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Antiphospholipid Antibodies, Portal and Mesenteric Thrombosis and Carcinoid Tumor: A Case Report

Dear Sir,

The association between thrombosis and cancer, mainly related to liver, ovary, pancreas, brain, and lymphoma, has been extensively reported (1, 2). Due to the coexistence between both processes, a search for a hidden cancer in patients with idiopathic venous thrombosis is warranted. So far, the association between thrombosis and carcinoid tumor has not been described. We present a case of a patient in whom portal thrombosis was detected four years before an established diagnosis of carcinoid tumor. Complementary studies after surgery did not show the presence of metastases.

A 32-year old woman with a history of intrauterus fetal death in her first pregnancy owing to placental infarction was studied in the hematology service because of acute spontaneous bruises in her legs. She also refered abdominal pain during the last week. A radiological study including echography and computarized axial tomography showed portal and splenic venous thrombosis with gastro-esophageal varices.

The most relevant analytical parameters were positive anticardiolipin antibodies (aCL: 30 GPL) confirmed in two separate determinations and moderate thrombocytopenia (79000/pL). Lupus anticoagulant measurement using the vVRD test was negative. Other causes of antiphospholipid syndrome (APS), including collagen diseases, were excluded and serologic markers for autoimmune diseases were negative. Antithrombin, proteins C and S, resistance to activated protein C, molecular prothrombin mutation and analysis of factor V Leiden ruled out a congenital hypercoagulable state. With the diagnosis of primary APS she began an oral anticoagulant treatment keeping INR around 3. Repeated controls showed thrombocytopenia and positive aCL. Oral anticoagulant therapy was chronically maintained.

After a follow-up period of 4 years, she presented with hematemesis requiring hospitalization. Abdominal echography was performed detecting a tumor localized in the pancreas head which was biopsied through collangiography. An arteriography showed massive thrombosis affecting portal and mesenteric veins with no evidence of liver metastatic dissemination. Surgical intervention consisting of duodenopancreatectomy confirmed the diagnosis of carcinoid tumor with areas of fibrosis and venous thrombosis of small vessels. The patient received oral anticoagulant treatment without evidence of tumoral recurrence after one year follow-up.

Neuroendocrine carcinoid tumors are relatively uncommon tumors clinically silent in most instances. Occasionally intestinal manifestations occur as abdominal pain, intermittent obstruction and palpable mass. Patients rarely present the complete clinical picture of flushing, bronchoconstriction, intestinal hypermotility and cardiopathy due to the production and secretion of 5-hydroxytryptamine (serotonin) by the enterochromaffin tumoral cells (3). Whereas some cardiac manifestations mainly involving the right side valvular heart disease have been reported, no thrombotic events have so far been described (4, 5). The reported case illustrates for the first time an association of carcinoid tumor diagnosed long after portal thrombosis in a patient with APS, emphasizing the need to look for a hidden carcinoid tumor in patients diagnosed of idiopathic acquired venous thrombosis.

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Congenital Combined Deficiencies of all Vitamin K-dependent Coagulation Factors

Dear Sir,

Congenital combined deficiencies of all vitamin K-dependent coagulation factors are a rare bleeding disorder. Recently, we reported a missense mutation of the γ-glutamyl carboxylase gene, resulting in a serine codon (TCG) instead of a tryptophan codon (TGG) at amino acid residue 501 of the γ-glutamyl carboxylase enzyme (1). The carboxylase gene is located on chromosome 2 and has 15 exons which encode a mRNA with an open reading frame of 2277 nt. The γ-glutamyl carboxylase enzyme consists of 758 amino acids and has a molecular weight of 95 kD (2). Vitamin K is a necessary cofactor in the γ-glutamyl carboxylation reaction in which specific glutamic acid residues (Gla) in a number of proteins are modified into γ-carboxy glutamic acid residues (Gla), including the procoagulant factors II, VII,

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