Advanced Enteral Access

Choosing the Right Tube for You

Lauren Schwartz, M.D.
Mount Sinai Hospital, NY

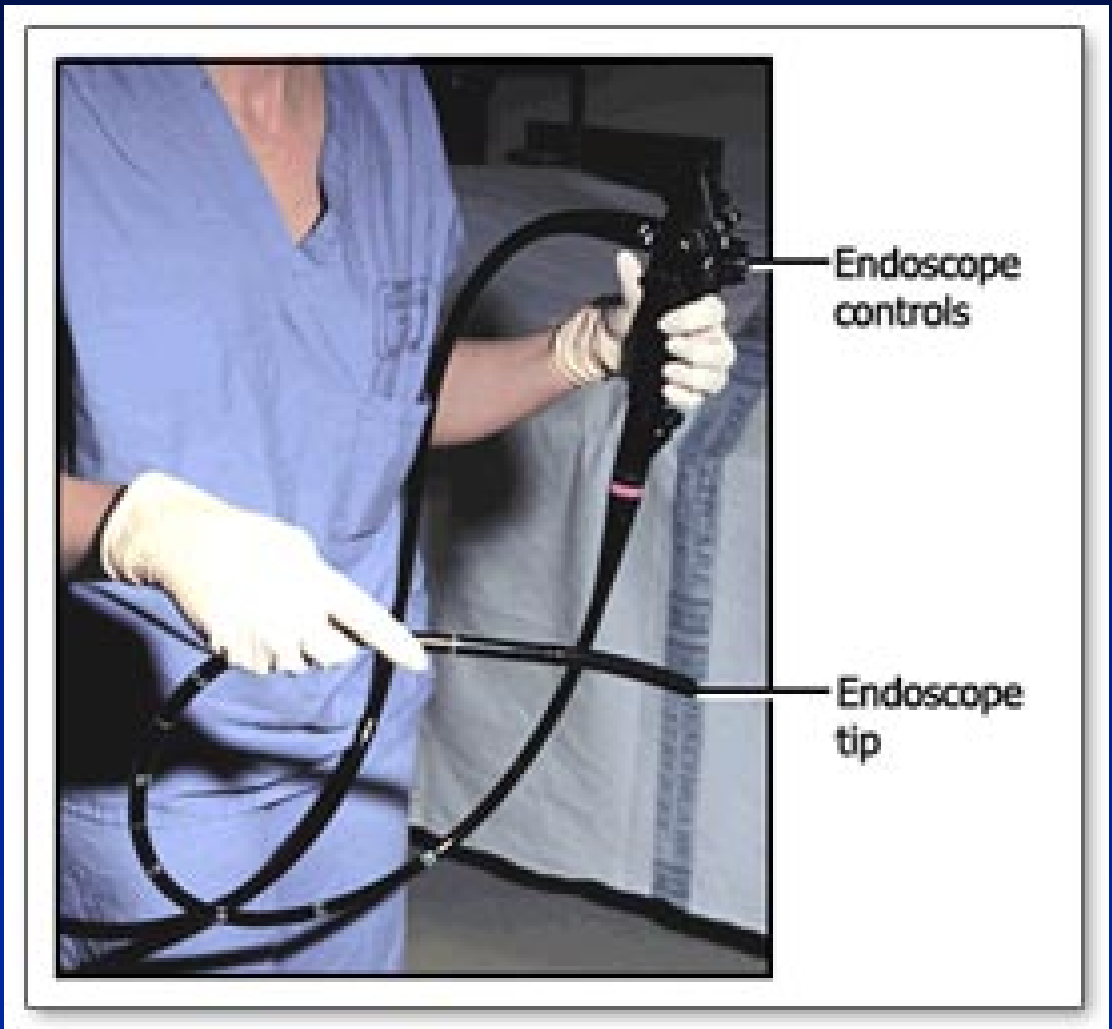
Discussion Outline

- Types of Tubes
- Indications for post pyloric tubes
- PEG-J versus Direct J
- Special situations
  - Ascites
  - Tube dislodges

Types of Tubes

- Technique
  - Surgical vs. radiology guided vs. endoscopic
- Short term vs. long term
  - Nasogastric, nasojejunal
  - PEG, PEG-J, Direct PEJ
- Pre vs. Post Pyloric

