


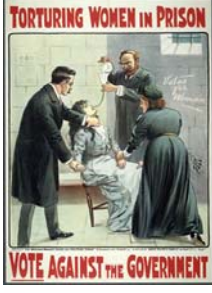
BSGIE 2012

Percutaneous Endoscopic Gastrostomy (PEG):
ethical aspects
indications
complications

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Introduction

- Optimal nutrition is cornerstone of every therapy

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 - Oral intake
 - Nasogastric / naso-enteric tube feeding
 - Percutaneous tube feeding (stomach / small bowel)
 - Endoscopy / surgery
- Children / adults
- Temporarily / long term




Introduction

- Percutaneous Endoscopic Gastrostomy (PEG)



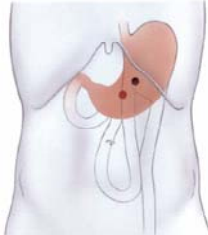
1968	Endoscopic retrograde pancreatography
1969	Colonoscopic polypectomy
1970	Endoscopic retrograde cholangiography
1974	Endoscopic sphincterotomy (w/bile duct stone extraction)
1979	Percutaneous endoscopic gastrostomy
1980	Endoscopic injection sclerotherapy (reinvented)
1980	Endoscopic ultrasonography
1983	Electronic (charge coupled device) endoscope
1985	Endoscopic control of upper gastrointestinal bleeding
1990	Endoscopic variceal ligation

Indications

- Percutaneous Endoscopic Gastrostomy (PEG)
 - Longterm tube feeding (>30 days)
 - Oral feeding not possible (swallowing disorders)
 - Extra feeding (normal swallowing)
- Ethical aspects
 - Cancer
 - Head / neck cancer: improvement of QoL
 - Other cancers (curative): reasonable
 - Terminal cancer (palliative): questionable
 - Neurological diseases
 - Swallowing disorders: improvement of QoL
 - Aspiration: improvement of QoL (jejunal extension)
 - Dementia: reasonable
 - Vegetative state: questionable

Procedure

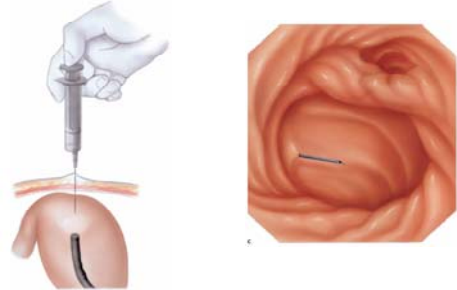
- Percutaneous Endoscopic Gastrostomy (PEG)
 - Empty stomach
 - Sedation and local anesthesia
 - Antibiotic prophylaxis (prevent infection)
 - Correction of coagulation (prevent bleeding)
- Localisation
- Impression (endoscopic view)
- Transluminiscence (outside view)

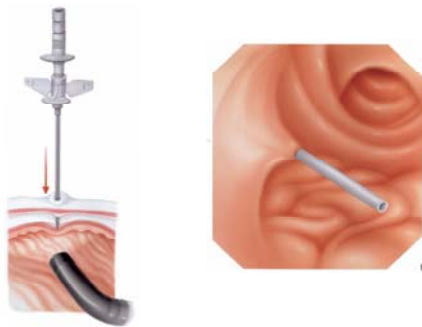
Procedure

- Percutaneous Endoscopic Gastrostomy (PEG)
 - Classical pull-type
 - Push-type
 - Loop-PEG (not yet available in Belgium)

