

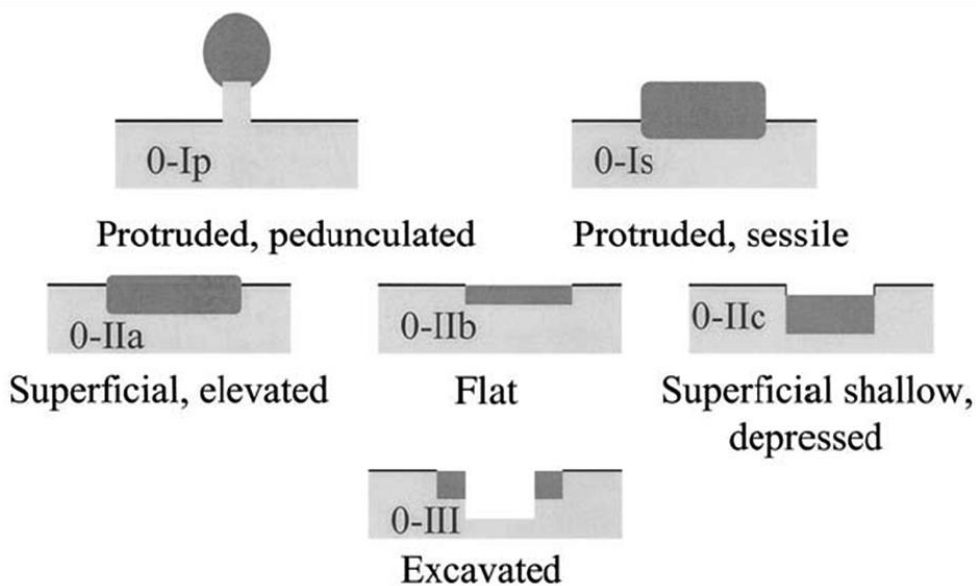
## Endoscopic polyp size and classification (Non-core)

Polyp size is associated with risk of metachronous polyp and colorectal carcinoma, and is used to determine colonoscopy surveillance intervals. Conventional adenomas <10 millimetres (mm) are considered as low-risk lesions while conventional adenomas ≥10 mm are classified as advanced lesions. Polyps <10 mm in size are further divided into small (6-9 mm) and diminutive (1-5 mm) lesions. The size of conventional adenoma correlates with other advanced histologic features (villosity >25% of the polyp and high- grade dysplasia). Sessile serrated lesions (formerly known as sessile serrated adenoma/polyp) and hyperplastic polyps ≥10 mm are considered advanced lesions.

Information on endoscopic appearances of polyps should be recorded for endoscopy/histology correlation. This may be helpful to pathologists who may request deeper levels in tissue blocks when the first histologic impression does not match the endoscopic appearance (optical diagnosis).

Superficial and early neoplasms of the gastrointestinal tract can be assessed on the basis of their endoscopic appearance. Various classifications are used.

Using the Paris classification, type 0 neoplastic lesions are classified as polypoid (Ip and Is), non-polypoid (IIa, IIb and IIc), and non-polypoid and excavated (III) (Figure 1).<sup>1</sup>



**Figure 1: Schematic representation of the major variants of type 0 neoplastic lesions of the digestive tract: polypoid (Ip and Is), non-polypoid (IIa, IIb, and IIc), non-polypoid and excavated (III).** Terminology as proposed in a consensus macroscopic description of superficial neoplastic lesions. Reproduced with permission from Paris workshop participants (2003). The Paris endoscopic classification of superficial neoplastic lesions: oesophagus, stomach, and colon: November 30 to December 1, 2002. *Gastrointest Endosc* 58(6 Suppl):S3-43.<sup>1</sup>

Lateral spreading tumours (LSTs) are a subgroup of the type IIa lesions, larger than 10 mm in diameter, and classified into 2 groups: granular and non-granular LSTs.<sup>2</sup> Granular LSTs are subclassified into homogenous and nodular mixed types. Non-granular LSTs have a higher malignant potential than the granular LST and are subclassified into flat, elevated and pseudo-depressed types.

For direct optical diagnosis of colorectal lesions, usually both high-definition white light as well as image-enhanced endoscopy, are becoming increasingly used. Various strategies and classifications exist, including the Narrow-band imaging (NBI) International Colorectal Endoscopic (NICE), the Japanese NBI Expert Team (JNET) and the Workgroup serrated polyp and Polyposis (WASP) classifications.<sup>3-5</sup> The endoscopist's optical diagnosis can be reported as a specific type of the classification used or as histologic category: serrated lesions/polyps (hyperplastic polyp, sessile serrated lesion, sessile serrated adenoma with dysplasia), adenoma, early adenocarcinoma, advanced adenocarcinoma, submucosal lesion, others.

## References

- 1 Endoscopic Classification Review Group (2005). Update on the Paris classification of superficial neoplastic lesions in the digestive tract. *Endoscopy* 37(6):570-578.
- 2 Kudo S (1993). Endoscopic mucosal resection of flat and depressed types of early colorectal cancer. *Endoscopy* 25(7):455-461.
- 3 IJspeert JE, Bastiaansen BA, van Leerdam ME, Meijer GA, van Eeden S, Sanduleanu S, Schoon EJ, Bisseling TM, Spaander MC, van Lelyveld N, Bargeman M, Wang J, Dekker E, Dutch Workgroup serrated polyp and Polyposis (2016). Development and validation of the WASP classification system for optical diagnosis of adenomas, hyperplastic polyps and sessile serrated adenomas/polyps. *Gut* 65(6):963-970.
- 4 Sano Y, Tanaka S, Kudo SE, Saito S, Matsuda T, Wada Y, Fujii T, Ikematsu H, Uraoka T, Kobayashi N, Nakamura H, Hotta K, Horimatsu T, Sakamoto N, Fu KI, Tsuruta O, Kawano H, Kashida H, Takeuchi Y, Machida H, Kusaka T, Yoshida N, Hirata I, Terai T, Yamano HO, Kaneko K, Nakajima T, Sakamoto T, Yamaguchi Y, Tamai N, Nakano N, Hayashi N, Oka S, Iwatate M, Ishikawa H, Murakami Y, Yoshida S and Saito Y (2016). Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI Expert Team. *Dig Endosc* 28(5):526-533.
- 5 Hewett DG, Kaltenbach T, Sano Y, Tanaka S, Saunders BP, Ponchon T, Soetikno R and Rex DK (2012). Validation of a simple classification system for endoscopic diagnosis of small colorectal polyps using narrow-band imaging. *Gastroenterology* 143(3):599-607 e591.