Control Number: 21

Abstract Category: Clinical Case Challenge in Cardio-Oncology

Title: Management of Neuroendocrine Tumor with Carcinoid Heart Disease and Liver Metastases: Multidisciplinary Approach.

ABSTRACT BODY

Background and Purpose

Heart is frequently involved in oncological processes, either by direct tumor existence/activity or secondary to antitumor treatment. This case exemplified how cardio-oncologists, being part of multidisciplinary team, reach a consensus management, key to success.

Case Description and Outcomes

A 46 years-old female, no medical history, consulted for dyspnea, oedema, palpitations and hot flushes. On examination, presented a systolic tricuspid murmur. Echocardiogram showed free tricuspid valve regurgitation (Image 1) and double mild pulmonar valve lesion, with retracted and thickened veils, and normofunctional dilated right ventricle (RV) with volume overload signs. Cardiac magnetic resonance (MR) confirmed overloaded RV and normal function. With the suspicion of carcinoid syndrome (CS), methanefrines, chromogranin-A and 5-hydroxyindoleacetic levels in serum resulted increased. Primary tumor in ileum and extensive metastatic liver affectation were found by abdominal computer tomography (CT) (Image A-B). PET-CT showed high metabolic activity and OctreoScan pathological somatostatin's receptors (Image 2C-D, respectively). Liver biopsy confirmed a well-differentiated low-grade neuroendocrine tumor (LGNET), compatible with CS and heart valve involvement. Management was decided by multidisciplinary team. With profilaxis to serotoninergic crisis, the patient underwent tricuspid and pulmonary biologic-valve replacement. Anticoagulation with low-weight-molecular heparin was kept until abdominal laparoscopic resection surgery of TNE and left liver metastases. In a second time, radioembolization of right liver metastases and curative surgery were performed.

Discussion

Primary LGTNE appears more frequently in gastrointestinal and respiratory systems, 75% with metastases at diagnosis. CS, secondary to hormonal overproduction, appears in 20-30% of patients. More than 50% have cardiac involvement: tricuspid almost all, 50% pulmonary and 90% right chambers dilatation. Multidisciplinary management is mandatory for the right treatment of symptoms, cardiac morbidity and tumoral mass to ensure outcomes.

References

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2. Davar J, Connolly HM, Caplin ME, et al. Diagnosing and Managing Carcinoid Heart Disease in Patients With Neuroendocrine Tumors: An Expert Statement. J Am Coll Cardiol 2017;69:1288–1304.
3. Ito T, Lee L, Jensen RT. Carcinoid-syndrome: recent advances, current status and controversies. Curr Opin Endocrinol Diabetes Obes 2018;25:22–35.

Image 1

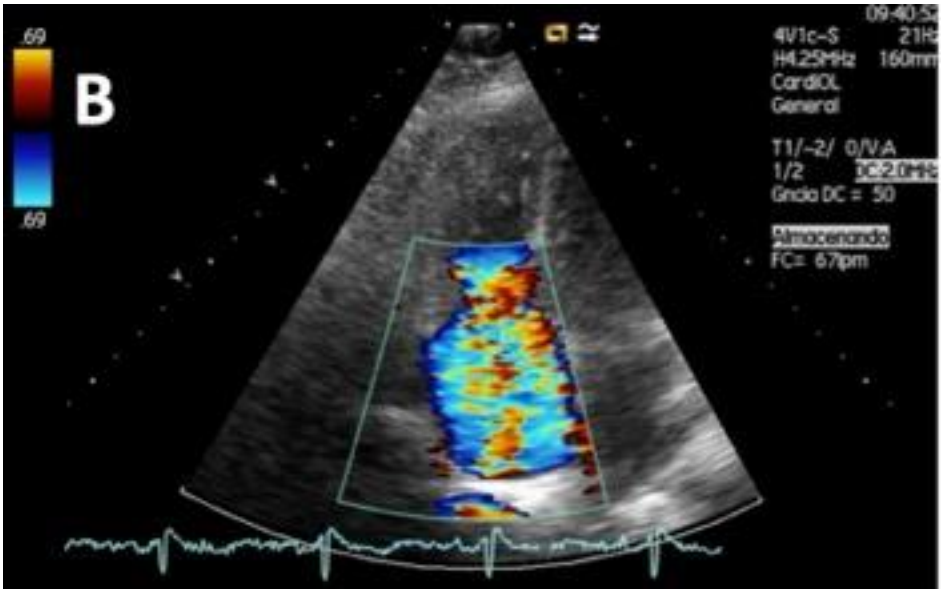

Image 2