Upper GI Disorders

- Nausea- urge to vomit
- Vomiting- expelling stomach contents(emesis)
- May require NG tube for drainage/decompress stomach
- Document color/consistency/amount
- Monitor for S/S of dehydration

Eating Disorders

- Anorexia
  - Lack of appetite
  - Symptom of many diseases
- Complications
  - Electrolyte imbalance
  - Cardiac dysrhythmias

Anorexia Nervosa

- American Psychiatric Association criteria:
  1. Refusal to maintain body weight over minimum weight for age & height
  2. Intense fear of gaining weight or becoming fat, even though underweight
  3. Disturbance in the way in which one's body weight, shape , or size is experienced
  4. In females, the absence of at least 3 consecutive menstrual cycles

Anorexia Nervosa (cont.)

- More common in females
  - Age 12 – 18
  - Middle/upper Western culture
  - Highest risk - ↓ self esteem
- Male account for ~ 5 -10%
- Psychological in origin
  - Phobia of weight gain
  - Attempt at control
  - Often mistrusting

Signs & Symptoms

- Severe weight loss
- Low self-esteem
- Compulsive dieting
- Altered body image
- Amenorrhea
- Electrolyte imbalance, dysrhythmias
- Constipation
- Dry skin, lanugo

Medical Management

- Restoration of nutritional health
- Acute phase
  - IV infusions w/electrolyte
  - Tube feedings
  - Oxygen supplementation
- Intense psychotherapy
  - Behavioral modification
  - Include pt's significant others

Bulimia Nervosa

- Compulsive eating with self-induced vomiting (binge-purge)
- Laxatives may be used
- Attempt to control weight
- More common in young women
- May be normal weight

Signs & Symptoms

- Similar to anorexia nervosa
- Enamel erosion of front teeth
- Large salivary glands (parotids)
- Sores on fingers
- After meals – bathroom
- Metabolic alkalosis
  - Loss of gastric acid

Treatment

- Similar to anorexia nervosa
- Multidisciplinary
  - Therapy (positive reinforcement/behavior modification)
  - Nutritional support
  - Healthy weight gain/loss

•Obesity

- Height-Weight chart
  - 10-20% > ideal weight overweight
  - >20% ideal weight obese
- Waist to Hip Ratio (waist ÷ hip)
  - >1.0 men
  - >0.8 women (overweight)
- BMI - > 30 obese
- Caloric intake > energy expenditure

Medical Management

- Weight loss
  - Exercise & dieting
  - Pt cooperation & continued motivation
- Take Off Pounds Sensibly (TOPS)
- Weight Watchers
- Medications used to suppress appetite or block fat absorption(Meridia, Xenical, Alli)

Bariatric Surgery Criteria

- Gross Obesity for > 5 years
- Failure to decrease weight by other forms
- Body weight of > 100% ideal wt
- Absence of other medical conditions
- Psychologically/socially stable
- Wt loss would relieve a high risk condition (HTN, DM, heart disease)

Gastric By-Pass

- Roux-en-Y
  - Two step surgery
  - Small stomach pouch created with staples
  - Y shaped section of intestine attached to allow food to bypass lower stomach
- Vertical banded gastroplasty
  - Small pouch made with staples
  - Mesh band applied in circular window
  - Restricts and slows food passage into intestines

Bariatric Surgery
Post-op guidelines (Immediate).

- Wk 1-2: Low-fat, low-sugar, all liquid diet. Meals 3 hrs apart.
- Wk 3-4: Pureed diet (consistency of applesauce.) Meals 3 hrs apart.
- Wk 5 +: Sm. amts of solid foods. Meals 5 hrs apart. No liquids during or shortly following meal.

(AORN, 2003)

Bariatric Surgery
Post-op guidelines. (Lifetime)

Eat 3 meals per day

- Include 2 protein snacks per day
- Restrict total meal size to 1 cup
- Eat slowly
- Chew thoroughly
- Do not eat and drink at the same time

(AORN, 2003; Am. J Surg, 2002)

Bariatric Surgery
Post-op guidelines. (cont.)

- Drink plenty of water from 90 min after each meal until 15 min before next meal.
- Avoid liq. Calories
- Walk at least 30 min. each day.

