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Objective:

Upon completion of the lecture, attendees should be better prepared to:

- Discuss signs of *Vibrio Vulnificus* and treatment course

Abstract:

Introduction: Each year in early summer, local media of the Southern Gulf Coast region warn locals and tourists alike of an infection that incites fear: *Vibrio vulnificus* (VV). Often touted in the media as “flesh-eating bacteria,” VV is a gram-negative bacterium known to flourish in warm, brackish waters. VV is associated with both food poisoning from raw and undercooked shellfish, as well as a necrotizing soft tissue infections often seeded via exposure of open wounds to seawater. Recent experience with VV soft tissue infections illustrates the significant health impact the bacterium has on the local population.

Methods: A retrospective review was performed of patients treated in the Southern Gulf Coast region from August 2015 to June 2017 with culture-proven VV soft tissue infections. Demographics, clinical course, and outcomes were recorded.

Results: Six patients were included in the study. In 5 of 6 patients, the VV infection began with exposure of an open wound to contaminated water. In the sixth, VV colonized a diabetic foot wound. Five patients were white males aged 49 to 75 years. One patient was a 12-year-old white female. Three patients carried a diagnosis of Type II diabetes mellitus. Other comorbidities included: hypertension, chronic kidney disease, peripheral vascular disease, and obstructive pulmonary disease. All patients were started on broad spectrum intravenous antibiotics at presentation before narrowing to a more specific therapy upon culture results. Three patients required incision and drainage or debridement alone, 2 patients required transhumeral amputations, and 1 patient required an above the knee amputation.

Conclusions: In areas where VV is endemic, an early diagnosis based on history of brackish water exposure along with clinical signs is key. When VV infection occurs, prompt antibiotic initiation and aggressive surgical debridement are usually necessary. Individuals with open wounds should avoid the waters of the area, especially in the summer months when more than 85% of VV infections occur. As outcomes from VV soft tissue infections are often devastating, prophylactic antibiotic coverage may be limb or life-saving; but this needs to be further studied.

Disclosure:

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