Chromogranin A expression in human colonic adenocarcinoma

R. Romeo, R. Pellitteri, V. Mazzone and M.F. Marcello

Anatomy, Diagnostic Pathology, Phorens Medicine, Hygiene and Public Health Department.
University of Catania. Via S. Sofia, 87 - 95125 Catania

Key words: chromogranin, colonic adenocarcinoma, mixed tumour.

SUMMARY

The presence of CgA positive cells occurring in scattered elements or in clusters within human colonic adenocarcinomas has been documented in recent data. The number of these cases has ranged from 10% to 40% depending on the method of demonstration. The aim of this study is to assess the presence of CgA positive cells on a set of 60 tumours that, by standard histological procedures, were classified as well differentiated (n.5), moderately differentiated (n.48) and poorly differentiated (n.7) adenocarcinoma. 4.5 µm thick sections were processed by means of immunoperoxidase method using the primary CgA monoclonal antibody. Our results showed CgA positive cells in two cases of poorly differentiated and three cases of moderately differentiated adenocarcinoma. These specimens (8% of cases) showed diffuse, irregular areas of CgA immunoreactive cells as components of the neoplasm. These cases could be considerer as “mixed exocrine and neuroendocrine carcinoma” that develops from the same stem cell which differentiates into two atypical cell lines. Therefore, we suggest that to carry out a proper adenocarcinoma histological examination, and to establish a consequent therapy, not only common staining techniques but also immunohistochemical methods should be used.