Sepsis as the first presentation of penetrating aortic ulcer: a case report

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KEYWORDS: acute aortic syndromes, penetrating aortic ulcer, sepsis.

CITATION: Cardiol Croat. 2024;19(3-4):119. | https://doi.org/10.15836/ccar2024.119

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Introduction: The incidence of acute aortic syndromes is estimated at approximately 10.2 and 5.7 cases per 100 000 person-years for males and females, 2-7% of all these cases are penetrating aortic ulcers.[1] Penetrating aortic ulcer (PAU) is more common in males, with increased age (>60 years), with uncontrolled hypertension. The problem is that there are no optimal recommendations for the treatment of an isolated PAU.[2]

Case report: 72-years-old male was admitted to the Emergency Room with the symptoms of fatigue and nonspecific abdominal pain, hypotensive (blood pressure 80/60 mmHg). In the last two years patient has suffered from cerebrovascular disease and had thromboendarterectomy of right internal carotid artery. Due to history of atherosclerosis and clinical presentation of shock, MSCT aortography was performed and it showed penetrating aortic ulcer of infrarenal abdominal aorta width 12 mm and depth 10 mm. In the lab results there was a rise in inflammatory parameter: leukocytosis (16.89x10^9 /L) with neutrophilia (15.94x10^9/L) and high C-reactive protein (381.1 mg/L). Patient was admitted in the Coronary Care Unit in septic shock where he was treated with parenteral antibiotics (*K. pneumoniae ESBL* was isolated in blood cultures). On the fifth day of hospitalization, patient's neurological status was worsening so the computerized tomography of brain was done that showed new ischemic lesion. In spite of the antibiotics patient was still febrile and the new MSCT of abdomen was done and revealed hydronephrosis of the left kidney which was treated with the implantation of JJ stent. During the rest of the hospitalization patient had no fever, inflammatory parameters dropped to normal values. A vascular surgeon was consulted multiple times to reevaluate the treatment of aortic ulcer and the conclusion was that surgical treatment was not indicated at the time and it was recommended to continue optimal medicament treatment and regular follow ups.

Conclusion: This case report on a 72-years-old patient shows that in treating patients with acute aortic syndrome it is crucial to select appropriate combination of medical and procedural therapy and later to provide follow up and imaging surveillance.

RECEIVED:
October 15, 2023

ACCEPTED:
October 27, 2023

LITERATURE

1. Sorber R, Hicks CW. Diagnosis and Management of Acute Aortic Syndromes: Dissection, Penetrating Aortic Ulcer, and Intramural Hematoma. Curr Cardiol Rep. 2022 Mar;24(3):209-216. https://doi.org/10.1007/s11886-022-01642-3
2. Salim S, Locci R, Martin G, Gibbs R, Jenkins M, Hamady M, et al; Imperial Vascular Unit Collaborators. Short- and long-term outcomes in isolated penetrating aortic ulcer disease. J Vasc Surg. 2020 Jul;72(1):84-91. https://doi.org/10.1016/j.jvs.2019.09.039