

Pathological Features of Colorectal Laterally Spreading Tumors

– Differences and Similarities between Granular and Non-Granular Type –

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Abstract : Five-hundred and two lesions of colorectal laterally spreading tumors (LSTs) from 502 patients were studied histopathologically to analyze differences and similarities between the four macroscopic subtypes. The colorectal LSTs were collected from 1999 through 2012 and were subclassified as follows: 373 lesions of granular type (140 homogenous type and 233 nodular mixed type) and 129 lesions of non-granular type (100 flat elevated type and 29 pseudo-depressed type). The major anatomical sites of the granular type were the rectum and the proximal region of the ascending colon and cecum, whereas the non-granular type was commonly located in the transverse colon. Regardless of their maximum diameter, colorectal LSTs were low in height, and small-sized lesions (e.g., non-granular type) were also included. In 481 (95.8%) lesions, the intramucosal spreading area contained adenomatous components. On histologic examination, non-granular types showed tubular adenoma with severe cytologic atypia (equivalent to high-grade adenoma) despite their relatively small size. In contrast, granular types showed tubular and/or tubulovillous adenoma with mild to moderate cytologic atypia (equivalent to low-grade adenoma) despite their relatively large size. Among the colorectal LSTs, both nodular mixed type, pseudo-depressed type, and flat elevated type contained a carcinomatous component with high frequency as compared with homogenous type. Different clinical management is needed to cope with these macroscopic subtypes. The conclusion from the standpoint of a pathologist is that it is worthwhile to subclassify colorectal LSTs into four distinct groups.

Key words : Laterally spreading tumors, Granular type, Non-granular type, Adenoma, Adenocarcinoma, Macroscopic type