Preface to gastrointestinal polyps

It will be meaningless from a biological standpoint, clinically inappropriate and misleading, and it will also be over-simplistic from an endoscopic perspective, but the mere morphological equivalent of a mostly benign gastrointestinal neoplasia, that is the term ‘polyp’, has deeply penetrated in the scientific and public awareness of both the medical and non-medical community, becoming the sine qua non of one of the most fascinating chapters of the modern clinical and preventive medicine, that is the interaction between a human technique, GI-endoscopy, and a human disease, GI-neoplasia. Albeit apparently reductive, this term ‘polyp’ summarizes amazing advances in the natural history, screening, diagnosis, therapy, and prognosis of GI-neoplasia and its prevention.

This issue of the Journal may be divided in two main parts. First, we deal with the natural history of the GI-polyps and — more in general — GI-neoplasia, including the main risk-factors and the histological and molecular alterations underlying their clinical and prognostic behavior. These information are critical in order to predict the actual prevalence, distribution, and risk of malignant transformation of GI-lesions, resulting in a clinically meaningful risk stratification of individual patients as well as of entire populations. In addition, a deeper knowledge of the natural history of GI-neoplasia led to the identification and early diagnosis of several hereditary and sporadic polyposis syndromes that will be soon accelerated by the outstanding achievements in the field of DNA sequencing.

The second part focus on the most recent advances that have revolutionized the field of GI-endoscopy, including our comprehension on its role as preventive, diagnostic and therapeutic procedure. The growing evidence of a strict association between quality of endoscopy and risk of colorectal cancer revitalized technical and technological efforts to increase the detection of GI-lesions, especially in the colorectal tract. We will not restrict our focus only on those technological advances that should be regarded as the current standard of practice, such as high-definition or chromoendoscopy, but also on the need of an optimal technique as absolute prerequisite for a full exploitation of these technological advances.

In order to select the most suitable therapeutic strategy, the possibility to in vivo predict the histological diagnosis and the clinical behavior of GI-superficial neoplasia is critical, and it will be largely addressed in this issue of the Journal. This field represents by far the most fertile compromise between the Western and Japanese approach to endoscopy classification, merging the accuracy of relatively simple morphological criteria with that of a more complex surface- and vessel classification with or without optical magnification. The creation and validation of user-friendly classifications in this field have opened the door for new clinical strategies, such as the ‘resect and discard’ for diminutive polyps, which are gradually incorporated within our clinical practice.

The third advance in GI-endoscopy deals directly with endoscopic resection of GI-polyps, and GI-lesions more in general. As incomplete or suboptimal resection of GI-neoplasia remains one of the main cause of post-endoscopy interval cancer, we prioritize the standardization of both polyectomy and endoscopic mucosal resection techniques in this issue of the Journal, especially in the lower-GI tract. If until a few years ago it was quite common that any endoscopy centre had its own particular approach to such techniques of resection, this has become nowadays unacceptable, as each step of these complex procedures may severely affect the clinical outcome of our patients.

An additional outstanding revolution in the field of endoscopic resection has been the implementation of en bloc resection for large lesions at high risk of submucosal invasion. The contamination between the Japanese and Western communities has brought a gradual implementation of endoscopic submucosal dissection in the Western world, not only in the upper-GI but also in the lower-GI tract. The advantages of a meticulous stratification of the risk of lymph-node metastasis by histological examination of a lesion removed en bloc, and the minimization of both useless surgical procedures, and of any post-resection recurrence risk represent major clinical advances for patients with the most advanced superficial GI-neoplasia. However, this is somewhat balanced by the need of a long-lasting and complex training to marginalize a higher risk of adverse events.

By using the term ‘polyp’ as a key to explore all the new insights in the natural history of GI-neoplasia and GI-endoscopy, this issue of the Journal wants to shows how complex — but also fascinating — is to deal with gastrointestinal lesions, requiring an extensive knowledge in several fields of scientific and technological innovations. Such knowledge does not only represent the unique feature of the modern-GI endoscopy, but, more importantly, it is what makes the difference between a favourable and unfavourable clinical outcomes for the majority of our patients.

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