What about tumor budding?

- Detachment of single tumour cells or in small aggregates (< 5 cells)
- High grade budding (10 buds in a X25 power field) is an adverse prognostic marker

Mod Pathol 2012;25:1315-25
A Big Diagnostic Problem

Is this cancer in the submucosa or is it the benign phenomenon of epithelial misplacement?
Epithelial misplacement
Epithelial misplacement in adenoma
Misplaced Epithelium in Colonic Polyps

(PSEUDOINVASION)

- Large pedunculated adenomas
- Typically found in sigmoid colonic polyps
- Misplaced epithelium is similar to non-displaced epithelium (degree of dysplasia)
- Lamina propria is retained in displacement
- Mucin pools present
- Hemosiderin may be present
Misplaced Epithelium
Misplaced Epithelium
Serrated colon polyps

- Hyperplastic polyp
- Sessile serrated adenoma/polyp
- Traditional serrated adenoma
- Sessile serrated adenoma with dysplasia
- Mixed polyp
Hyperplastic Polyps
2 commonest types

- Many cells with microvesicular mucin droplets
- Most mucin-containing cells are goblet cells

- Microvesicular
- Goblet cell
Sessile serrated adenoma/polyp

- Cytologic dysplasia is absent (in most cases)
- Irregular dilated crypts
- Serrations present at the base of crypts
- Proliferative zone extends half way up crypts
- Proliferation of crypts along the muscularis mucosae
- SSAs are often large (>10mm) and right sided, but these features do not form part of the diagnostic criteria
What do we know about sessile serrated adenoma/polyp

- Sessile serrated polyps/adenomas are associated with synchronous advanced colorectal neoplasia
  

- Sessile serrated ‘adenomas’ strongly predispose to synchronous serrated polyps in non-syndromic patients
  

- Sessile serrated polyps progress to carcinoma more slowly than conventional adenomas (10 -15 years)
  

- Where endoscopists are mandated to detect and remove all polyp lesions, these are very common and cause diagnostic and management issues........
Sessile Serrated Adenoma/Polyp
Sessile Serrated Adenoma/Polyp
Sessile Serrated Adenoma Polyp
Sessile Serrated Adenoma Polyp
Sessile Serrated Adenoma
Sessile Serrated Adenoma
Sessile Serrated Adenoma/Polyp
Sessile Serrated Adenoma/Polyp
Traditional serrated adenoma

- Traditional serrated adenomas are adenomas that have a serrated morphology
- Typically only low-grade dysplasia is present
Traditional Serrated Adenoma
Traditional Serrated Adenoma
Traditional Serrated Adenoma
Traditional Serrated Adenoma
Sessile serrated adenoma  Traditional serrated adenoma
### Colonoscopy Reporting Form

**INSTRUCTIONS:** File in chart | Fax copy to Colon Screening Program (fax: 604-680-3645) | If specimens taken, send copy with specimen container.

**PATIENT NAME**

**DATE OF BIRTH**

**PHN**

**PROCEDURE DATE (dd/mm/yy)**

**PROCEDURE START TIME**

**COLONSCOPIST**

**MSCN**

#### Cecal Intubation
- **No**
- **Uncertain**
- **Yes**
- **Photo documentation?**
    - **No**
    - **Yes**

#### Bowel Preparation
- **Excellent**
- **Good**
- **Fair**
- **Poor**

#### Unplanned Events
- **None**
- **Perforation**
- **Bleeding**
- **Cardiovascular**
- **Other (specify):**

#### withdrawal time: **Minutes**

**No Show for Colonoscopy: **

#### Specimens Taken:
- **No**
- **Yes**

#### Incomplete Procedure: Repeat procedure required

<table>
<thead>
<tr>
<th>Specimens Taken</th>
<th>Location</th>
<th>Size (mm)</th>
<th>Morphology</th>
<th>Primary Removal Mode</th>
<th>Resection (Y/N)</th>
<th>Complete Removal (Y/N)</th>
<th>Complete Removal (Y/N)</th>
<th># pieces lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>P</td>
<td>T</td>
<td>✓</td>
<td>P</td>
<td>HS</td>
<td>Y</td>
<td>Y</td>
<td>J</td>
</tr>
</tbody>
</table>

**FOR PATHOLOGY LAB:**

Number of samples received at lab: **Signed:**

**COPIES TO:**

Colon Screening Program

<table>
<thead>
<tr>
<th>Patient Coordinator</th>
<th>GP (name &amp; MSCN)</th>
<th>Other (name &amp; MSCN)</th>
</tr>
</thead>
</table>

**BC CANCER AGENCY**

**CARE + RESEARCH**

**PROVINCIAL HEALTH SERVICES AUTHORITY**

**VANCOUVER COASTAL HEALTH**

**VANCOUVER ISLAND HEALTH AUTHORITY**

**FRAZER HEALTH**

**NORTHERN HEALTH**

**INTERIOR HEALTH**
Specimen pathology report

- Patient identifiers: Name, PHN #, etc
- Specimen received: Location of polyp
- Gross description:
- Diagnosis:
  a) Tubular/tubulovillous/villous adenoma/etc
  b) Highest grade of dysplasia present
  c) Maximum diameter of polyp (or not applicable)
  d) Completeness of excision yes/no/CBA (only for polyps with high-grade dysplasia or cancer)
- Comments by pathologist
Colonoscopy surveillance after polypectomy

Gastroenterology 2012;143:844-857

Following a negative (no adenomas) colonoscopy:
• Average risk participants with positive FIT but a negative colonoscopy will re-enter FIT screening in the 10th year following colonoscopy
• Participants with 1 first degree relative with CRC diagnosed at ≤ 60 years or > 2 first degree relatives with CRC will have a repeat colonoscopy in 5 years
• Adenoma identified at last prior screening episode, repeat colonoscopy in five years.

Following a colonoscopy with removal of an adenoma:
• Repeat colonoscopy in 5 years for a low risk adenoma
• Repeat colonoscopy in 3 years for a high risk adenoma or > 3 low risk adenomas

A high risk adenoma includes the following:
• High grade dysplasia
• Villous features
• Size > 10 mm
• Sessile serrated polyp/adenoma > 10 mm in size
• Sessile serrated polyp/adenoma of any size with dysplasia
• Traditional serrated adenoma of any size
'TA' Tubular adenoma with LGD
Colon (site), biopsy:
Tubular adenoma, low-grade dysplasia:
- Maximum size: xx cm (gross description)

'TV' Tubulovillous/ Villous adenoma with LGD
Colon (site), biopsy:
Tubulovillous / Villous adenoma, low-grade dysplasia:
- Maximum size: xx cm (gross description)
'TAINC' Invasive carcinoma arising within a polyp
Colon (site), biopsy:
Invasive, low-grade, colonic adenocarcinoma arising within a tubular/villous adenoma:
1. Negative/Positive for poor tumor differentiation.
2. Negative/Positive for high-grade tumor budding.
3. Negative/Positive for lympho-vascular invasion.
4. Tumor is xx cm away from the cauterized resection margin.
5. Completeness of excision can not be assessed. 
   **OR** polyp is completely excised.