The introduction of narrow-band imaging (NBI) had led to a major step forward in the endoscopic identification of lesions in the gastrointestinal tract. This endoscopic improvement puts in doubt the conventional way of assessing gastrointestinal lesions. For the esophagus and colon, this is already a matter of debate: do we still need to take random biopsies in Barrett’s esophagus and in inflammatory bowel disease surveillance? Do we still need to send every colorectal polyp to pathology or can we resect and discard? The same discussion can also be held for premalignant lesions of the stomach when using NBI.

“So, do not dismiss your pathologist when you start using EGGIM, we still need them but maybe not that often.”

According to the current guideline on the management of precancerous conditions and lesions in the stomach (MAPS) [1], the recommended practice for the diagnosis of gastric intestinal metaplasia (GIM) is based upon a histopathologically led risk assessment in which patients are staged according to their operative link on gastric intestinal metaplasia (OLGIM) status from random biopsies, using the Sydney system biopsy protocol. NBI has been shown to have a high concordance with gastric histology and appears to be superior to white-light endoscopy [2–4]. Moreover, the classification for endoscopic grading of gastric intestinal metaplasia (EGGIM) has shown an excellent correlation with histology and OLGIM stages [5]. These results suggest that NBI could be used to target biopsies instead of taking random biopsies and that NBI may even obviate the need for biopsies in patients under surveillance.

In this issue of Endoscopy, Esposito et al. [6] present a two-center study on the real-time use of the EGGIM classification to validate its performance compared with OLGIM in the detection of the presence and extension of GIM. All 250 consecutive patients underwent a gastroscopy using high resolution NBI gastrosopes because of upper gastrointestinal symptoms. Patients were included from both a low risk country (Italy) and a high risk country (Portugal), which was reflected in a similar prevalence of gastric intestinal metaplasia, but a significantly higher prevalence of OLGIM III/IV in the Portuguese population. For grading the extension of intestinal metaplasia, the stomach was divided into five areas: the lesser and greater curvature of the antrum, the lesser and greater curvature of the corpus, and the incisura. In every area 0–2 points were given dependent on the extent of intestinal metaplasia in that area: 0, no GIM; 1, focal GIM (≤30%); 2, extensive GIM (>30%). The total points scored were then used to provide the optimal cut-off to assess the extension of GIM by EGGIM compared with OLGIM.
Targeted biopsies were able to diagnose GIM in 99% of patients. A cut-off of >4 appeared to be the optimal cut-off. With this cut-off, 89% of patients with OLGIM stages III/IV were identified by EGGIM. Therefore, these patients could be advised to undergo surveillance without the need for biopsies; however, 11% of patients with OLGIM III/IV were not correctly identified and would be allocated to no surveillance based on the EGGIM score only.

The authors also showed that the same cut-off may have different implications dependent on the prevalence of GIM. For example, in countries with a low risk of GIM, the positive predictive value of a positive EGGIM score (a score above the cut-off; extended intestinal metaplasia, for which surveillance is recommended) is lower compared with countries with a high prevalence. This may imply that in low risk countries biopsies are still warranted in patients with a positive EGGIM score.

EGGIM appears to be a promising tool to assess the extension of GIM and identify patients who should be recommended to undergo surveillance according to the MAPS guideline. Patients in high risk countries particularly will benefit from the use of an EGGIM score with a cut-off of >4. In low risk countries, this cut-off will probably lead to a reduction in biopsies using NBI and the taking of targeted biopsies at the index upper gastrointestinal endoscopy and will probably obviate the need for biopsies in patients under surveillance, unless changes or new lesions are found. So, do not dismiss your pathologist when you start using EGGIM, we still need them but maybe not that often.

Competing interests

None

References