Pilipidis Ioannis1, Tzilves Dimitrios2, Soufleris Kostas3, Lazaraki Georgia4, Xiroy Persefoni4, Skordas Kostas5, Tarpagos Anestis5

1Thessaloniki Cancer Hospital ‘Theagenio’, Thessaloniki, Greece
2Thessaloniki Cancer Hospital ‘Theagenio’, Thessaloniki, Greece
3”Theagenio” Cancer Hospital, Thessaloniki, Greece
4Thessaloniki Cancer Hospital ‘Theagenio’, Thessaloniki, Greece
5”Theagenio” Cancer Hospital, Thessaloniki, Greece

Introduction: The aim of the study is to describe the clinicopathological features and the therapeutic approaches of patients with gastric carcinoids (GC) in our center.

Methods: We analyze retrospectively, 25 patients presented with gastric carcinoid between 1/1/2002 and 31/8/2012. Clinical data, pathological records, outcome of interventions and therapeutic options with follow up have been evaluated.

Results: Recorded data of 25 patients (13 females and 12 males, median age 57 year old) with gastric carcinoid within the last decade were studied. Sixteen (64%) of them were classified as type 1 (elevated serum gastrin levels, low serum B12 levels and atrophic gastritis). Pathologically, all of them were well differentiated (WD) neuroendocrine tumors (NETs), grade I with ki-67 <2%, except one that was WD, grade II, with ki-67 of 8%. Unexpectedly, 10 of the 16 patients presented with anemia as an “alarm” symptom, because of B12 deficiency, and the other 6 patients with non specific dyspeptic symptoms. Two patients underwent antrectomy with complete regression of the carcinoid tumors located in the body and fundus, respectively. One patient with a large carcinoid infiltrating the muscularis propria is still treated with somatostatin analogues because of older age and comorbidities, and one patient underwent total gastrectomy because of the development of gastric adenocarcinoma. All the other patients with type 1 GC undergo regular endoscopic follow up and removal of the largest lesions after an EUS evaluation. One patient presented with type 2 GC, with multiple gastric lesions and a small (0.6cm) gastrinoma within the duodenum which was removed endoscopically, resulting in the regression of the gastric lesions. In six (24%) patients type 3 GC was diagnosed, grade II (ki-67 15%) in one of them and grade III (ki-67 varying from 40% to 90%) in the others. One patient presented with metastatic disease and was treated with systemic chemotherapy. The other one, because of the locally extension of the disease were operated and are still alive except one. Two patients (8%) presented as mixed adeno-neuroendocrine carcinoma (MANEC) according to the 2010 WHO classification of NETs. Both patients die within a year despite an aggressive treatment approach.

Conclusion: Type I GCs have a benign course and regular endoscopic surveillance and removal of the largest lesions is an adequate approach. Type II GCs are uncommonly found and may reflect the over the counter use of PPIs. Type III GCs have an aggressive course and should be treated as adenocarcinomas.