Bovis in the Blood: A Case of Ischemic Stroke Caused by *Streptococcus Bovis* Infective Endocarditis

Mohammad Zaidi, MD; Mery Elashvili, MD, DO

Author contact information

Mohammad Zaidi
mzaidi@burke.org

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INTRODUCTION

A 42-year-old male with myasthenia gravis controlled with prednisone and pyridostigmine, and bicuspid aortic valve, presented to the acute rehabilitation setting after a right MCA ischemic stroke, due to native aortic valve infective endocarditis caused by *Streptococcus bovis*.

CASE

The patient described above presented to an outside hospital with acute onset left hemiparesis and fever and was diagnosed with *S. bovis* sepsis bacteremia. The initial CT head scan showed right cortical MCA infarct with hemorrhagic transformation (see Image 1). TTE revealed bicuspid aortic valve, and TEE revealed large aortic valve vegetations, as well as a patent foramen ovale (PFO). The initial blood culture exhibited sensitivity to ceftriaxone, therefore a six-week ceftriaxone IV regimen via PICC was started. Cardiology, cardiothoracic surgery, and gastroenterology were consulted. Aortic valve replacement was postponed due to the need for heparin during cardiopulmonary bypass. The patient completed inpatient rehabilitation with improvement in his left hemiparesis. He was later diagnosed with gastric tubular adenomas during an outpatient colonoscopy, which were resected. The patient is currently undergoing planning for aortic valve replacement.

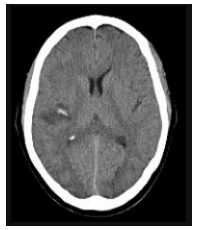

Image 1: Noncontrast CT head demonstrating right MCA cortical infarct with hemorrhagic transformation.

Hemiparesis and sepsis were the presenting illness in a patient diagnosed with **MCA stroke**, ultimately attributed to ***S. Bovis* infective endocarditis** and **gastric adenoma.**

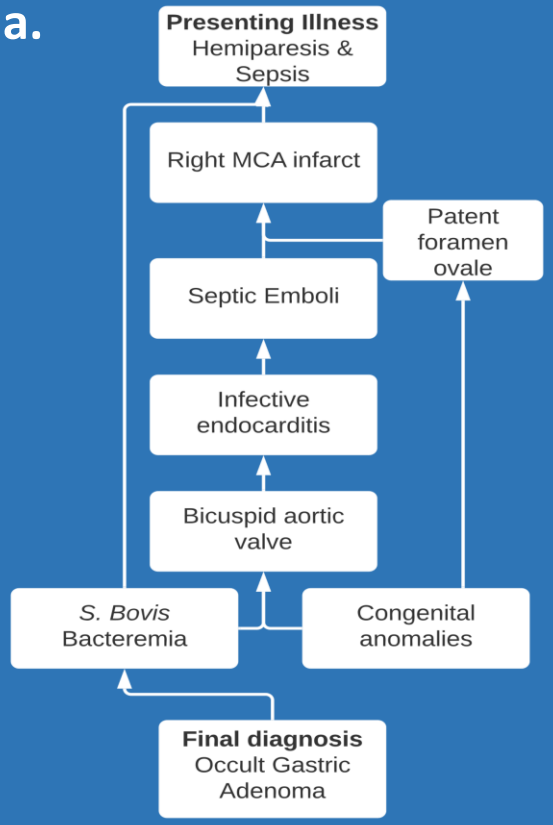

Figure 1: Proposed Etiology of Presenting Illness

DISCUSSION

Infective endocarditis and neurological complications caused by S. bovis have been reported in the literature, although typically in older populations with significant comorbidities [1]. This patient's myasthenia gravis was well-controlled on prednisone and pyridostigmine, and his outpatient neurologist was consulted during both hospitalizations. There was no personal or family history of colon cancer, which is typically associated with S. bovis bacteremia. The role of prednisone causing immunosuppression leading to the infection is unclear, as the patient did present with leukocytosis and fever [2]. This patient's specific congenital anomalies highlight a unique presentation, with the proposed etiology outlined in Figure 1.

CONCLUSION

This case highlights the unique role of acute rehabilitation bridging between acute hospitalization and the outpatient setting. Acute rehabilitation was essential in this patient's management, allowing for close monitoring while the patient completed intravenous antibiotics, coordination of various subspecialties for his future care, and improving his functional outcomes in the interim. In addition to the rare medical case, this report further emphasizes the role of physiatrists in managing all aspects of care.

REFERENCES

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