Nottingham Pathology 2016
Serrated neoplasia
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Plan

- Histopathological criteria
  - Hyperplastic polyp
  - Sessile serrated lesion
  - Traditional serrated adenoma
  - Serrated adenocarcinoma

- Additional diagnostic techniques

- Guidelines

- Interactive cases
Spectrum of serrated polyps

- Hyperplastic polyp
- Sessile serrated lesion
- Traditional serrated adenoma
- Other polyps

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Histopathological criteria
Hyperplastic polyp

- Very common! 10-20% of Western adults
- Widespread distribution but particularly seen within the distal colon and rectum
- Three histological subtypes
  - Goblet cell rich
  - Microvesicular
  - Goblet cell poor
- Little or no associated cancer risk
Hyperplastic polyp
Sessile serrated lesion

- First recognised in 1996
- Particularly found in right colon
- Many features similar to hyperplastic polyps
- Key distinguishing features
- What are the minimum criteria?
- Artefacts can make the diagnosis difficult
- Link with serrated neoplasia/CRC pathway
SSL nomenclature

- North America: sessile serrated adenoma/polyp (SSA/P) even if ‘conventional’ dysplasia is not present
- UK: sessile serrated lesion with or without ‘conventional’ dysplasia
- Based on whether or not ‘dysmaturation’ is thought to represent a form of dysplasia
SSL – diagnostic criteria

Å Crypt dilatation
Å Crypt branching/distortion
Å Prominent serration esp. at crypt bases
Å Herniation of crypts through musc. mucosa
Å *WHO*: at least three – or two adjacent – crypts
Å *American Association of Gastroenterology*: a single crypt is sufficient
SSL – diagnostic criteria

Â Is there a ‘ranking’ for these criteria?
Â How dilated does a crypt have to be to be assessed as ‘dilated’?
Â How distorted or branched does a crypt need to be assessed as ‘branched’?
Â Should the site and/or size of a lesion be taken into account during assessment?
Â Is the natural history of lesions diagnosed according to the presence of different numbers of criteria, known?
SSL – diagnostic criteria

A

B

C

D

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SSL – diagnostic criteria
SSL - difficulties

- Technical problems may hinder diagnosis
  - Sampling variability
  - Poor orientation
  - Tangential cutting

- May not be able to make the diagnosis definitively but also cannot exclude it

- It is reasonable to ‘weight’ your diagnosis according to the site and size, in this situation