

The Era of Novel Pathogens

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Introduction

- Eggerthella Lenta is an anaerobic gram-positive bacilli associated with immunocompromised hosts polymicrobial intra-abdominal infections.
- Has a high fatality rate of 22-43% mortality.
- It is usually resistant to penicillins and piperacillin-tazobactam.

Case Presentation

- 74-year-old female with underlying Crohn's disease (on infliximab) and COPD (3.5L home O2) who presented to the ED with abdominal pain and septic shock due to sigmoid perforation documented by CT scan.
- Patient had exploratory laparotomy with resection of sigmoid colon and formation of colostomy and Hartmann pouch.
- Patient was empirically treated with vancomycin and piperacillin-tazobactam.

Hospital Course

- Patient developed loculated intra-abdominal fluid collections requiring ultrasound-guided aspiration and severe protein calorie malnutrition.
- Patient positive blood culture identified as gram negative anaerobe.
- Treatment continued only on piperacillin-tazobactam.
- Patient had poor clinical response with intra-abdominal fluid collections, anemia, persistent leukocytosis.
- Identification was noted for Eggerthella Lenta on hospital day 7 and antibiotics was changed to Meropenem.
- Patient discharged on hospital day 27 due to slow improvement.

Follow-Up

- Patient was followed up in the clinic after discharge.
- Patient completed the course of treatment for another month of Meropenem due to poor clinical response.
- She also developed developed postoperative E. fecium and coag negative staph treated with IV vancomycin for 18 days
- Wounds eventually closed and patient doing well.

Discussion

- *Eggerthella lenta* is a novel anaerobic, nonsporulating, Gram-positive bacillus which is probably underreported in clinical settings due to difficulty in identification due to long incubation time.
- E. Lenta is associated with polymicrobial intra-abdominal infection.
- The 30-day mortality rate was 36% in a retrospective review of patients whose source of bacteremia was primarily abdominal.
- Risk factors include states of immunosuppression, malignancies and IBD.
- No clinical guidelines exist but literature review revealed it is usually resistant to peniciliin and piperacillin-tazobactam, and susceptible to vancomycin, carbopenems, and metronidazole.

References

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