

Serrated carcinoma arising from a sessile serrated adenoma

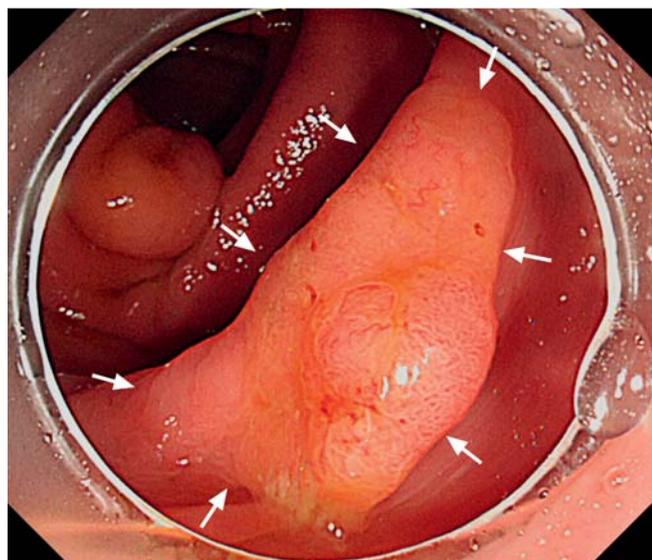


Fig. 1 Endoscopic image showing a 27-mm laterally spreading tumor in the ascending colon (arrows) with a mucus-covered surface that has a flat elevated appearance except for the peripheral portion, which displays a nodular surface.

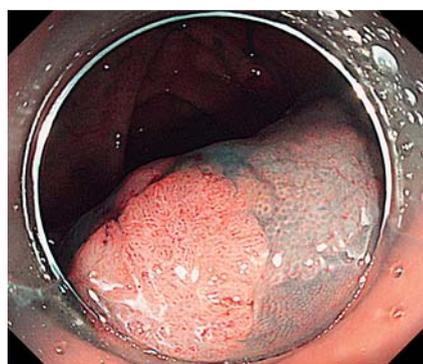


Fig. 2 Endoscopic appearance after submucosal injection showing a type III (tubular) pit pattern in the nodular area and a type II (stellate) pit pattern in the flat area.

Sessile serrated adenoma/polyp (SSA/P), a distinct serrated polyp subtype, can progress to colorectal cancer via the serrated neoplasia pathway [1]. On endoscopic examination, SSA/Ps usually show a flat or sessile appearance, a mucus covering, and a type II pit pattern. The endoscopic findings of uncomplicated SSA/Ps are well known; however, the endoscopic features of serrated carcinomas arising from SSA/Ps have not been fully described [2,3]. Herein, we report a case of serrated carcinoma arising from an SSA/P in a 66-year-old man who underwent endoscopic submucosal dissection (ESD) following colorectal cancer screening.

Colonoscopy revealed a 27-mm laterally spreading tumor in the ascending colon (Fig. 1). Most of the mass showed a flat elevated surface with a mucus covering, whereas the peripheral portion displayed a nodular appearance. The central area showed a type II (stellate) pit pattern, whilst the peripheral area displayed a type III (tubular) pit pattern (Fig. 2). Because there was a considerable risk of piecemeal resection, the tumor was resected by ESD instead of by endoscopic mucosal resection (EMR) [4].

On gross examination, the mass comprised two main parts (Fig. 3a). Histopathological examination of these areas showed that the flat elevated area met the SSA/P criteria (green line), the nodular reddish area corresponded to an intramucosal adenocarcinoma (red line), whilst histologic transition was noted between the two areas (orange line; Fig. 3b,c). Despite increasing attention being paid to SSA/Ps, the endoscopic findings of SSA/Ps that are showing early neoplastic progression are not yet well known. We believe the present case clearly shows a biphasic endoscopic appearance of an SSA/P transitioning to a serrated carcinoma.

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Competing interests: None

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Fig. 3 a, b, c see following page.

