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JCIMCR OPEN ACCESS Journal of Clinical Images and Medical Case Reports

ISSN 2766-7820

Clinical Image

Open Access, Volume 3

Raw oyster consumption causing vibrio vulnificus bacteremia in ESRD patient

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Received: Apr 26, 2022

Accepted: May 25, 2022

Published: Jun 01, 2022

Archived: www.jcimcr.org

DOI: www.doi.org/10.52768/2766-7820/1863

Background

Vibrio is gram negative bacteria found in warm salty water [1]. Vibrio vulnificus is one of the most common species causing vibriosis in the United States [2]. It is associated with primary sepsis, skin infections as well as gastrointestinal tract infection. Here we present a case of Vibrio vulnificus bacteremia in a hemodialysis dependent ESRD patient [3], with h/o treated colon carcinoma, and liver cirrhosis presenting as bilateral leg edema rapidly escalating to septic shock.

Case presentation

A 65-year-old man with End-Stage Renal Disease (ESRD) on Hemodialysis, treated colon cancer and cirrhosis was admitted to the emergency department for bilateral lower extremity edema. The patient was initially started on vancomycin, zosyn, and doxycycline with no clinical improvement. He later developed worsening leg edema bilaterally with bullae formation and hemodynamic instability requiring intensive care admission as well as initiation of vasopressors. The blood cultures subsequently showed vibrio vulnificus. Based on sensitivity results patient was started on Meropenem and doxycycline. Extensive history taking revealed that the patient had been consuming raw oysters and shellfish. Despite organism-targeted antibiotic therapy, hemodynamic support using vasopressors, and concerted management by the Infectious disease and ICU team, the patient succumbed to sepsis.

Figure 1: Image showing the characteristic bullous lesions.

Citation: Chinta S, Kulkarni M, Dhruv P, Taruna C, Rabih N. Raw oyster consumption causing vibrio vulnificus bacteremia in ESRD patient. J Clin Images Med Case Rep. 2022; 3(6): 1863.

Discussion

Clinicians should have a high suspicion of Vibrio vulnificus [4] in male patients with comorbidities like Cirrhosis, alcohol use, and CKD presenting with primary septicemia and/or wound infections [5]. Early surgical debridement along with antibiotics [6] such as doxycycline and a third-generation Cephalosporine is a preferred treatment of choice for Vibrio Vulnificus while the choice of antibiotics should be based on sensitivity reports

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