(AORN, 2003; Am. J Surg, 2002)

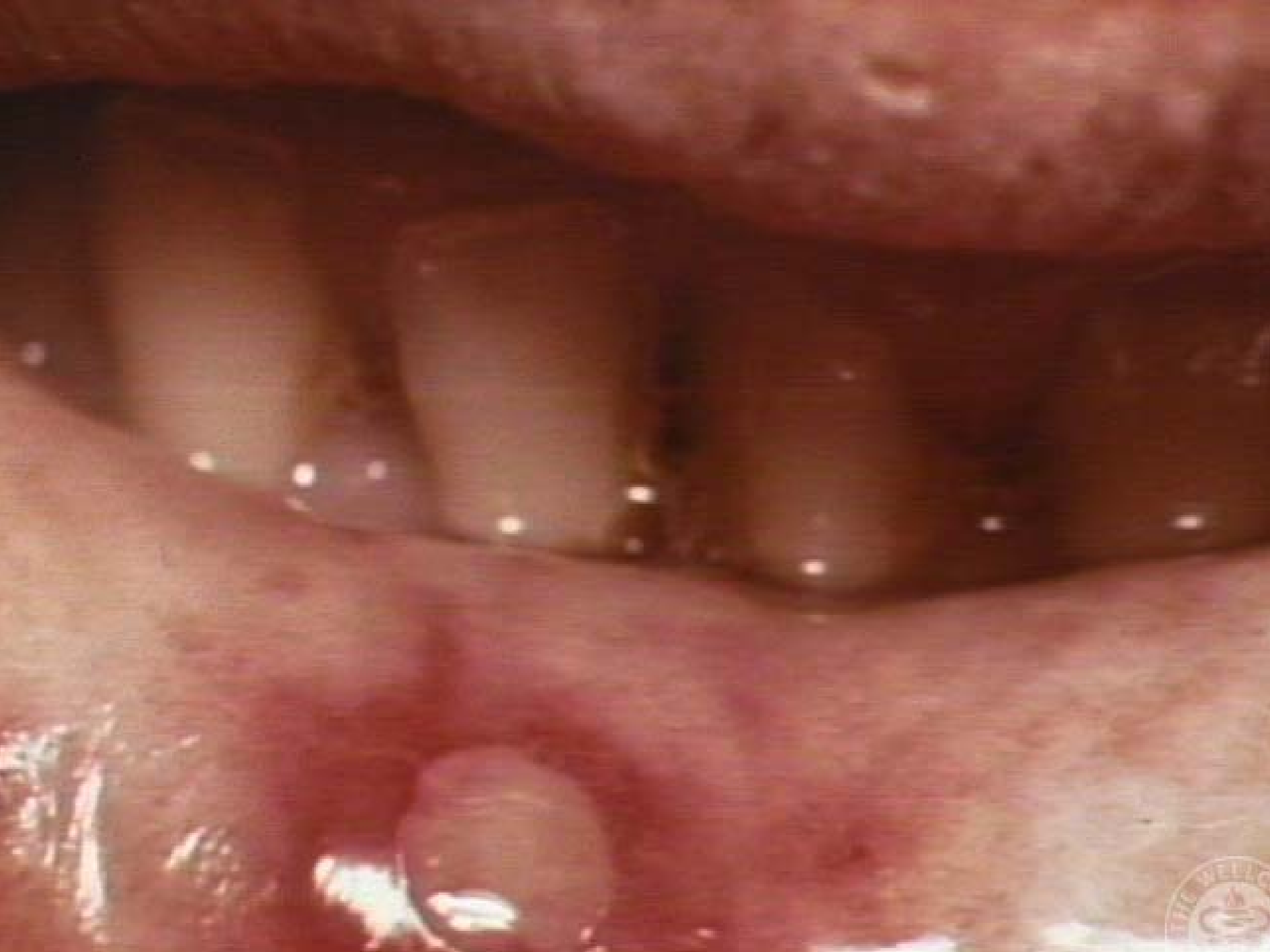
Oral Health

- Important to overall health
- Regular oral hygiene and care is important to prevent infections
- Oral decay, periodontal disease, dentures not fitting properly can interfere with proper nutrition
- Provide oral care and monitor for any problems

Canker sores(Aphthous stomatitis)

- Recurrent, small, white painful ulcers
- Inner cheeks, lips, gums, tongue, palate and pharynx
- Exact cause is unknown
  - May be viral, but unsure.
- Treatment
  - Usually heal spontaneously in few days
  - Local anesthetics for pain

Last several days-two weeks



Herpes simplex (HSV-1)

