Lower Gastrointestinal Pathology
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GI Pathology Outline

- Esophagus
- Stomach
- Intestine
- Liver
- Gallbladder
- Pancreas
GI Pathology Outline

- Esophagus
- Stomach
- Intestine
  - Diverticulosis
  - Inflammatory bowel disease
  - Adenoma
  - Carcinoma
Diverticulosis

- Mucosa/submucosa herniates through muscle wall
- Older patients, low fiber diet
- Sigmoid colon
- Asymptomatic unless infected ("diverticulitis")
Diverticulosis
Diverticulosis
## Inflammatory Bowel Disease

<table>
<thead>
<tr>
<th>Crohn Disease</th>
<th>Ulcerative Colitis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Anywhere</td>
<td>• Colon only</td>
</tr>
<tr>
<td>• Patchy</td>
<td>• Continuous</td>
</tr>
<tr>
<td>• Transmural</td>
<td>• Superficial</td>
</tr>
<tr>
<td>• Poor response to surgery</td>
<td>• Good response to surgery</td>
</tr>
<tr>
<td>• Increased risk of cancer</td>
<td>• Increased risk of cancer</td>
</tr>
</tbody>
</table>
Crohn disease

- Transmural inflammation
- Skip lesions
- Stricture
- Linear ulceration
- Fissures

Small intestine

Ulcerative colitis

- Continuous colonic involvement, beginning in rectum
- Active disease: superficial ulceration
- Inactive disease: atrophy
- Pseudopolyp

Large intestine
Adenoma

- Common! 50% of people >60.
- Benign glands; may become dysplastic
- More dangerous when:
  - Large (>1 cm)
  - Villous architecture
  - Severely dysplastic
Tubular adenoma of colon
Villous adenoma of colon
Dysplastic (L) vs. normal (R) epithelium
Colon Carcinoma

- Almost always arises in adenomatous polyp
- Diet: low fiber, high fat, lots of refined carbs
- Symptoms:
  - silent for years
  - fatigue, weakness, iron-deficiency anemia
  - occult bleeding, crampy pain
- 5 year prognosis: 4% (stage 4) - 90% (stage 1)
Colon carcinoma
Colon carcinoma