Chapter 15
Multiple Primary Malignancies: Role of Advanced Endoscopy To Identify Synchronous and Metachronous Tumors of the Digestive Tract

Giuseppe Galloro, Luca Magno, Giorgio Diamantis, Antonio Pastore, Simona Ruggiero, Salvatore Gargiulo, Marcello Caggiano

Introduction

The development of new endoscopy systems represents a significant advance in the diagnosis of tumors. The prognosis for patients is strictly dependent on the early detection of malignant lesions, because early lesions of the digestive tract can be removed endoscopically by several techniques (e.g., polypectomy, endoscopic mucosal resection, submucosal endoscopic dissection).

Within the limits of multiple primitive malignancies (MPM), there are several associations involving gastrointestinal tumors, both synchronous and metachronous (esophagus-stomach, stomach-colon, colon-colon etc). Advanced endoscopy is the method of choice for the early diagnosis, treatment, and follow-up of these tumor associations, and complete cure is possible in many cases. It is important to detect not only the more common polypoid type of malignant lesions associated with a primary tumor but also flat and depressed neoplasias. Nowadays, endoscopy can be performed with new and powerful endoscopes whose optic features provide an improved resolution that reveals a wealth of surface detail.

Chromoendoscopy

Chromoendoscopy is an endoscopic examination involving the use of dyes [1]. Information that cannot be obtained or a structure that is poorly visualized by conventional endoscopy is well-defined by the addition of a dye, resulting in accurate lesion detection and precise qualitative diagnosis. The technique allows the detection of small non-polypoid lesions (as defined by the Paris classification [2]), which are very often missed by standard endoscopy, and confirms both the surface structure and the nature of the lesion’s edges in detail point of view, about .

For many years, the Eastern and Western endoscopic and histologic classifications of early digestive tumors have diverged greatly. Many endoscopists, par-
particularly those in the West, considered the Japanese classification, with its numerous divisions for the esophagus, stomach, and colon, to be too complex for practical use. Western endoscopists tend to base treatment decisions largely on the size and location of the tumor and on the histology of biopsy specimens. By contrast, Japanese endoscopists have found that the endoscopic classification of a lesion can be an important determinant of when endoscopic therapy is needed.

Another source of differences regarding the value of endoscopic classification of superficial neoplastic lesions arises from East/West differences in the pathological classification of intramucosal neoplasias. The recent Vienna classification [4] has, to some extent, resolved this conflict in its use of the terminology of dysplasia, adenoma, early cancer, and advanced cancer. Following the consensus reached in Vienna, an international group of endoscopists, surgeons, and pathologists gathered in Paris for an intensive workshop designed to explore the utility and clinical relevance of the Japanese endoscopic classification of superficial neoplastic lesions of the gastrointestinal tract. The result of the Paris symposium was the complete convergence of western and eastern views and thus a new common international classification of digestive superficial neoplastic lesions (extremely close to the Japanese one), as shown in Fig. 15.1. According to the Paris classification, there are three major types of superficial neoplastic lesions of the digestive tract as well as several subtypes (Table 15.1).

To improve the quality of diagnosis, the primary step is to identify the presence of an area of the mucosa that is slightly discolored (paler or redder), an irregular microvascular network, or a slight elevation or depression. The second

![Fig 15.1 Schematic representation of the Paris classification: 0 I protruded or polypoid (Ip and Is), 0 II non-polypoid (II a, IIb, and II c), 0 III non-polypoid and excavated (III)]