Claudication or Something More Sinister: A Case of Endovascular Infection Due to Campylobacter Coli

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Introduction:

Campylobacter spp. are a leading cause of gastroenteritis worldwide; however invasive infections, particularly endovascular, are exceedingly rare. We present the case of a peripheral endovascular infection due to Campylobacter coli.

Case Presentation:

A 66-year-old male with CAD, PAD, type 1 diabetes mellitus, hypertension, chronic diarrhea due to pancreatic insufficiency, and tobacco use presented for elective aortobifemoral bypass after a recent hospitalization for right medial thigh pain attributed to claudication from known PAD. Intraoperatively he was found to have an avulsed friable branch of the superficial femoral artery (SFA) with thick purulence and chronic thrombosis suspicious for infective arteritis, and the procedure was aborted. Postoperatively the patient developed fevers to 102.7°F, tachycardia, and hypotension refractory to intravenous fluids. Labs were significant for white blood cell count of 10.8 10³ /uL and a troponemia which peaked at 19,276 ng/L, concerning for non-ST elevation myocardial infarction. Subsequent transthoracic echocardiogram showed a newly reduced ejection fraction and regional wall motion abnormalities. He was admitted to the ICU for septic versus cardiogenic shock and started on vancomycin, piperacillin-tazobactam, and unfractionated heparin, and ultimately taken for coronary revascularization. Blood cultures and intraoperative cultures subsequently grew gram negative rods identified as Campylobacter coli. Sepsis and right thigh pain resolved with empiric antibiotics, and he was transitioned to intravenous azithromycin for a six-week course. Etiology of his presentation was thought to be from Campylobacter coli gastroenteritis, unrecognized in the setting of chronic diarrhea, and leading to gut translocation and subsequent bacteremia with SFA arteritis.

Discussion:

Endovascular infections caused by *Campylobacter spp.* are likely underreported due to lack of awareness of their potential for localized infections. Interestingly, only 22% of cases present with diarrhea, as in our patient, which may contribute to lack of recognition. Common risk factors include male sex, cardiovascular disease, diabetes, solid organ neoplasm, chronic hepatic or renal failure, as well as presence of vascular endografts. Most cases are attributed to *Campylobacter fetus* bacteremia and seem to preferentially affect the infra-renal aorta, less commonly peripheral arteries of the lower extremities. *Campylobacter coli* is a far less common cause. This case highlights an uncommon presentation of a *Campylobacter* endovascular infection and the need for a high index of suspicion particularly with *Campylobacter spp.* bacteremia.

References:

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