Synchronic gastric adenocarcinoma and lymphoma

Key words: Synchronic gastric neoplasia. Gastric adenocarcinoma. Gastric lymphoma.

Dear Editor,

The presence of multiple carcinomas in the stomach has been widely described in medical literature; however, much less common is the synchronic detection of gastric adenocarcinoma together with primary gastric lymphoma. Recently, the association between these synchronic tumours has been related to infection by Helicobacter pylori (1).

We present a new case in which an advanced gastric cancer is found synchronically with a gastric lymphoma.

Clinical case

A 81 year old male with a clinical history of arterial hypertension, diabetes mellitus, chronic renal insufficiency and peripheral arteriopathy. He presents with toxic syndrome and gastric dyspepsia. An endoscopic study shows neo-formation at juxtapyloric antral level within the normal range which hinders the passage of the endoscope and prevents the exploration from continuing. The biopsy reports the presence of an adenocarcinoma. The analysis highlights hypochromic anaemia and some tumoral markers within the normal range (CEA: 3.17 µg/L, CA 19:9: 17.31 KU/L). An abdominal CT scan shows the formation of gastric tumors that extend along the entire lesser curvature to the duodenal bulb and the first part of the duodenum with adenopathies next to the inferior margin. Cholelithiasis. The patient does not present with retroperitoneal adenopathies or distance metastasis (Fig. 1). Surgical intervention shows antral neoplasia extended to the gastric body. Cholecystectomy, total gastrectomy and Roux-en-Y oesophageal-jejunosotomy were also carried out. Anatomopathological study reports two neoplastic masses, with an ulcerous-necrotic centre and mameloned margins, separated by 3 cm of normal-looking gastric wall. The nearest tumoral area measures 65 x 55 mm and features diffuse neoplastic proliferation which infiltrates the gastric wall and reaches the surrounding adipose tissue, and which is a high grade non-Hodgkin’s lymphoma, compatible with a diffuse large B-cell lymphoma. The distal tumoral area measures 55 x 55 mm and features diffuse and glandular neoplastic proliferation made up of polygonal cells with an irregular round nucleus with a prominent nucleolus and broad, eosinophilic cytoplasm. The neoplastic proliferation infiltrates the...
gastric wall up to the muscular layer, without reaching the serous membrane or the adipose tissue. This is a diffuse, intestinal adenocarcinoma. Surgical resection margins are unaffected. Neoplastic infiltration through the adenocarcinoma is found in one of the 32 dried ganglia, without extracapsular extension. The patient has no post-operative complications. After assessing the patient, the oncological committee rejected adjuvant treatment because of the patient’s commorbidities. The patient is monitored as an out-patient and showed good progress after 6 months.

Discussion

The synchronic presence of adenocarcinoma and gastric lymphoma was described for the first time by Rabinovitch in 1952 (2). Since then, 56 cases have been published in the medical literature (1,3).

The changes in the mucous surrounding the primary gastric lymphoma together with similar findings in the adenocarcinoma suggest that these two tumours could come from the same immunological dysfunction or share a common pathogenesis (4). It is believed that H. pylori contributes to the development of both the carcinoma and the lymphoma. The development of the adenocarcinoma is described by the H. pylori infection sequence and constitutes a chronic gastritis which predisposes the patient to intestinal metaplasia, which becomes dysplasia and then carcinoma. H. pylori causes lymphoid aggregates to appear in the submucous, after which the monoclonal proliferation of B cells in this lymphoid tissue can cause the appearance of a gastric MALT lymphoma (5-7). Furthermore, the tendency to present with secondary neoplasias has been suggested, in immunodepressed patients, as a possible explanation why the presence of gastric lymphoma seems to increase the risk of gastric carcinoma but not the other way round, which would also explain the small size of the adenocarcinoma in our patient.

These two entities present similar macroscopic characteristics in the endoscopic study and can lead to confusion, such as the diagnosis of multifocal lesions in the lymphoma. For this reason, a biopsy of all the suspected areas is recommended. Although there are no clinical guidelines for the treatment of synchronic gastric tumours, it is thought that treatment should follow the therapeutic guidelines for adenocarcinoma which involve total gastrectomy and D1 or D2 dissection (1). The treatment of choice for aggressive gastric lymphomas is chemotherapy which in our case has not been possible because of the patient’s commorbidities.

Carles Olona-Casas, Vicente Vicente-Guillén, Aleidis Caro-Tarragó, Jose Mª Coronas-Riba and Enric Duque-Guilera

Department of General and Digestive Surgery. Hospital Universitario Joan XXIII. Tarragona, Spain

References