood pressure for the next 2 hours. Two hourly pulse and blood pressure for the following 2 hours.
  2) Temperature should be measured 4 hourly for the first 24 hours.
  3) The patient should also be checked for the presence of bowel sounds, and for evidence of peritonitis.
- Feeding can commence after 4 hours following PEG tube insertion (see page 53).
- Wound care:
  1) The wound site should be cleaned and dried using aseptic technique for the first 2 days.
  2) The first 24 hours are critical for development of infection around the PEG site. Therefore regular checks (3-4 times a day) for skin redness or swelling of abdomen or leaking of stomach contents are mandatory.

8. General Principals of Nursing Care

- Daily mouth care - Mouth washes should be continued if required.
- Hygiene - The patient must not have an immersion bath for 2 weeks following the procedure while the track around the inserted tube is being formed. However the patient can have a shower.
- Please do not insert any dressing under the fixation cover and do not release the fixation cover until the track is formed (for about 2 weeks). Over granulation of the stoma may occur and can be treated with hydrocortisone cream.

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• Please also note as the patient gains weight, the fixation cover needs to be readjusted but this is unlikely to occur over the first 2-3 weeks. If any problems arise the Nurse Endoscopist or Nutrition Sister who would be available too advise.

9. Long term complications

• Infection at the insertion site
• Oesophageal reflux resulting in aspiration pneumonia – Wherever possible the patient should be fed at an angle of at least 30° recumbent.
• Tube occlusion
• Accidental or intentional removal of PEG tube by the patient: please see page 10 of Lothian Enteral Tube Feeding Best Practice Statement

Acknowledgement

This document has been prepared by the Endoscopy Unit (Dr JN Plevris) after consultation with the Department of the Care of the Elderly (Dr B Chapman), Nutrition Sister (Mrs C Muir) and Nurse Endoscopist (Mr J Pendlebury) of the Royal Infirmary of Edinburgh. The Nutritional Guidelines operating at the Gastrointestinal Unit of the Western General Hospital, Edinburgh have been used as a reference.

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