

PATIENT PRESENTATIONS

- 90-year-old male, 61-year-old female, and 46-year-old male were all stung in the lower extremity by a sting ray
- Presented 2 weeks to 2 months after the initial injury
- All patients were treated with antibiotics prior to their visits to the wound care center
- Two patient's wounds had the fat pad exposed, the third developed osteomyelitis of the underlying bone

MANAGEMENT AND OUTCOMES

- All wounds required excisional debridement
- All wounds were dressed with a silver-calcium alginate dressing as well as further oral or IV antibiotic therapy
- Two patients experienced complete wound healing, the third is still undergoing evaluation with concern for possible osteomyelitis.

DISCUSSION

- Approximately 750 to 2000 injuries occur each year in the United States due to stingrays¹
- Stingrays are generally not aggressive, however, when provoked, may sting with their tail containing barbed spines¹
- Injuries commonly occur when an individual steps on the stingray in murky water, resulting largely in injuries to the lower extremities
- Complications can result from retained fragments of the stingray spine, bacterial infections from brackish water or the stingray itself, or stingray venom causing local or systemic effects¹
- Wounds can become necrotic and lead to delayed wound healing^{1,2}
- Appropriate treatment involves debridement, antimicrobial dressings such as silver-calcium alginate, and systemic therapy with oral or intravenous antibiotics depending on type of water exposure and extent of infection, such as clindamycin and doxycycline, especially if there is concern for *Vibrio* species^{1,2}
- Should ensure patients are current on tetanus vaccinations¹

IMAGES



Figure 1: 60-year-old female with full-thickness open wound to left hip following stingray injury



Figure 2: 90-year-old male with sting ray injury to the left lower extremity with exposure of the fat pad



Figure 3: 46-year-old male with stingray wound to the right anterior lower extremity with fat layer exposed

CONCLUSIONS/TAKE HOME POINTS

- Stingray injuries can result in wounds with delayed healing
- They should be treated aggressively with empiric antibiotics and if necessary excisional debridement and antimicrobial dressings
- Patients benefit from referral to wound healing centers for regular monitoring and treatment

REFERENCES

1. Charnigo A, Thiele G, Kong EL, et al. Stingray Sting. [Updated 2020 Sep 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK539785/>
2. Diaz JH. The evaluation, management, and prevention of stingray injuries in travelers. *J Travel Med.* 2008 Mar-Apr;15(2):102-9. doi: 10.1111/j.1708-8305.2007.00177.x. PMID: 18346243.