The Endoscope



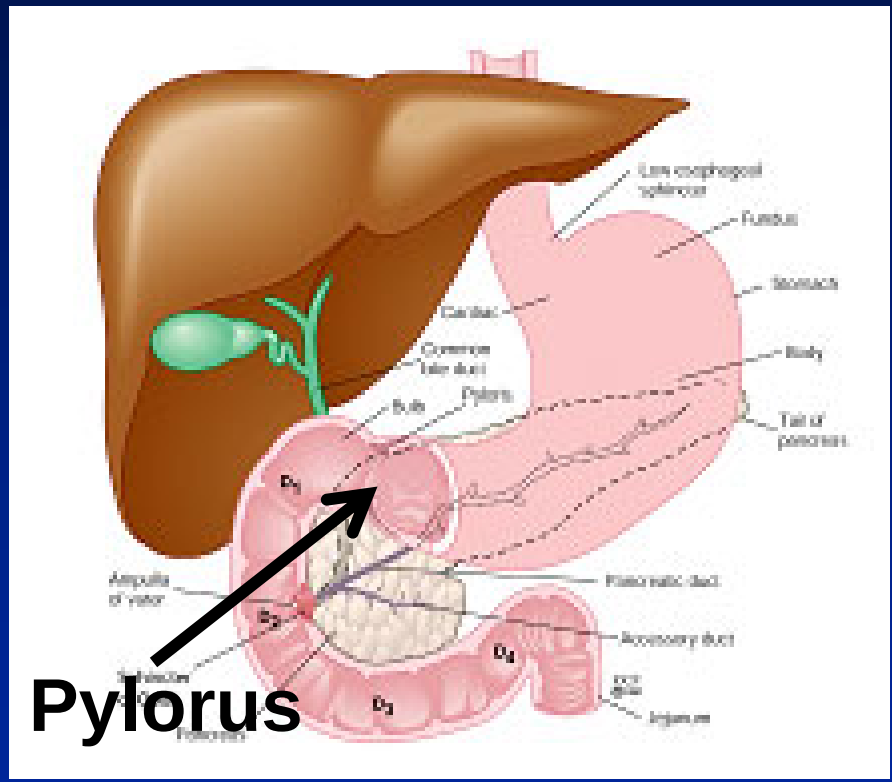
Short Term Tubes

- Nasoenteric Tubes (NGT, NJT)
  - Intended for usage up to 4 weeks
  - NGT placed into stomach by feel
  - NJT placed into small bowel under endoscopic guidance