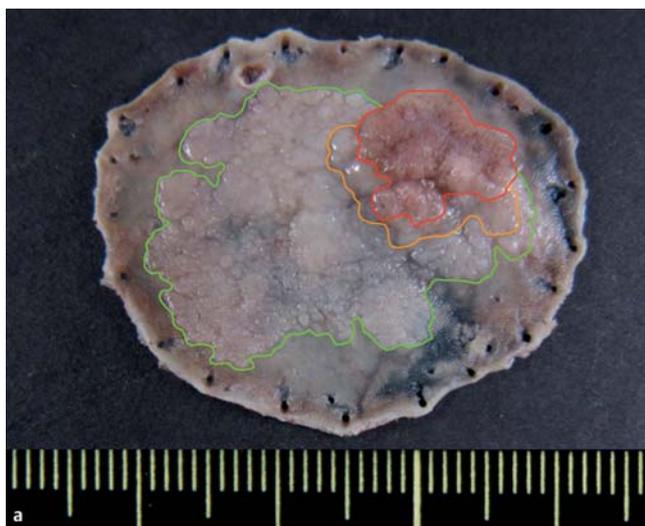
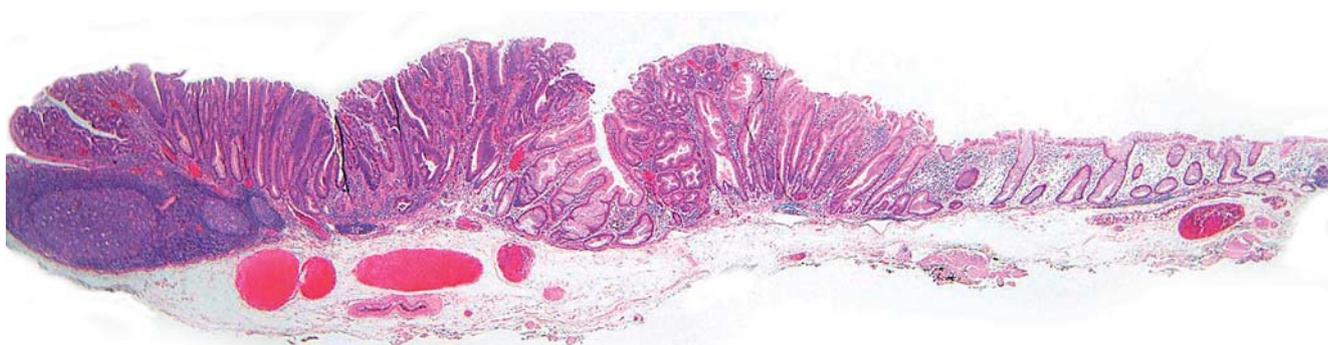


Fig.3 Appearances of the resected tumor.

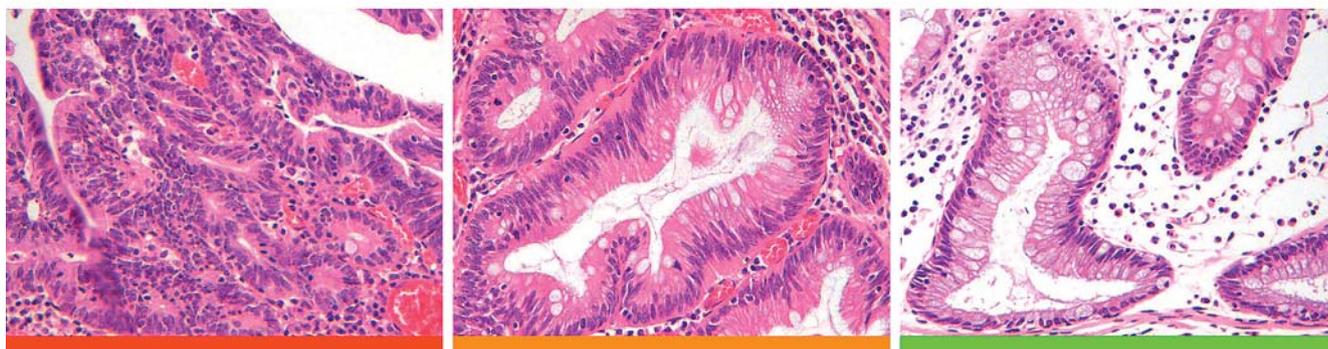
a Gross appearance showing a biphasic tumor with a flat elevated area (green line), nodular area (red line), and an intervening transitional area (orange line).

b Low power view of the tumor with the three areas indicated by their respective colors on the bar below (original magnification $\times 12.5$).

c High power view of each of the tumor areas showing features consistent with an SSA/P in the green area, an intramucosal adenocarcinoma in the red area and an area with low grade dysplasia in the transitional orange area (original magnification $\times 200$).



b



c