- Cold sores or fever blisters
- Painful vesicles
- Occur on lips, perioral area, cheeks, nose
- Cause is herpes simples virus type I
- Usually resolve spontaneously, but often recur.
- Treatment not necessary

Oral Cancer

- Can occur anywhere in mouth/throat
- Curable with early detection
- S/S
  - oral sore not healed in two weeks
  - Painless, become tender as CA progresses
  - Late Stages: difficulty swallowing/speaking
- Dx with biopsy
- Tx
  - Radiation
  - Chemo
  - Radical Neck Dissection

Esophageal Cancer

- Associated with tobacco & ETOH
- Prognosis usually poor
- S/S (associated late stages of cancer)
  - Swallowing difficulties
  - Full feeling, chest pain after eating
  - Foul breath
- Complications
  - Obstruction w/regurgitation
  - Fistula formation w/possible rupture

Esophageal Cancer (cont.)

- Treatment
  - Radiation, chemotherapy
  - Surgery
    - Esophageal resection (esophagogastrostomy)
    - Dacron esophageal replacement or replace esophagus w/section of colon
    - Esophageal dilation or stent placement
      - If tumor inoperable
      - Relieves dysphagia and allows food passage

Hiatal hernia

- Part of stomach protrudes thru the hiatus (opening) of the diaphragm
- Common in women, obese, pregnancy and >60yrs of age
- S/S
  - None if small
  - Large
    - Pain, heartburn, full sensation, reflux

Hiatal hernia

- Treatment
  - Antacids
  - Small meals
  - **Upright 1 hr pc**
  - Avoid HS snacks, spicy foods, ETOH, caffeine, smoking
  - **↑ HOB 6 – 12 inches to prevent reflux**
  - Surgery

Gastroesophageal Reflux Disease (GERD)

- Gastric secretions reflux into esophagus
  - Potential damage to lining
    - Acid secretions
    - Digestive enzymes
- Cause
  - Conditions that affect cardiac (LES) sphincter
    - Unable to close tightly (ie, hiatal hernia)
- Common in elderly

Gastroesophageal Reflux Disease (GERD)

- S/S
  - Heartburn – most common symptom
  - Regurgitation
  - Dysphagia
  - Bleeding
- Complications
  - Aspiration
  - Scar tissue development (Chronic Inflammation)
  - Barrett's Esophagus
    - Precancerous lesion (risk for esophageal CA)

Gastroesophageal Reflux Disease (GERD)

- Treatment
  - Goal - ↓ reflux
  - Medications
    - Antacids
    - H2 receptor antagonists
    - Proton pump inhibitors(PPI)
    - Cytoprotective agents
    - Promotility agents

GERD treatment (cont.)

- Weight loss
- Low fat, high protein diet
- Avoidance of caffeine, dairy products, spicy foods
- Surgery if severe
  - Fundoplication

Mallory-Weiss Tear

- Logitudinal tear in esophagus at stomach junction
- Hiatal hernia usually present
- S/S: bright red emesis, bloody/tarry stools
- Dx with EGD and check H/H
- Treatment:
  - Self heal without intervention
  - PPI, antiemetic
  - Treat bleeding if necessary
  - Monitor for s/s bleeding

Gastritis

Inflammation of the stomach mucosa
acute/chronic

- Causes
  - Overeating
  - Direct irritation
    - Spicy foods
    - Contaminated foods
  - ETOH, ASA, acids or alkalis, NSAIDS, Chemo
  - microorganisms,
  - Stress
  - Smoking
  - Radiation

Acute Gastritis (cont.)

- Signs & Symptoms
  - Abdominal pain/tenderness
  - Nausea
  - Anorexia
  - Feeling of fullness/belching
- Treatment
  - Removal of irritating substance
  - Bland diet (soft, easy to digest)
  - Antacids

Chronic Gastritis

- Two types
- Type A
  - Autoimmune gastritis
  - Results from changes of mucosa cells
  - Fundus or body of the stomach
  - Lack of intrinsic factor
  - Difficulty absorbing Vitamin B12
    - Pernicious anemia

Chronic Gastritis (cont.)

