

EP-168 - MUSCLE RETRACTION SIGN: A CHALLENGE IN THE ENDOSCOPIC RESECTION OF COLORECTAL LESIONS

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During colorectal endoscopic submucosal dissection (ESD), the feature of a muscle layer being pulled towards a neoplastic tumor (muscle-retracting [MR] sign) is sometimes detected and is associated with a high-risk of incomplete tumor resection and complications.

We present the case of an 84-year-old man who underwent a colonoscopy due to rectal bleeding. Endoscopic examination identified a 35-mm laterally spreading tumor mixed-granular-type (one nodule > 10mm; T0-Is+IIa) in the lower rectum, extending from the pectin line. Endoscopic evaluation was compatible with an adenomatous lesion with preserved pit pattern, without unequivocal endoscopic suspicion of invasive lesion (Kudo III/IV classification; JNET 2B). Endoscopic ultrasound revealed neither submucosal invasion nor locoregional lymphadenopathies. Following multidisciplinary evaluation, ESD was planned. The lesion was gradually elevated with a colloid solution and the excision was performed by ESD using the FlushKnife (Fujifilm Corp., Tokyo, Japan). During the procedure, an area of retraction of the muscle layer towards the tumor (MR sign) was clearly identified and gently dissected/cut. Complete en bloc resection was achieved and there were no immediate complications. Histological examination confirmed a complete resection (R0) of a traditional serrated adenoma with low grade dysplasia.

Endoscopic resection of large protruding lesions is increasing, however some of these lesions exhibit features that may difficult the resection. The recognition of the MR sign is crucial and should be distinguished from submucosal tumor invasion, pointing to additional difficulties, such as the requirement of an uneven dissection line, which lengthen the procedure and can potentially increase the risk of adverse events, like perforation. Video of the procedure is presented.