Methods
Drag and pull
Over the guidewire
Through the scope
Transnasal endoscopy

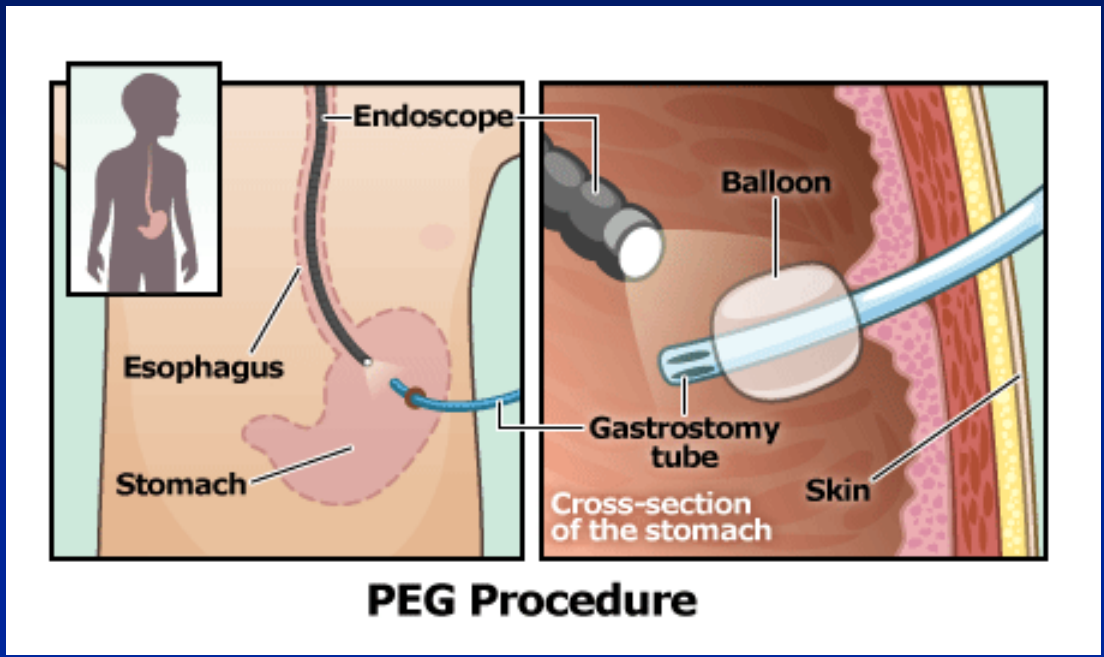
Long Term Tubes

- Pre-Pyloric
  - PEG
- Post Pyloric
  - JET PEG
  - Direct PEJ



PEG

- Percutaneous endoscopic gastrostomy



Transillumination

Indentation

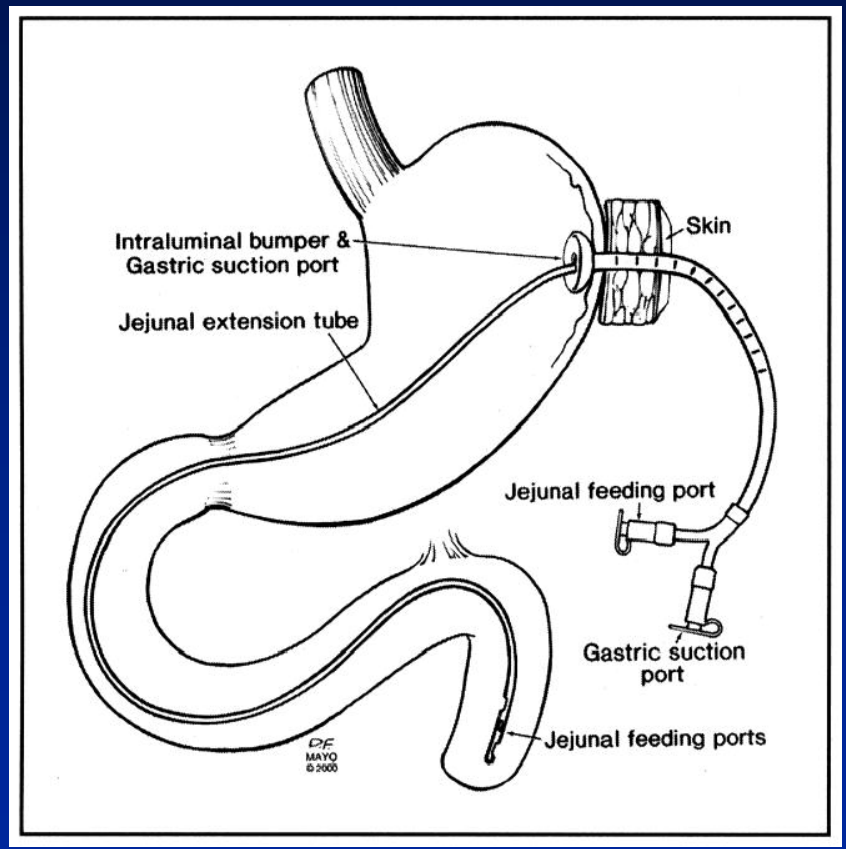
Incision

Tube Insertion

JET-PEG

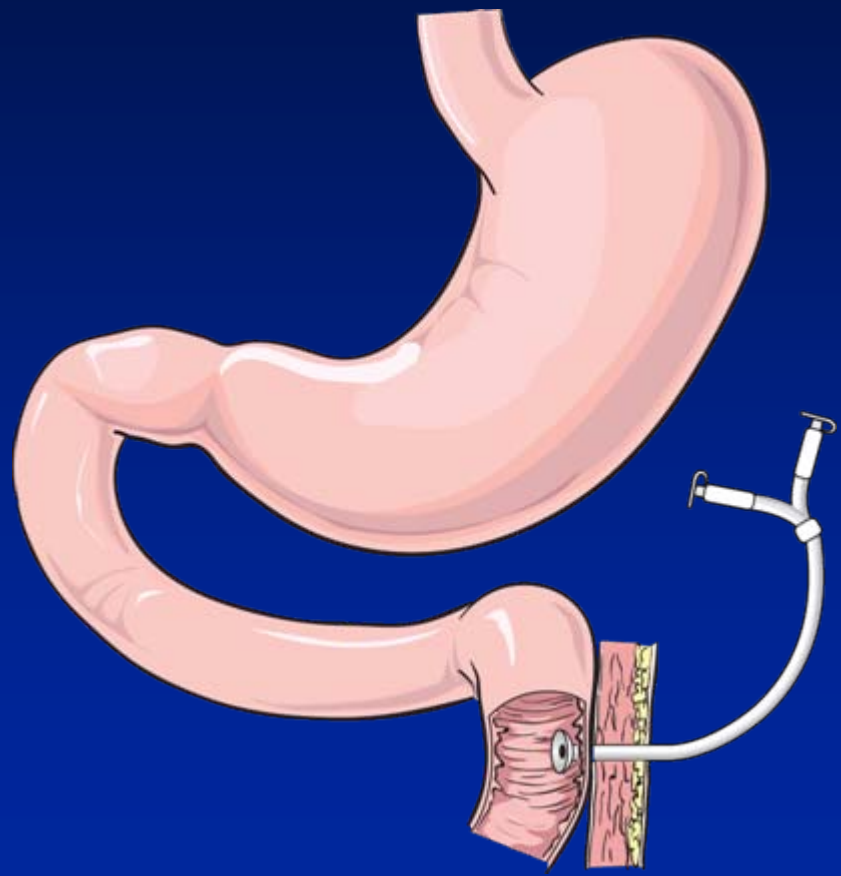
- PEG placed
- Jejunal extension
  - Passed through PEG
  - Grasp and drag

Pro	Con
Single stoma to drain and feed	Extension placement difficult
Take advantage of existing PEG	Extension migrates or clogs



Direct PEJ

- Tube placed directly into jejunum
  - Technique similar to PEG placement
  - Use pediatric colonoscope
  - 20 French tube with mushroom bumper (avoid balloon)
  - Unusual tube locations common



Shike GIE 1987;33:372-4.