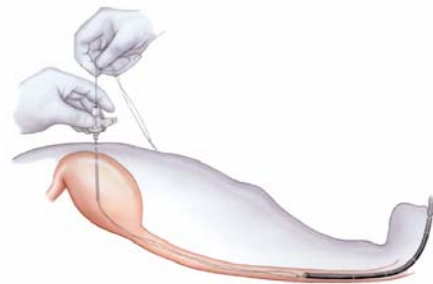
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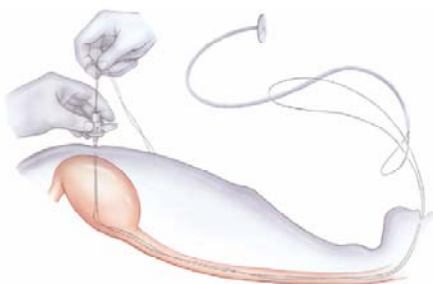
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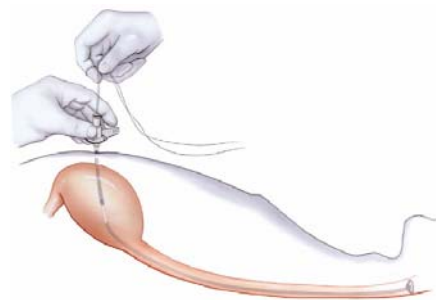
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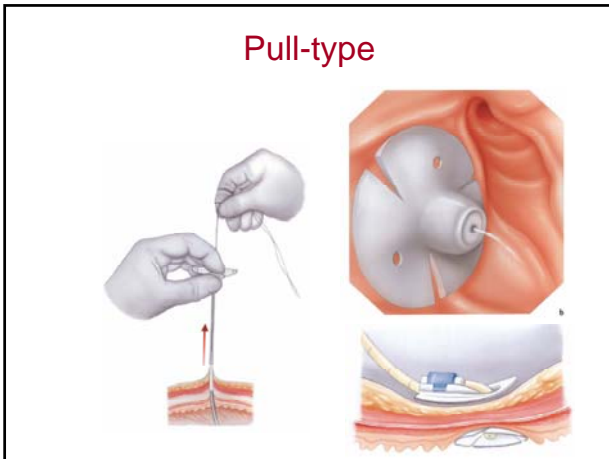


