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Case Report

ACUTE VENOUS THROMBOSIS AS FIRST SIGN OF PANCREATIC ADENOCARCINOMA

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ABSTRACT
Significant increase on the incidence rate of pancreatic cancers stand out among other gastrointestinal malignancies, at present. Insidious progression of the disease usually cause delayed onset, locally advanced or metastatic disease. Many symptoms such as loss of appetite, progressive cachexia and thrombosis are also seen in pancreatic cancer. Tumor cells can produce procoagulant substances and leads to hyperviscosity. This case report was made to emphasize the importance of a detailed evaluation on the cases with venous thrombosis.

Keywords: *Acute Venous Thrombosis, Pancreatic Adenocarcinoma*

INTRODUCTION
Venous thromboembolism can be developed 10-20% of cancer patients and detected 50% of autopsies on cancer cases. There is a documented tendency of thrombosis and increased risk of cerebrovascular disease in cancer population (Horsted, 2012). The etiology may differ among patients, but a widely accepted hypothesis suggets that increased serum levels of tissue factor or cancer procoagulant and acceleration of pro-coagualtive processes. Superficial or deep vein thrombosis may be the first sign of malignant diseases. Gastrointestinal adenocarcinomas include prominent risk of thromboembolism. Acute venous thromboses can be developed in the course of pancreatic adenocarcinoma (Bauer, 2000). This case was presented to emphasize the importance of ethiologic investigation of acute venous thrombosis as a clinical finding of pancreas cancer.

CASES
Seventy years old female diabetic patient admitted to the hospital with a sudden developed right lower extremity pain and swelling in a day. Patient had been medicated with metformin (2000 mg/day) medication for type 2 diabetes for five years. Physical examination was performed and jaundice was identified on scleras.
Cardiovascular and respiratory system examination were normal. Tension 125/70 mmHg, pulse 88 /min. There was edema, limitation of movement and pain on right lower extremity. Homans test was positive. Blood tests were performed and results were fasting blood glucose 103 mg/dl, hemoglobin A_1c 6.8%, urea 23 mg/dl, creatinine 0.7 mg/dl, aspartate aminotransferase (AST) 201 mg/dl (0-45), alanin aminotransferase (ALT) 296 mg/dl (0-42), gamma glutamyl transferase (GGT) 1547 mg/dl (0-55), total bilirubin 6.9 mg/dl (0.3-1.2), direct bilirubin 4.36 mg/dl (0-0.8), alkaline phosphatase 496 mg/dl (30-120), cancer antigene (CA-19.9) 2064 ng/ml (0-9), carcinoembryonic antigen 253 ng/ml (0-3). Arteriovenous doppler ultrasound of right deep femoral was displayed an oclusion by the thrombus material. Low molecular weight heparin (enoxaparine) was administered. Abdominal ultrasound was performed and displayed a heterogenous hyperechoic lesion which measured 35 mm in diameter in pancreas caput and multiple lesions in the liver that considered as metastasis. Abdominal tomography and magnetic resonance imaging revealed dilatation of Wirsung duct, hypointens mass lesion in pancreas, hydropic gall bladder and liver metastasis.
Results was consulted with general surgeon. Laparascopic pancreas mass biopsy was applied. Pancreatic adenocarcinoma was identified in pathological examination. Patient was referred to the oncology department for the chemotherapy protocol.

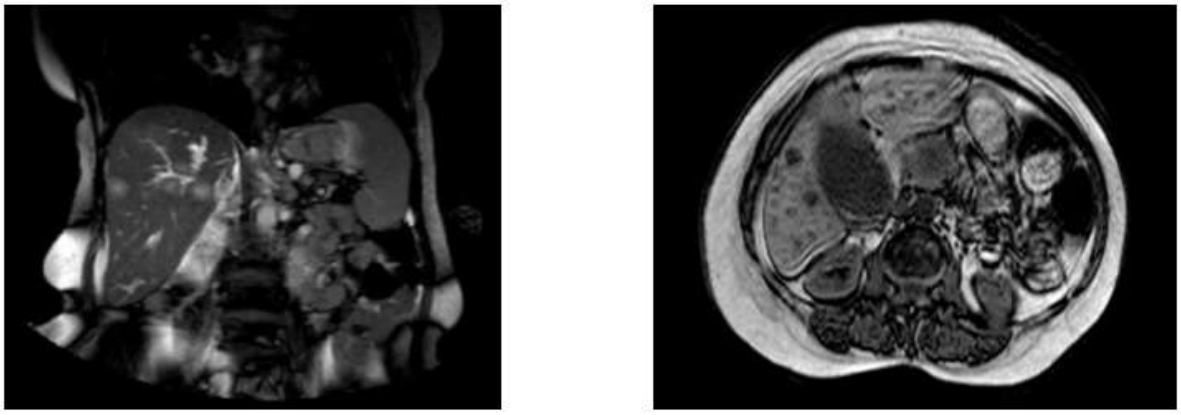

Figure 1: Abdominal Magnetic Resonance İmaging Revealed Hypointens Mass Lesion in Pancreas, Hydropic Gall Bladder and Liver Metastasis

DISCUSSION

Malignancy related thromboembolism is mostly related with spontaneous recurrent migratory venous thrombosis, arterial thrombosis, microangiopathy, non-bacterial thrombotic endocarditis and acute or chronic disseminated intravascular coagulation. The most common cancers paired with thromboembolism originate from pancreas, ovary, colon, lung and bladder; moreover, disorders such as myeloproliferative syndromes and paraproteinemias have high incidence of thrombosis (Horsted *et al.,* 2012). Tumor cells secrete procoagualant factor and not only trigger coagulation, but also inflammatory processes. TNF-alfa, IL-1, vascular endothelial growth factor may also induce procoagulant factor production. Tumor factor secretion caused by vascular injury during surgery, cytotoxic agents or hormonal therapies, direct endothelial damage in radiotherapy and immobilization may accelerate hypercoaguability (Bauer, 2000). Radiologial findings are important to detect intra-abdominal tumors with the clinical feature. Compiturized tomography and magnetic resonance imaging can be applied. Clinical findings can vary from common abdominal pain to venous thrombosis. Pancreas tumors are associated with the risk of developing venous thromboembolism. There was not survival difference between patients with acute venous thrombosis compared to those without it (Shaib *et al.,* 2010).

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