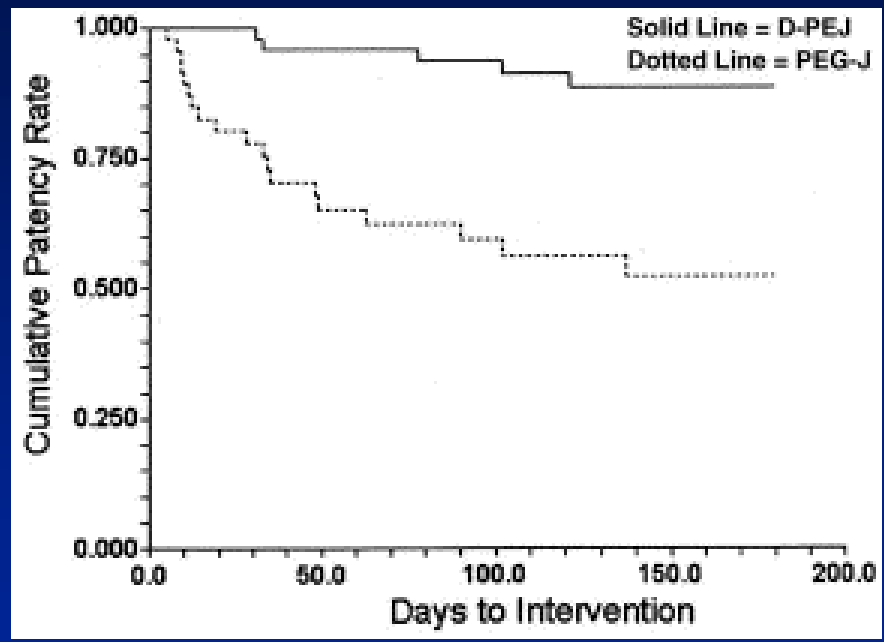
Indications for Jejunal Feeding

- Prior gastric surgery
  - Gastrectomy
  - Esophagectomy/gastric pull-up
- Gastric dysmotility
  - Gastroparesis
  - Mechanical ventilation
- Gastric outlet obstruction
- Recurrent aspiration of gastric contents
- Acute severe pancreatitis

JET PEG vs. Direct PEJ

	N	Reintervention at 6 mos (%)
JET PEG	56	13.5
D PEJ	49	55.9

p<0.001



JET PEG is less stable and requires more reintervention than DPEJ

Fan GIE 2002;56:890-94.

Jejunal Feeding Tubes

	Success	Morbidity	Availability	Durability	Utility
Surg J	Excellent	17% minor 2% major	Good	Moderate	•At time of other surgery •If other methods fail
JET PEG	Good	>20%	Good	Poor	If D PEJ not possible
D PEJ	Good	6% minor 2% major	Poor but increasing	Excellent	Procedure of choice

Courtesy of Mark Schattner

Special Situations

- Ascites (fluid in abdominal cavity)
  - Can impair formation of a tract between stomach and skin
    - Increased risk of gastric leak
  - Can lead to leakage from stoma site
  - Causes:
    - Liver disease (cirrhosis)
    - Malignancy
    - Other

Special Situations

- Ascites
  - Avoid PEG, PEJ in patients with liver disease and ascites
    - Rapid reaccumulation, higher volumes
  - Proceed with PEG, PEJ in patients with malignant ascites
    - Remove fluid first (paracentesis)
    - Place tube
    - Slower reaccumulation, lower volumes

Special Situations: Tube Dislodges

- Tube falls out
  - < 4 weeks post procedure
    - Allow tract to close
    - Monitor closely
    - Repeat procedure
  - > 4 weeks post procedure
    - See MD immediately
    - Reinsert foley tube or replacement tube
    - Obtain tube study to confirm position

Summary

- Feeding tubes can be placed surgically, endoscopically, and radiographically
- Endoscopic options can be placed into the stomach (pre-pyloric) or small bowel (post pyloric)
- Of the small bowel tubes, the D PEJ is the choice option, but not all MDs perform procedure

Summary

- Patients with malignant ascites are candidates for endoscopic tube placement
- If the catheter becomes dislodged, proper intervention will be depend on presence/absence of mature tract