Image Article

Interventional Cardiology

Aeromonas bacteremia in a patient with decompensated EtOH cirrhosis

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Description

Aeromonas hydrophila is a gram-negative rod, aquatic microorganism implicated in clinical disease, including skin soft tissue infections and rarely, bacteremia. In patients with cirrhosis, *Aeromonas* bacteremia has been associated with higher mortality than bacteremia caused by other organisms [1,2]. The following presents a case of a woman with cirrhosis and lower extremity wound exposed to brackish water, found to have *Aeromonas hydrophila* bacteremia.

A 50-year-old-woman with EtOH cirrhosis, active EtOH use, ascites, chronic hyponatremia, and HTN presented to outside hospital with painful bilateral LE swelling, found to have an open LE wound (Figures 1-3) and decompensated cirrhosis. Shizuma, et al. [3], was transferred for hepatology, cardiology and general surgery evaluation for concern of necrotizing fasciitis. While on vacation in New Orleans, she incurred a left LE injury causing an open wound in a blackberry bush, which she maintained while dredging for oysters in brackish water. Vitals wnl upon admission. Exam revealed jaundice, bilateral LE edema and erythema, tenderness to palpation, no crepitus, and open wound on anterior left shin. WBC 15 (nl 3.9-12.7), Na 124 (nl 136-145), AST 107 (nl 10-44), ALT 55 (nl 10-44), TB 15 (nl 0.1-1.0), Lactic 4.4 (nl 0.5-2.2), with MELD 22. CT scan negative for findings consistent with necrotizing fasciitis. Blood cultures grew *Aeromonas hydrophila*. Cardiac surgery believed presentation more consistent with cellulitis. Hepatology consulted for decompensated cirrhosis c/b Hepatic Encephalopathy (HE) and hyponatremia. Hyponatremia improved with IV albumin and lasix. HE resolved with lactulose and rifaxamin. Infectious Disease consulted and recommended cellulitis treatment with 2 weeks of IV Ceftriaxone and PO ciprofloxacin to cover both *Aeromonas* and possible underlying *Vibrio vulnificus* infection [4,5].

Figure 1: Left shin wound upon presentation to hospital

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Figure 2: Wound on left shin

Figure 3: Wound after debridement

Conclusion

In patients with cirrhosis, evaluation of LE wounds may be confounded by baseline LE edema which can be a barrier to clinically evaluating for subcutaneous gas. Although *Aeramonas* is a rare cause of bacteremia, the increased mortality risk associated for patients with cirrhosis and this infection should be considered during treatment and management. With wound exposure to brackish water and concern for cellulitis, empiric treatment for *Vibrio* is reasonable.

Ethics Approval and Consent to Participate

Consent was obtained by patient for this case report.

Consent for Publication

Informed consent has been obtained from participant for publication.

Availability of Data and Materials

Not applicable.

Competing Interests

No, I declare that the authors have no competing interests as defined by BMC, or other interests that might be perceived to influence the results and/or discussion reported in this paper.

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Authors' Contributions

*J.G: Primary/first author, wrote and reviewed the case report; R.E: Helped with intro and conclusion; S.S: Helped write clinical case presentation; N.R: Helped take care of patient in clinical setting; S.B: Helped take care of patient in clinical setting; K.R: Reviewed finished work and made edits; H.J: Reviewed finished work and made edits

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