Bad Takeout Leading to Epidural Abscess and Bacteremia

Authors: Isabella Alvarado, DO[1,2], Natalie Lukasik, DO[1,2]
1. Department of Internal Medicine (Philadelphia College of Osteopathic Medicine)
2. Department of Internal Medicine (Temple Health Chestnut Hill Campus)

INTRODUCTION

Salmonella Infections

Entry into the bloodstream: Salmonella, often from contaminated food, can enter the bloodstream.

Systemic Infection: Once in the blood, the bacteria can spread to various parts of the body, causing inflammation and potentially severe complications.

Focal Infections: The bacteria can also localize in specific tissues, forming abscesses or causing conditions like arthritis, endocarditis, or even meningitis.

PATIENT PRESENTATION

83-year-old female with PMHx of Hypertension, Graves' disease s/p thyroidectomy, CAD with remote MI s/p angioplasty, and IBS presents to the hospital with the chief complaint of lower back pain. Pain, fevers, and chills started 4 days prior to arrival, severely limiting ambulation. Congestion, decreased urine output, and decreased appetite were also reported. On arrival, patient was hypertensive (BP 163/74) and afebrile (Temp 99.2 F), sating 94% on room air.

CASE DESCRIPTION

Initial lab work showed hyponatremia and leukocytosis, negative viral panel. Lumbar xray showed degenerative spondylosis.

Given concerns for possible infectious source, initial treatment included IV Cefepime and Flagyl. CT Abdomen/Pelvis showed gastric wall thickening versus under-distention, clinical correlation for gastritis was recommended. Patient's admission blood cultures grew gram negative rods. Speciation eventually showed Salmonella spps, raising suspicion for bacterial seeding into her spine, with the source of Salmonella suspected to be abdominal. Lumbar MRI was negative for abscess.

Cervical MRI showed acute disco vertebral osteomyelitis at C6-7 with small ventral epidural abscess impinging the cord with cord edema, causing a critical spinal canal stenosis

DISCUSSION

During her hospital stay, her WBC peaked at 19. She was found to have salmonella bacteremia with minimum of GI symptoms. She was further found to have cervical epidural abscess and transferred to a tertiary medical center for further neurosurgical evaluation. For antibiotic treatment, patient was continued on IV Ceftriaxone 2g daily.

Patient had outpatient MRI cervical spine 4-6 weeks after finishing antibiotics and was instructed to follow up with infectious disease.

CONCLUSION

This case emphasizes the importance of thorough investigation for causes of infections, including both history taking and diagnostic testing. The unique diagnostic challenge and interdisciplinary management highlight the need for a comprehensive approach to uncover uncommon etiologies in complex clinical presentations.