

Editor's quiz: GI snapshot

Don't judge a book by its cover: except during optical evaluation

INTRODUCTION

A healthy 41-year-old female was referred for the endoscopic management of a large rectal laterally spreading lesion (LSL). On index colonoscopy, performed for the evaluation of rectal bleeding, multiple proximal sessile serrated polyps were identified meeting diagnostic criteria for serrated polyposis syndrome. Family history was notable for a sister with a history of sessile serrated polyps.

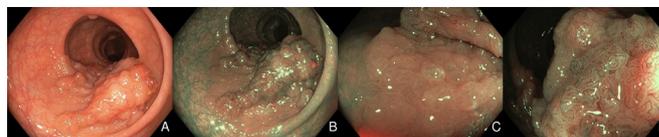


Figure 1 :Optical evaluation including high-definition white-light. (A), narrow-band imaging (B) and near-focus (C, D).

Using an Olympus 190 series high-definition colonoscope (Olympus, Tokyo, Japan), the lesion was evaluated under white-light ([figure 1A](#)), narrow-band imaging (NBI) ([figure 1B](#)) and near-focus ([figure 1C,D](#)).

QUESTION

What is the predicted histopathology of this lesion?

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See page 1252 for question

ANSWER

Using established imaging criteria,¹ two distinct surface patterns were identified consistent with serrated (pale colour, lacey vessels, absent surface pattern; NBI International Colorectal Endoscopic (NICE) I; [figure 1C](#)) and adenomatous histopathology (brown colour, brown vessels contrasting surrounding white surface pattern; NICE II; [figure 1D](#)), respectively. After successful endoscopic submucosal dissection (ESD) ([figure 2A](#)), histopathology confirmed a mixed traditional serrated adenoma and tubulovillous adenoma with high-grade dysplasia ([figure 2B](#)). At 6-month surveillance colonoscopy, no recurrence was identified.

Optical evaluation is critical for managing large LSLs as it empowers the endoscopist to select the appropriate resection technique based on the lesion's predicted histopathology and the risk for submucosal invasive cancer (SMIC). Moreover, in bulky lesions, location and gross morphology can be used to quantify the risk of invisible or covert SMIC²; thereby identifying ideal candidates for ESD and optimising oncological outcomes through the implementation of a selective resection algorithm.³

While serrated-class lesions are an established precursor to colorectal cancer,^{4,5} to our knowledge this is the first description of the optical features of a mixed lesion containing a traditional serrated adenoma and tubulovillous adenoma; which is believed to be precipitated through KRAS mutation. Moreover, this case highlights the ability to identify these lesions preresection. Until more is known about their malignant potential, a selective resection algorithm similar to that employed for adenomatous lesions, may be most appropriate.

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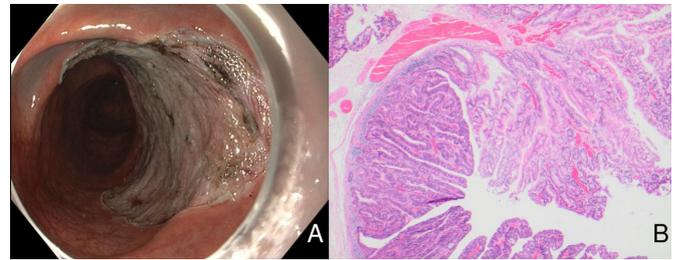


Figure 2 Resection defect after endoscopic submucosal dissection. (A) and histopathology evaluation (B)

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