Aneurysm Induced Disseminated Intravascular Coagulation Masking as Elder Abuse

Jessica Sharon Genkil DO, MHSA[1]; Jabari Munroe MD[1], Jordan Carty MD[1]; Zurab Azmaiparashvili MD[1], Grei Shele DO, MHSA[2]
[1]Department of Internal Medicine, Albert Einstein Medical Center, Philadelphia, PA. [2]Department of Emergency Medicine, Albert Einstein Medical Center, Philadelphia, PA

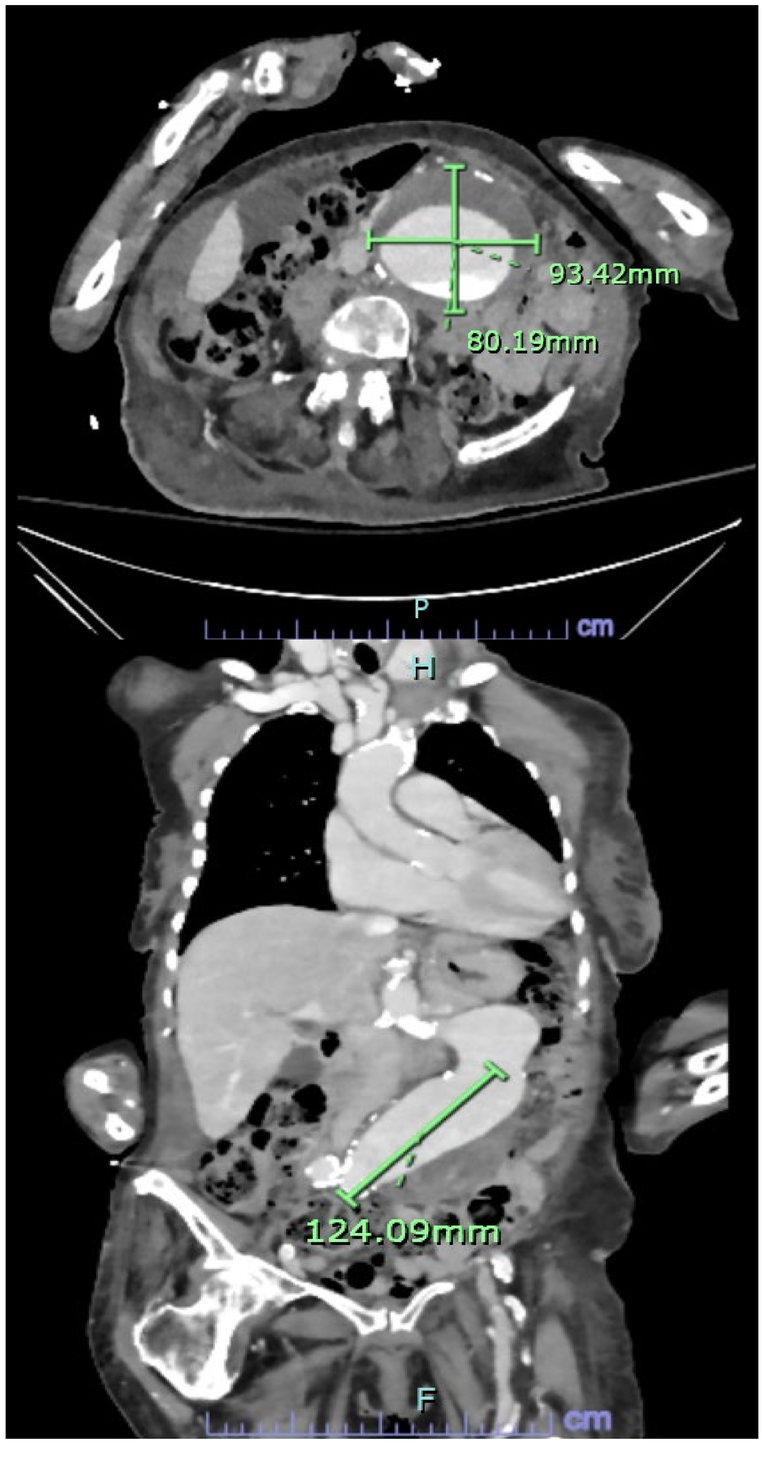
Introduction

Disseminated intravascular coagulation (DIC) is a known, but rare complication of abdominal aortic aneurysm (AAA). Most cases present as perioperative coagulopathy, but it rarely presents spontaneously as a result of the aneurysm itself. In the aging population, clinical features of DIC such as purpura, petechiae, ecchymosis, and confusion may raise concern for elder abuse. As the aging population increases, we present a case of spontaneous DIC thought to be induced by AAA with intention to expand the unique presentations which may exist with this dangerous condition.

Case Report

A 90 year-old female with hypertension, atrial fibrillation not on anticoagulation due to history of spontaneous rectus sheath hematoma, AAA, and dementia presented to the hospital for left-sided neck pain, bruising, and hemoptysis. Family reported that the patient has been experiencing spontaneous bruising and gum bleeding. Recently the patient required sutures for a simple open wound as hemostasis was difficult to achieve. Given the patient's advanced age, dementia, diffuse ecchymosis, and history of multiple recent hospitalizations there was reasonable concern for elder abuse and neglect. Imaging was obtained and CT neck revealed soft tissue infarction of anterior neck muscles. CT abdomen revealed two infrarenal abdominal aortic aneurysms (AAA), the larger being 9.3 x 8.0 x 12.4 cm with calcified and noncalcified thrombus within the aorta. Laboratory studies were abnormal with prolonged prothrombin time (PT) and partial thromboplastin time (PTT), elevated D-dimer, elevated lactate dehydrogenase, decreased platelet count, and hypofibrinogenemia. Peripheral blood smear revealed schistocytes. The patient was determined to be in disseminated intravascular coagulation with the only identifiable cause being the AAA. Due to advanced age and comorbidities the patient was deemed not to be a surgical candidate and she was transitioned to hospice care instead.

CT CHEST/ABDOMEN/PELVIS W/ CONTRAST



Conclus

Disseminated intravascular coagulation that presents acutely secondary to infection or trauma is readily recognized due to its characteristic presentation and multi-organ failure. On the contrary, DIC that results from gradually progressing vascular disease, such as AAA, typically remains in a chronic compensated state and may therefore remain asymptomatic. For this reason, DIC diagnosis may be prolonged and only considered in the clinical setting where hemostasis is difficult to achieve. When symptomatic, it may present with overt bleeding, ecchymosis, purpura, and even confusion. It is important to maintain a high index of clinical suspicion for DIC, especially in the aging population with AAA as the diagnosis may be overshadowed by concern for elderly abuse and neglect. As such, it is important to perform a comprehensive geriatric assessment to identify potential for elder abuse and avoid premature closure when making the diagnosis.

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