Management of Gastroparesis

Bible Class

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What is the definition of gastroparesis?

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Problem: functional dyspepsia and accelerated gastric emptying can present with similar symptoms

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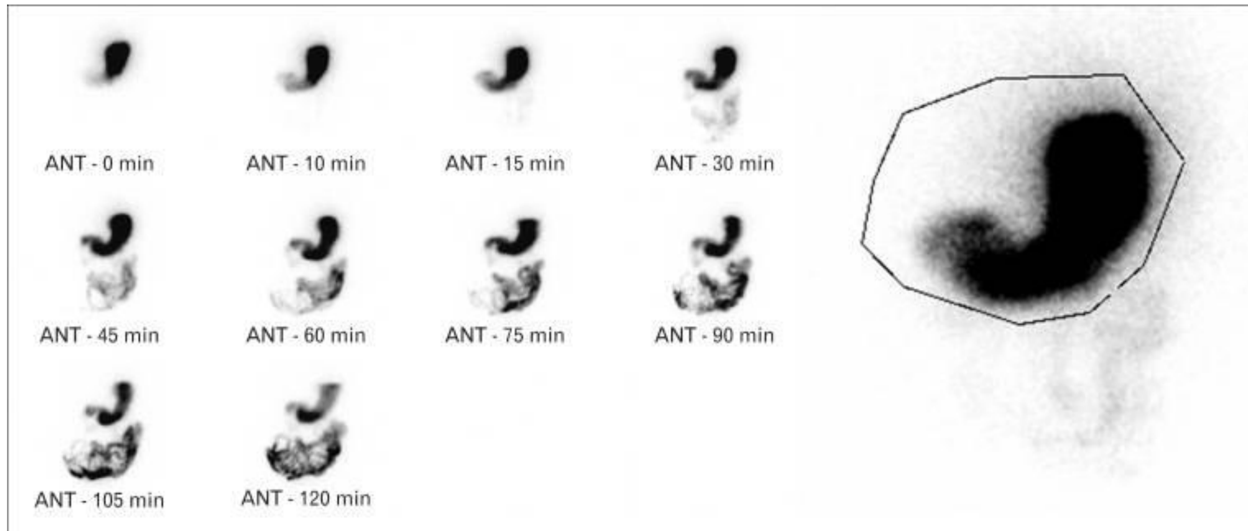
1. Gastric emptying scintigraphy

Ingestion of a solid meal to which a radiotracer is bound (usually radiolabel egg Albumen with Tc-99m sulfur colloid; but consensus on the optimal test meal is lacking)



J Neurogastroenterol Motil. 2011 April; 17(2): 189–191

Most reliable T1/2 has been reported after 4h; defined as leased 50% emptying

2. Wireless capsule motility testing

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3. Breath tests (13C-octonate test)

However, gold standard is gastric emptying scintigraphy

What can be the cause of gastroparesis?

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- Diabetes mellitus
- Idiopathic gastroparesis
- Hypothyroidism
- Postsurgical gastroparesis (Roux Y Gastrojejunostomie, Fundoplicatio (Nissen)
- Iatrogen gastroparesis

  vagus nerve injury (in elder patients ulcus surgery)

  Anticholinergic agents, opoids

  Glucagon-like peptide-1 analogs (exanatide)
- Cholinergic dysautonomia

  (caused by an underlying viral infection CMV, Ebstein-Barr, Varizella)
- Parkinsonism
- Amyloidosis
- Paraneopalstic disease
- Scleroderma
- Mesenteric ischemia

Principles of the management of gastroparesis?

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- Restoration of fluids (enteral alimentation should be preferred)
- Diet / glycemic control
- Pharmacological therapy
- Surgical intervention

What are the principles of oral nutrition / diet?

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- Meals with low fat content and low –fiber content; 4-5 meals a day
- Supplementation with high calory liquids
- Avoid carbohydrated beverages
- No alcohol and smoking

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dipeptidyl peptidase (DPP) IV inhibitors (e.g., sitagliptin and vildagliptin)	**no**
Sulfonylureas (Glimipirid)	**no**
Glitiazones (pioglitazone)	**no**

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Erythromycin (3 mg/kg every 8 h	lactobiont	QT prolongation tachyphylaxis by downregulation of motilin receptors (4 weeks)

