Reevaluation of the term “carcinoid”

Jun Soga
Niigata Seiryo University, Japan

Historic background: In 1907, Siegfried Oberndorfer, as a “Privatdozent” in pathology aged 31, proposed a fascinating term “carcinoid”, meaning a carcinoma-like benign neoplasm, based on the histologic analysis of 12 submucosal nodules of the small intestine in 6 autopsy cases. However, 22 years later, he partly corrected his concept of carcinoid on reanalysis of 53 accumulated cases in the small intestine and appendix, describing that some cases might have metastases. The concept and nomenclature have been subsequently criticized by several authors: unfortunate, misleading, outmoded, archaic, confusing, and frankly a misnomer.

Points of emphasis on malignancy: [1] Experimental evidence. Intramucosal invasion of carcinoid cells was confirmed on serial sections of gastric glands of an African rodent, further permeating through the muscularis mucosae into the submucosa. [2] Reevaluation of Oberndorfer’s original diagram of submucosal nodule in the human small intestine, leading to the proposal of the term “carcinoid”. [3] A comparative analysis on metastasis rates in cases with submucosal nodules of a “carcinoid” type and of an ordinary carcinoma type. In the rectum, for instance, such lesions of limited size of 10.1 mm - 20.0 mm are described to show a metastasis rate significantly higher in the “carcinoid” group than in the ordinary carcinoma group (27.6% vs 10.0%).

Conclusion: Since “carcinoid”, now often referred to a group of NETs, is a malignant epithelial neoplasm (carcinoma) with endocrine or functional potentiality (endocrinocarcinoma), the term “carcinoid” meaning a carcinoma-like benign neoplasm is a misnomer.

Biography

Dr. Jun Soga graduated from Niigata University School of Medicine, Japan, at the age of 24 years, and obtained Doctor of Medical Science after having completed the postdoctoral research course at Surgical Department of the same University. He completed pathology residency receiving American Board Certificate in Pathology at the age of 31. He was given a title of Professor Emeritus, Niigata University, aged 65, and awarded with the Eminent Scientist of the Year 2004 in Surgery and Surgical Pathology by IRPC, aged 70, and, ENETS Life Achievement Award and IPSEN Oberndorfer Prize at the age of 74. He has published over 200 first-author articles, 119 in English.