



Podcast Show Notes

Envenomations: Snakes, Lizards, Marine Life, and Arthropods

Envenomations, particularly snakebites, are common in Southern states, yet most healthcare professionals have little formal training on this subject. Frequently, the medical care provided is inconsistent with established guidelines. There are a variety of common mistakes of both omission and commission. Antivenom is not administered when it is indicated, and antibiotics and surgical interventions are ordered despite the evidence indicating these are unnecessary. Many soft tissue infections are mis-diagnosed as spider bites and hymenoptera stings often receive unnecessary and potentially dangerous treatments.

This podcast reviews the pathophysiology, clinical features, and management of various envenomations, including snakebites, scorpion stings, spider bites, hymenoptera stings, bites from venomous lizards and a variety of marine envenomations, including jellyfish stings. Common myths will be dispelled, and learners will be provided with evidence-based treatment guidelines.

This CE course is specific to the Nursing profession.

Episode 1: Evidence-Based Treatment of Snakebites

This episode focuses on the appropriate and inappropriate treatment when caring for a patient who has been bitten by a venomous snake.

Guest

Spencer Greene, MD, MS, FACEP, FACMT, FAACT, FAAEM

Spencer Greene, MD, MS, FACEP, FACMT, FAACT, FAAEM is a board-certified emergency physician, medical toxicologist, and addiction medicine specialist. He is a Clinical Professor

at the University of Houston College of Medicine and serves as the Director of Toxicology at HCA Houston Healthcare-Kingwood, where he oversees one of the busiest snakebite services in the U.S. His research interests include envenomations, salicylate poisoning, antimuscarinic toxicity, anticonvulsant overdoses, and alcohol withdrawal. Dr. Greene has authored more than 50 book chapters and scholarly articles and is the recipient of multiple teaching and clinical awards. He has directed the Houston Venom Conference since 2013 and serves as the co-Chair of the newly established American College of Medical Toxicology (ACMT) Toxicology section and directed the ACMT Natural Toxins Academy. Dr. Greene graduated from Washington University in St. Louis with a BA in psychology and biology. He earned an MS in immunology from C.W. Post, Long Island University. He graduated magna cum laude with an MD from Albany Medical College and completed his emergency medicine residency at Vanderbilt University Medical Center and his medical toxicology fellowship at Banner Good Samaritan Medical Center.

Host

Candace Pierce, DNP, RN, CNE, COI

Candace Pierce, DNP, RN, CNE, COI is a nurse leader committed to ensuring nurses are well prepared and offered abundant opportunities and resources to enhance their skills acquisition and confidence at the bedside. With 15 years in nursing, she has worked at the bedside, in management, and in nursing education. Dr. Pierce has demonstrated expertise and scholarship in innovation and design thinking in healthcare and education, and collaborative efforts within and outside of healthcare. Scholarship endeavors include funded grants, publications, and presentations. As a leader, Dr. Pierce strives to empower others to create and deploy ideas and embrace their professional roles as leaders, change agents, and problem solvers. In her position as the Senior Course Development Manager for Colibri Healthcare, she works as a project engineer with subject matter experts to develop evidence-based best practices in continuing education for nurses and other healthcare professionals.

Resources

Asclepius Snakebite Foundation

An international group of physicians, paramedics, and scientists who treat snakebite patients, establish clinics, donate supplies, train and support local providers, conduct clinical research, and implement public health education initiatives at all levels to save lives and limbs. <https://www.snakebitefoundation.org/>

National Snakebite Support

A free resource that connects you to the experts for treating snakebites to humans and animals. <https://www.facebook.com/groups/national.snakebite.support/>

Contact Dr. Greene - Bayoucitymedicaltoxicology.com

References

Bush, S. P., Cohen, J. P., & Greene, S. (2020). *Widow spider envenomations*. Medscape Drugs & Diseases. <https://emedicine.medscape.com/article/772196-overview>

Gerardo, C. J., Quackenbush, E., Lewis, B., Rose, S. R., Greene, S., Toschlog, E. A., Charlton, N. P., Mullins, M. E., Schwartz, R., Denning, D., Sharma K. (2017). The efficacy of Crotalidae polyvalent immune Fab (Ovine) antivenom versus placebo plus optional rescue therapy on recovery from copperhead snake envenomation: a randomized, double-blind, placebo-controlled, clinical trial. *Annals of Emergency Medicine*, 70(2), 233-44.

Lavonas, E. J., Ruha, A. M., Banner, W., Bebart, V., Bernstein, J. N., Bush, S. P., Kerns, W. P., Richardson, W. H., Seifert, S. A., Tanen, D. A., & Curry, S.C. (2011). Unified treatment algorithm for the management of crotaline snakebite in the United States: results of an evidence-informed consensus workshop. *BMC Emergency Medicine*, 11(1), 2.

Episode 2: Spiders, Insects, Monsters, and More, Oh My

This episode focuses on the proper treatment of envenomations from spiders, scorpions, insects, marine life, and lizards.

Guest

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