Radiology of the Esophagus: A Pattern Approach
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Patterns of Disease

- Nodules or plaques
- Ulcers
- Abnormal Folds
- Strictures
Diffuse Nodules or Plaques

*Cause*  
- Reflux
- Candida
- Glycogenic acanthosis

*Finding*  
- Poorly defined nodules
- Discrete plaques
- Nodules or plaques
### Localized Nodules or Plaques

<table>
<thead>
<tr>
<th><strong>Cause</strong></th>
<th><strong>Finding</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Candida</td>
<td>Discrete plaques</td>
</tr>
<tr>
<td>Superficial Ca</td>
<td>Coalescent nodules</td>
</tr>
<tr>
<td>Barrett’s</td>
<td>Reticular pattern</td>
</tr>
</tbody>
</table>
Ectopic Gastric Mucosa

- Congenital anomaly due to incomplete reg of columnar epith in fetal esophagus
- Unrelated to Barrett’s
- No clinical significance
- 4% of population at endo
- Rt lateral wall at thorac inlet
- Flat ulcer or dissection
Herpes Esophagitis in Healthy Pts

- Young men (15-30 y/o)
- Sexual partners with OP herpes
- Flu-like prodrome (3-10 days)
- Severe odynophagia
- Multiple tiny ulcers
- Sx resolve in 3-14 days

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Drug-Induced Esophagitis

- Contact esophagitis due to oral medications
- Usually at level of aortic arch or left main bronchus
- Discrete, superficial ulcers
- Severe odynophagia, but rapid clinical improvement
HIV-Related Ulcers

- Odynophagia and giant ulcers
- Maculopapular rash
- Recent seroconversion
- Biopsies, brushings, & cultures negative for CMV
- Treatment with steroids
Abnormal Folds

- Esophagitis
- Varices
- Varicoid carcinoma
Midesophageal Strictures

- Barrett’s esophagus
- Mediastinal irradiation
- Caustic ingestion
- Eosinophilic esophagitis
- Primary or metastatic tumor

Eosinophilic Esophagitis (EoE)

- Young men with longstanding dysphagia and food impactions
- Allergic hx, asthma, and periph eos
- Diff from GERD by high # eos/HPF
- Steroids (including inhaled preps)
- Stricture/small caliber/ringed esoph
  (Radiology 2010;256:127-134)
**Lichen Planus (LP)**
- Inflamm disorder affecting skin, oral mucosa, & esoph in elderly women
- Predilection for wrists/ankles/muc mem
- 50% present with esophageal disease before dev of cutaneous or oral lesions
- Long-standing dysphagia/food impact
- Esophageal stx or small caliber esoph
  (AJR 2017;208:1-6)

**Histopath Criteria**
- Lymphocytic infiltrate
- Keratinocyte degen
- Civatte bodies (necrotic keratinocytes)
- Few or no intraepith eos

**Small Caliber Esophagus**

<table>
<thead>
<tr>
<th>Eosinophilic Esophagitis</th>
<th>Lichen Planus</th>
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<tr>
<td>Young men</td>
<td>Older women</td>
</tr>
<tr>
<td>Atopic history, asthma, peripheral eosinophilia</td>
<td>Chronic rash on skin and mucous membranes</td>
</tr>
<tr>
<td>Dilation/steroids</td>
<td>Dil/steroids/immunosupps</td>
</tr>
<tr>
<td>No assoc with esoph Ca</td>
<td>Assoc with esoph Ca</td>
</tr>
</tbody>
</table>
Distal Esophageal Strictures

- Lower esophageal ring
- Peptic stricture
- Barrett’s carcinoma

Carcinoma of the Cardia

- Predilection for men (7:1)
- Some patients under age 40
- Dysphagia often referred to upper chest or pharynx
This is not a book to be tossed aside lightly. It should be thrown with great force.

Dorothy Parker