- Type B
  - Antrum and pylorus
    - (low end of stomach near duodenum)
  - Associated w/***Helicobacter pylori***
    - ***Most Common Type***
  - Signs/Symptom
    - Poor appetite
    - Post parandial heartburn
    - Belching
    - Sour taste
    - Nausea & vomiting

Peptic Ulcer Disease

- Cause
  - Infection with gram (–) bacteria H-pylori
    - 80% of gastric ulcers
    - 90% of duodenal ulcers
    - Occurs most commonly in Hispanics, African Americans & lower socioeconomic groups
    - Transmission
      - Oral-oral or oral-fecal route most likely
      - Contaminated water
    - Risk factors include smoking, stress, caffeine, GI Irritant meds (ASA, NSAIDS, Steroids)

Pathophysiology

- Erosion of stomach, pylorus, duodenum or esophagus
  - May extend to muscle layers/peritoneum
  - Due to increase HCL and pepsin
- Damaged mucosa unable to secrete enough mucous

Signs & Symptoms (Vary with location)

- Gastric:
  - Aching, burning
  - Gnawing pain in Left epigastric region
  - Pain with food or 1-2 hours pc may worsen with food
  - Antacids ineffective
  - Malnourished/Hematemesis present
- Duodenal
  - Intermittent midepigastric pain
  - Upper abdominal burning/cramping
  - Increased 2-4 hrs pc, or middle of night
  - Well nourished/ melena present
- Both:
  - Anorexia
  - Nausea and vomiting
  - Bleeding with ulcer erosion

Diagnosis

- H-pylori breath test
- IgG antibody detection test
- Biopsy (most common)
- UGI
- Esophagogastroduodenoscopy (EGD)

Treatment

- Several treatment options
  - Combo of 2 antibiotics and one PPI or H2 antagonist (accepted regimen for H. pylori) Tx lasts 14 days
- Bismuth subsalicylate (Pepto-Bismol) (antibacterial effects)
- Antacids – neutralize acid already formed
- PPIs- powerful agents to stop final step of acid production
- Mucosal barrier fortifiers (Carafate) – forms a protective barrier
- Other tx's to help protect mucosa until ulcer healed
  - Bland diet
  - Avoidance of spicy/aggravating foods
  - Avoidance of caffeine, carbonated drinks
- Can lead to perforation/obstruction

Stress Ulcers

- Occurs in critically ill patients
  - Burns, infections, cerebral trauma, major surgery
- Cause
  - ↓ blood flow
    - Ischemia and mucosal damage
  - Normal acids cause erosions

Gastric Bleeding

- Cause
  - Ulcer perforation
  - Tumors
  - Gastric surgery
- S/S
  - Hematemesis (vomiting blood)
  - Melena (tarry stools)
  - Coffee ground emesis
  - Occult blood(hidden)

Treatment

- Goal – prevent shock, dehydration, electrolyte imbalance and continued bleeding
- NPO
- IV's
- Urinary catheter – monitor output
- NG tube
  - Assess rate of blood loss
  - Decompress stomach
  - Saline lavage if ordered

Gastric Cancer

- Malignant lesions in stomach
- 2nd most common cancer in world
- More common in men
- Associated with
  - Chronic H-pylori infection
  - Pernicious anemia
  - Occupational exposure (i.e., lead dust, grain dust, glycol ethers, leaded gasoline
- Diet high in smoke fish/meats

Signs & Symptoms

- Occur late
- Indigestion
- Anorexia
- Pain relieved by antacids
- **Weight loss**
- Nausea and vomiting
- Anemia – blood loss
  - Occult blood may be present in stool

Treatment

- Surgery
  - Done to relieve symptoms
  - Usually cancer has already metastasized
- Chemotherapy
- Radiation
- Combos

Gastrectomy

- Removal of part or all of the stomach
- Subtotal (partial removal)
  - Treats cancer
  - Removes lower 2/3rds of stomach
  - 2 types
    - Billroth I (gastoduodenostomy)
    - Billroth II (gastrojejunostomy)

Gastrectomy

- Total
  - Complete stomach removal
  - Extensive stomach ca
  - Anastomosis of esophagus to jejunum
- Vagotomy
  - Vagus nerve is cut
    - Eliminate vagus stimulation
      - ↓ HCL, gastrin secretion and slows gastric motility
  - May be performed in both subtotal & total

Gastrectomy

- Complications
  - Hemorrhage
  - Gastric distention
  - Nutritional problems
    - Vit B12 & folic acid deficiency
    - ↓ absorption of calcium & vit D
  - Steatorrhea (fat in stools)
  - Pyloric obstruction
  - Dumping syndrome