2012 Fall Update in Surgical Oncology

Pathological Evaluation of Malignant Colon and Rectal Polyps

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Disclosures

No conflicting interests
Objectives

• Review the definition of malignant polyp

• Identify the minimum amount of data required for a complete report

• Identify some common challenges to pathological assessment of malignant polyps
Malignant Polyp Definition

- Polyps with invasive adenocarcinoma through the muscularis mucosae into the submucosa
- Excludes invasion into the lamina propria or muscularis mucosae (high grade dysplasia)
Malignant Polyp Report

- Haggitt levels for pedunculated polyps
- Kikuchi levels for sessile polyps
Haggitt Levels Pedunculated Polyp
Kikuchi Levels Sessile Polyp
Malignant Polyp Report

- High grade (poorly differentiated) adenocarcinoma
- Angiolymphatic invasion
- Completeness of excision
- Distance from margin (mm)
Carcinoma Grade
Angiolympathic Invasion
Distance Measurement
Challenges to Polyp Evaluation

• Deciding whether there is poorly differentiated carcinoma present

• Correctly identifying angiolympathic invasion

• Accurately measuring distance to margin and assessing completeness of excision
Challenges to Polyp Evaluation

- Orientation of tissue in the paraffin block
- Correctly identifying the stalk and position of attachment before submission to paraffin block
- Prior torsion of pedunculated polyps
- Cautery and forceps crush artifact
- Artifacts of formalin fixation or lack of fixation
- Measurement
Challenges to Polyp Evaluation

- Orientation of tissue in the paraffin block
Well Oriented Pedunculated Polyp
Well Oriented Sessile Polyp
Challenging Orientation
Challenges to Polyp Evaluation

- Correctly identifying the stalk and position of attachment before submission to paraffin block
Stalk Position
Stalk Position
Stalk Position
Challenges to Polyp Evaluation

- Prior torsion of pedunculated polyps
Torsion
Challenges to Polyp Evaluation

• Cautery and forceps crush artifact
Cautery Artifact
Cautery Artifact
Cautery Artifact
Challenges to Polyp Evaluation

- Artifacts of formalin fixation or lack of fixation
Artifact of Formalin Fixation
Artifact of Formalin Fixation
Artifact of Formalin Fixation
Challenges to Polyp Evaluation

• Measurement
Measurement
Measurement
Review

• Definition of malignant polyp

• Information required for an optimal report

• Challenges to acquiring the information
Thank you for your attention!