Liver metastasis secondary to primary mesenteric carcinoid

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CASE REPORT

A 66 year-old male presented a one-year period of abdominal pain, iron-deficiency anemia and diarrhea. Computed tomography showed in portal phase a mesenteric mass with three liver metastasis and locoregional adenopathies (Fig. 1A and B). After fine needle aspiration (18G) of one metastatic lesion, multiple neoplastic cells with positive immunohistochemistry markers for chromogranin and synaptophysin were identified. The Ki-67 proliferation rate was < 2%, and only 1 mitoses/10 HPF was detected (Fig. 2A-C). Normal values of 5-hydroxyindoleacetic acid in 24 h-urinary excretion and serum levels of chromogranin-A were detected. No other metastatic lesions were identified on octreoscan examination (Fig. 3 A and B). Therefore, metastatic primary mesenteric carcinoid tumor was the final pathological diagnosis. After two months of treatment with somatostatin analogs (Sandostatin® 30 mg/24 h) symptoms had improved, the diarrhea had disappeared and the disease was considered to be under control.

DISCUSSION

Carcinoid tumors are rare, slow-growing neoplasms that display neuroendocrine properties. The term carcinoid is generally applied to well-differentiated neoplasms, while neuroendocrine carcinoma is reserved only for poorly differentiated lesions. They can be found throughout the different regions of the gastrointestinal system, although they have predilection for the ileum (1). They often present an indolent growth and tend to infiltrate the gastrointestinal wall, extending to the mesentery in 40-80% of cases. Thus, solid neoplasms arising in the mesentery are usually metastatic lesions, while primary neoplastic involvement is extremely infrequent. Delayed diagnosis occurs frequently, typically 5-7 years from initial onset of symptoms, with 60-80% of patients diagnosed at an advanced stage (2). Surgical resection is generally preferred for patients with potentially resectable disease, while somatostatin analogs are the first line treatment for unresectable symptomatic disease (3).

Fig. 1. A. Typical presentation of extra-digestive carcinoid tumor: heterogeneous, starry mass of soft tissue with central calcifications in the mesentery. B. Liver metastatic lesions enhanced in portal phase.
Fig. 2. A. Neuroendocrine tumor infiltrates liver parenchyma (right side of the picture). Note the uniformity and organoid pattern. Tumor islands are separated by a delicate fibrous stroma (H-E x 200). B. Diffuse and granular cytoplasmatic staining for chromogranin in the tumor cells but not in hepatocytes (x200). C. Intense diffuse staining for synaptophysin, a neuroendocrine differentiation marker (x200).

Fig. 3. Octreoscan ruled out other lesions, confirming data obtained by computed tomography. A. Liver metastasis. B. Primary mesenteric carcinoid.

REFERENCES