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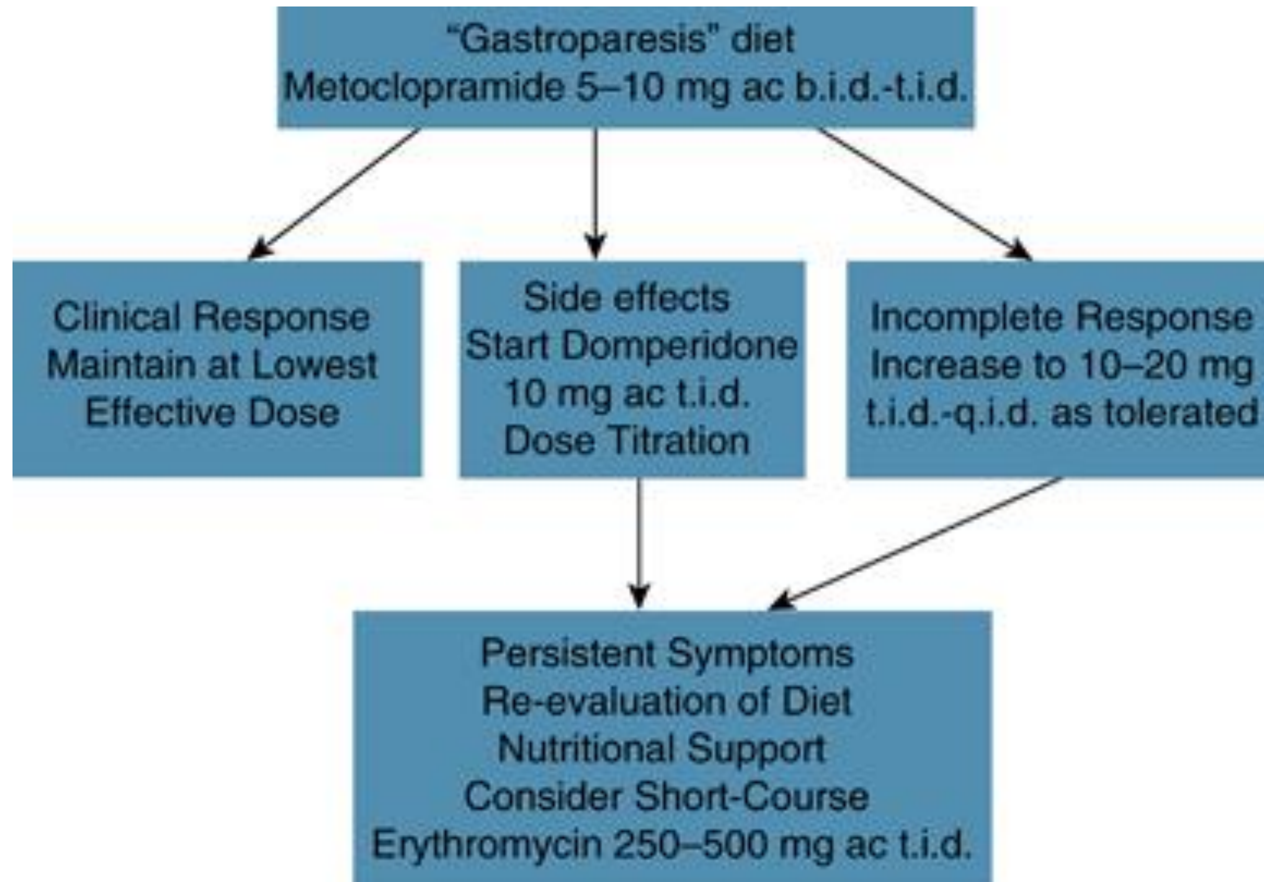
Aprepitant	Neurokinin -1 receptor antagonist	Dizziness, headache, elevated liver transaminase

Flow chart summarizing the pharmacological treatment of gastroparesis



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- Complete gastrectomy can be considered

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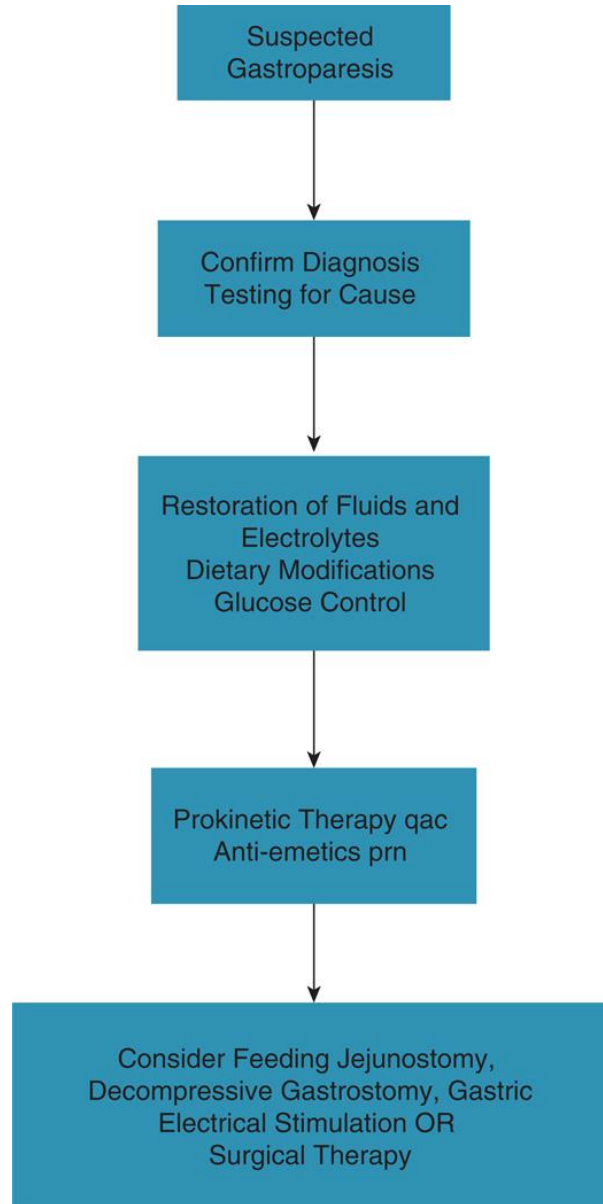

Thank you