Intramural great vessel lymphoma presenting as thrombus in an aortic aneurysm

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Abstract

Introduction: Intravascular large B-cell lymphoma (IVLBCL) is a subtype of extra nodal B-cell lymphoma with growth limited to the luminal of small vessels. Intramural great vessel lymphoma (IMGVL), on the contrary is extremely rare.

Case report: We report a 72-year-old male, smoker (40 pack-years) with hypertension and chronic kidney disease presented with severe abdominal pain. The patient experienced decreased appetite and weight loss of around 15 kg in the past one month. The patient underwent CT abdomen with IV contrast which showed aneurysmal dilatation at the level of first lumbar vertebra (L1) with circumferential thrombus. He was diagnosed to have Type IV Thoracoabdominal Aortic Aneurysm with total occlusion of the Infrarenal aorta and severe celiac artery stenosis as well as complete occlusion of the inferior mesenteric artery, complete occlusion of the distal abdominal aorta and near total occlusion of the left renal artery. Surgical repair of thoracoabdominal aneurysm was done along with complete revascularization of the abdominal viscera including celiac artery, superior mesenteric artery, bilateral renal and aorto-bifemoral bypass. The vessels appeared completely normal without any tumor growth. However, there was a thrombus in the aorta. Macroscopic examination showed a fragmented thrombus measuring 8x8 cm in aggregate. Image 1 A surprising diagnosis of intramural great vessel lymphoma (IGVL) large B cell lymphoma was made. Patient was treated with 6 cycles of R CHOP chemotherapy with dose reduction.

Discussion: Primary tumors of the aorta are extremely rare with around 100 reported cases. There are noted primarily in the abdominal aorta in association with an aneurysm or mimicking one. Intravascular large B-cell lymphoma (IVLBCL) is a distinctive subtype of extra nodal B-cell lymphoma based on intravascular growth of neoplastic B cells that is limited to the lumen of capillaries or small vessels. Primary IMGVL is exceptionally rare. To the best of our knowledge, this is the fourth reported case of intramural large B-cell lymphoma involving a large vessel which represents an entity distinct from IVLBCL clinically and histologically.

Conclusion: This report debates the concept of DLBCL associated with chronic inflammation and raises the question of other pathogenetic factors involved in the pathogenesis of this rare disease.

Image

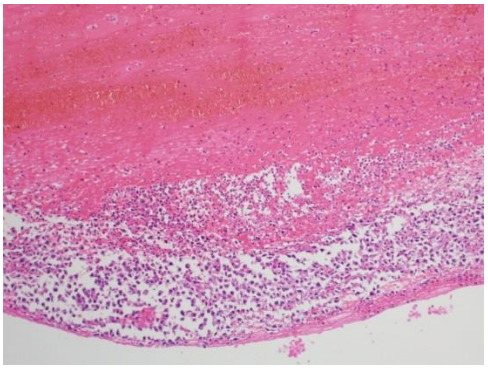


Figure 1: Thrombus with atypical cells in sheets towards the edge (hematoxylin- eosin, original magnification x300).

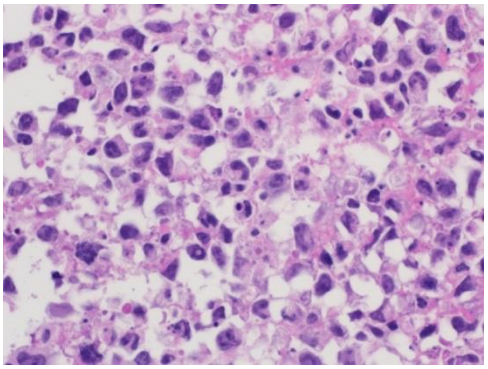


Figure 2: Hight power view showing pleomorphic population of large cells with hyperchromatism and bizarre nuclei with karyorrhexis (hematoxylin- eosin, original magnification x600)

1. Shehab F Mohamed, Mohamed A Yassin, Abdulqadir J Nashwan and Susana E L akiki (2018) Concomitant BRAF mutation in hairy cell leukemia and papillary thyroid cancer. Blood DOI: 10.1182/blood-2018-99-116084.

2. Shehab Fareed, Abdulqadir J Nashwan, Sulieman Abu Jari and Moh Yassin (2017) Spinal Abscess Caused by Salmonella Bacteremia in a Patient with Primary Myelofibrosis. American Journal of Case Reports 18:859-864.

Recent Publications

Biography

Shehab F Mohamed is a hematologist in National Center for Cancer Care and Research, Qatar which is a part of Hamad Medical Corporation. He has multiple publications in infections disease, hematology leukemia, MPNs.

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Notes/Comments: