

# Shewanella spp: An emerging pathogen in skin and soft tissue infection

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## INTRODUCTION

- ❖ Shewanella spp are saprophytic, motile gram-negative rods that are ubiquitous, particularly in proteinaceous fish, iced fish, and marine habitats.
- ❖ Shewanella spp has been implicated in skin and soft infections in humans, especially in those with peripheral vascular disease, diabetes, chronic kidney disease, and chronic leg ulcers

## CASE

- ❖ A 76-year-old male with a history of type 2 diabetes and hypertension was brought to the ED with complaints of swelling and redness of the left lower extremity for 2 days and chills for 1 day.
- ❖ On admission, the patient was in sepsis and was noted to have swelling and redness of the left lower extremity consistent with cellulitis.
- ❖ he was an avid gardener and reported frequent abrasions of the skin especially the lower extremities.
- ❖ Reported seawater exposure a week prior to the onset of symptoms.



## CLINICAL COURSE

- ❖ Empirically started on Vancomycin and Piperacillin- Tazobactam on admission.
- ❖ Antibiotics were narrowed down to Piperacillin- Tazobactam and subsequently de-escalated to oral ciprofloxacin to complete a 14-day course from the day of clearance of the bacteremia.
- ❖ Repeat blood cultures demonstrated clearance of the bacteremia.
- ❖ He also had a venous duplex of the lower extremities which was negative for chronic venous insufficiency

## INVESTIGATIONS

- ❖ White count – 11.1, 80 % Neutrophils, 7.4 % lymphocytes, 12% monocytes.
- ❖ Blood cultures- Shewanella algae – Susceptible Trimethoprim/Sulfate, Ciprofloxacin, Tetracycline and vancomycin

## DISCUSSION

- ❖ Our case illustrates that Shewanella spp, is increasingly being recognized as a causative agent in skin and soft tissue infections.
- ❖ The setting of exposure to marine habitat and the break of the skin barrier due to the recurrent abrasions and lacerations from the gardening put our patient at risk for Shewanella infection.