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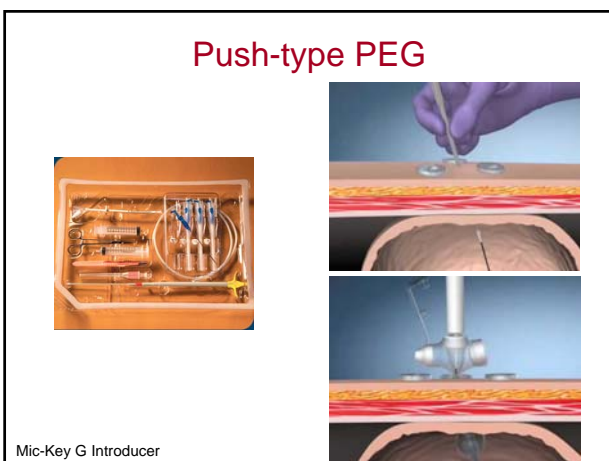
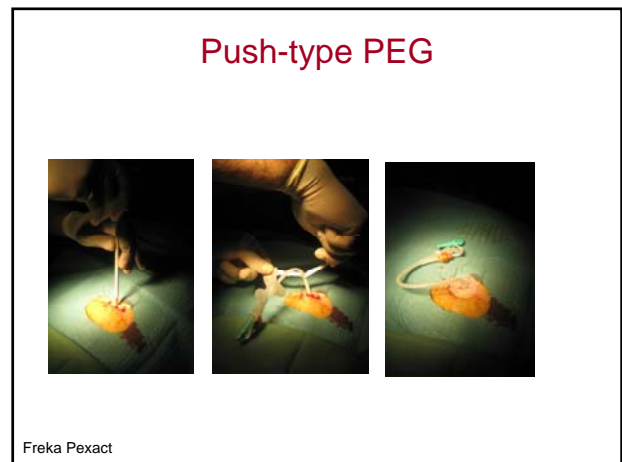
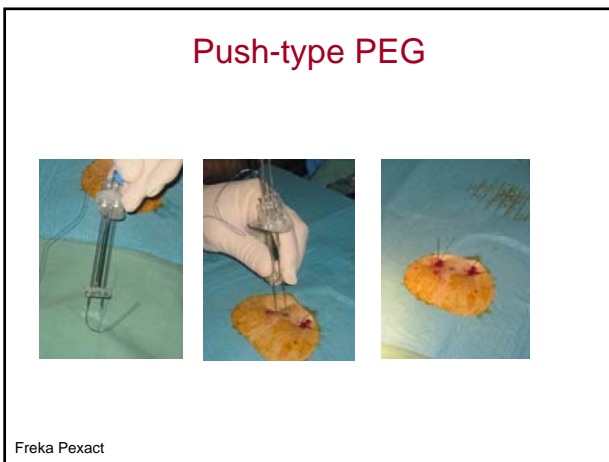
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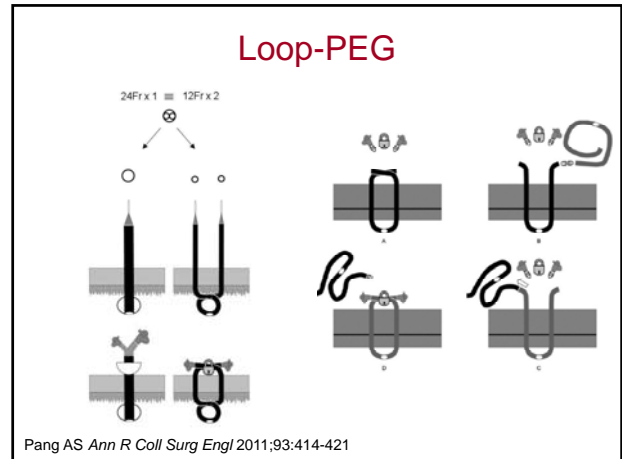
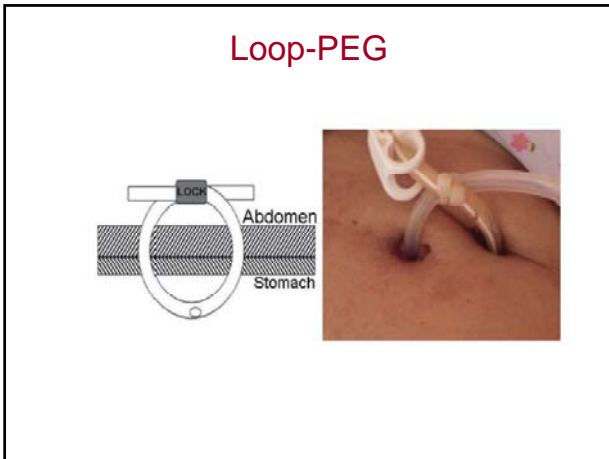
Contra-indications

- Pull-type PEG
 - Upper endoscopy not possible
 - Stenosis ENT, oesophagus
 - Entmetastases in gastrostomy
 - Ascites
- Push-type PEG
 - Upper endoscopy with baby endoscope (small caliber / transnasally)
 - Avoid entmetastases
 - Feasible with ascites (gastropexy)
- Freka Pexact PEG
- Mic-key G introducer PEG



Push-type PEG

- Pro
 - Transnasal endoscopy
 - Ascites
 - No entmetastases
- Contra
 - Freka pexact PEG
 - Gastropexy with 2x2 needles
 - Sutures have to be removed after 2 weeks
 - Temporary tube has to be replaced after 4 weeks
- Mic-Key Introducer PEG
- Progressive dilation of gastrostomy



Complications

- Many possible complications
- Minor (13-60%)
 - Wound infection, leakage, bleeding
 - Gastric ulceration
 - Pneumoperitoneum without peritonitis
 - Transient paralytic ileus of gastric outlet obstruction
 - Persistent gastric fistula after removal of PEG tube
- Major (3-10%)
 - Necrotizing fasciitis
 - Buried bumper syndrome
 - Colonic or liver perforation
 - Death

