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REVIEW ARTICLE

Large Colorectal Lesions: Evaluation and Management

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Abstract In the last years, a distinctive interest has been raised on large polypoid and non-polypoid colorectal tumors, and specially on flat neoplastic lesions ≥20 mm tending to grow laterally, the so called laterally spreading tumors (LST). Real or virtual chromoendoscopy, endoscopic ultrasound or magnetic resonance should be considered for the estimation of submucosal invasion of these neoplasms. Lesions suitable for endoscopic resection are those confined to the mucosa or selected cases with submucosal invasion ≤1000 μm. Polypectomy or endoscopic mucosal resection remain a first-line therapy for large colorectal neoplasms, whereas endoscopic submucosal dissection in high-volume centers or surgery should be considered for large LSTs for which en bloc resection is mandatory.

PALAVRAS-CHAVE
Endoscopia Gastrointestinal; Neoplasias Colorrectais; Pólipos do Colon

Lesões Colorretais Grandes: Avaliação e Tratamento

Resumo Nos últimos anos houve um crescente interesse pelas lesões colorretais polipoides e não polipoides de grande tamanho, especialmente pelas lesões planas neoplásicas ≥20 mm que tendem a crescer lateralmente - as chamadas lesões de espraiamento lateral (LST). Para avaliar o acometimento submucoso dessas lesões, pode-se utilizar a cromoendoscopia real ou virtual, a ecoendoscopia e a ressonância magnética. A ressecção endoscópica está indicada em lesões restritas à mucosa ou em casos selecionados com invasão da submucosa ≤ 1000 μm. A polipectomia e a ressecção endoscópica de mucosa permanecem um tratamento de primeira escolha

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para lesões colorretais grandes, enquanto que as LSTs cuja ressecção em bloco é mandatória devem ser submetidas à dissecção submucosa endoscópica em centros com grande experiência na técnica ou à ressecção cirúrgica.

1. Introduction

Colorectal cancer (CRC) is a major cause of cancer-related morbidity and mortality.[1] It affects mainly people older than 50 years and the detection and removal of precursor colorectal lesions has enabled a significant reduction in the incidence of cancer and in the CRC-related mortality of these cases.[2] The characteristics of the removed lesions and its histopathology determine colonoscopy surveillance. A recent guideline[3] indicates shorter intervals for advanced neoplasms (adenomas ≥10 mm, villous histology or high-grade dysplasia, and cancer). In addition to these criteria, the presence of three or more adenomas and serrated polyps ≥10 mm fulfill the requirements for the high-risk group. Thus, large lesions (≥2.0 cm) are considered high-risk neoplasms, with potential for malignancy, submucosal invasion and lymphatic involvement, being the risk of harboring carcinoma as high as 20–50%.[4] Lesions are called superficial when their features at endoscopy suggest that they are limited to the mucosa or submucosa. These lesions may be polypoid (sessile, pedunculated and subpedunculated) and non-polypoid (flat or depressed). Techniques for resection of these large lesions can use a diathermy loop for pedunculated or subpedunculated lesions, and the method of endoscopic mucosal resection or submucosal dissection for sessile and non-polypoid lesions.[5,6]

2. Evaluation of large colorectal lesions

According to the Paris classification,[7] lesions greater than 2.5 mm in height are considered polypoid; they can be measured by positioning a closed biopsy forceps next to the lesion. They are more frequent in the left colon and are classified as type 0-Is (sessile), type 0-Ip (pedunculated) and type 0-Isp (subpedunculated) (Figs. 1–2).

Non-polypoid lesions ≥20 mm in diameter are defined as laterally spreading tumors (LSTs), which are characterized by a lateral and circumferential growth in the colonic wall, with deep invasion of the submucosa occurring only at later stages, and are more commonly diagnosed at the right colon. LSTs are classified as granular (LST-G) and non-granular (LST-NG) types, according to the presence or absence of a granular surface pattern. Kudo et al.[8] proposed a sub-classification of LSTs, in which LST-Gs are classified as homogeneous and nodular mixed subtypes (LST-G-N), and LST-NGs are classified as flat elevated and pseudo depressed subtypes (LST-NG-PD)(Fig. 3A–C). The LST-G-N and the LST-NG-PD have a higher potential for malignancy.[9] The rate of invasive carcinoma in LST-Gs is low, and most cases are considered adenomatous lesions, where the homogeneous subtype tends to be a tubular adenoma, and the nodular mixed subtype tends to have villous features.[10]

The British Society of Gastroenterology guidelines[11] suggest that the term ''non-pedunculated colorectal polyp'' (NPCP) is the most appropriate term to define sessile and flat lesions, so the term ''large NPCP'' may be used to describe NPCP > 2.0 cm. This guideline considered the non-granular and granular nodular mixed subtype LST as having an increased risk for malignancy, as well as, pit patterns type V, capillary pattern Sano's type III and NICE (NBI International Colorectal Endoscopic) type III. This guideline suggests, as already pointed out by Japanese authors,[12] that biopsies should be used with caution, since they can cause fibrosis in the biopsied area and thus, prevents

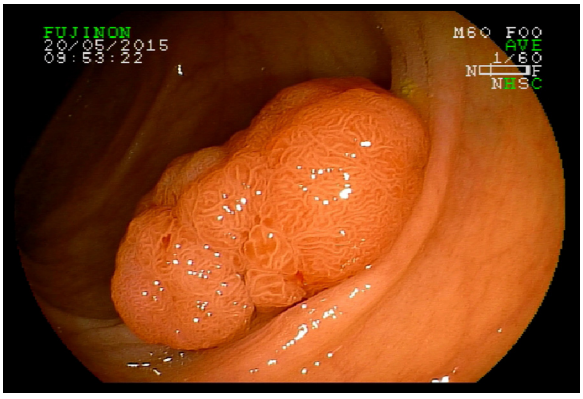

Figure 1 Polypoid lesion type 0-Is.

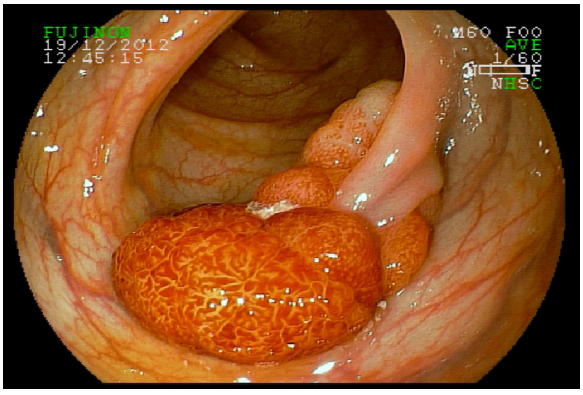

Figure 2 Polypoid lesion type 0-Ip.