PROSTHETIC VALVE CARIOBACTERIUM HOMINIS ENDOCARDITIS IN A PATIENT WITH HYPERCOAGULABILITY: TO ANTICOAGULATE OR NOT TO ANTICOAGULATE

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Background: Cardiobacterium hominis (C. hominis) is an uncommon cause of endocarditis and often presents insidiously, making the diagnosis difficult. On the other hand, prosthetic valve thrombosis (PVT) is a rare, but life-threatening condition that commonly occurs due to inadequate anticoagulation. Anticoagulation is contraindicated in patients with endocarditis as it may prove to be lethal due to increased risk of hemorrhagic stroke whereas it is required in PVT.

Case: A 35-year-old African American male with a history of hypercoagulability with deep vein thrombosis, pulmonary embolism, arterial thrombus and prosthetic aortic valve presented with a two-day history of dyspnea and pleuritic chest pain. Home medications included warfarin, carvedilol and oxycodone. Vital signs were stable on admission. Physical exam was remarkable for a chronic II/VI systolic murmur throughout the precordium. Laboratory studies were unremarkable, except sub-therapeutic INR of 1.5.

Decision Making: CT chest obtained to rule out pulmonary embolism showed thickening of aortic valve. Transthoracic echocardiogram (TTE) showed an echo-dense mass on the aortic valve highly suspicious for a thrombus. Due to a high suspicion for PVT, heparin was initiated and warfarin dose was increased with an INR goal between 2.5-3.5. Blood cultures were obtained to exclude subacute bacterial endocarditis (SBE) and were positive for C. hominis three days after. The patient was started on appropriate antibiotic and treated for six weeks following negative culture results.

Conclusion: In the absence of classical stigmata of endocarditis, presence of sub-therapeutic INR, mass on the aortic valve as seen in the TTE, and patient’s underlying hypercoagulability, the possibility of PVT was very high and anticoagulation was immediately indicated. However, with positive blood cultures, SBE also became likely and this posed as a management dilemma. In our patient, due to the complexity of his case, he was continued on both anticoagulation and antibiotic treatment. This case demonstrates the importance of weighing the risks and benefits and managing appropriately as SBE and PVT may both be fatal if left untreated.