

Human Rabies in the United States: The Atypically Atypical Cases

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Abstract

Statement of the problem: The initial manifestations of human rabies can be described as typical (classical) and atypical. However, there are anecdotal cases of human rabies whose initial manifestations are significantly rare that they are likely to further delay the correct diagnosis. This delay can expose unwary, unprotected nurses and other healthcare providers from the emergency department to the intensive care to becoming infected by the rabies virus as they render care to a deteriorating patient. The objective of this review is to identify and describe these atypically atypical cases so as to increase the knowledge base of the healthcare provider empowering them to employ proper personal protective equipment and lessen their risk of secondary infection. Methodology: A literature search was done that included human rabies cases from 1960-2018. Results: From 1938-2018, there were 588 cases of human rabies in the United States. During the period of study (1960-2018), there were 125 reported human rabies cases. Within that cohort, a number of atypically atypical cases (~15%) were identified. Their initial presentations obfuscated the correct diagnosis thereby increasing the exposure of individuals to the index patient and requiring post-exposure prophylaxis (PEP) once the correct diagnosis was finally made, oftentimes post-mortem. The initial manifestations of these cases included diagnoses of priapism, acute abdominal aneurysm, spontaneous ejaculation, generalized rash, etc. A summary of these atypically atypical cases will be explored further. Conclusion and significance: Knowledge of these cases may assist nurses and other healthcare providers in increasing their awareness of the diverse initial manifestations of rabies and don proper PPE (personal protective equipment) until the diagnosis has been clarified.



Biography:

Paul Rega, M.D. had been a board-certified Emergency Physician for over 34 years until his retirement six years ago. Within that career span, his duties and responsibilities have included disaster medicine, flight medicine, hyperbaric medicine, and EMS. Each of these endeavors can be broken down into practice, research, and education. Since his retirement from clinical practice, he joined the faculty in the Departments of Emergency Medicine and Public Health/Preventive Medicine at the University of Toledo.

Speaker Publications:

- 1) Rega P. Utilizing Medical Gaming Principles to Teach Emergency Management Strategies and Crisis Leadership during a Botulism Mass Casualty Incident. *EC Nursing and Healthcare*. 1.2(2019):39-45.
- 2) McKenzie N, Grider S, Fink BF, Rega PP. Interdisciplinary Cricothyrotomy Training for Respiratory Therapy Students: A Pilot Study. *Respiratory Care Education Annual*; Fall, 2019.
- 3) McKenzie N, Wishner C, Sexton M, Saevig D, Fink B, Rega P. (2019). Active Shooter: What Would Healthcare Students Do While Caring for Their Patients? Run? Hide? Or Fight? *Disaster Medicine and Public Health Preparedness*. <https://doi.org/10.1017/dmp.2019.67>. Published on-line 7/24/2019.
- 4) Rega PP. The Emergency Department Application of a Windlass to a Bedsheet Pelvic Circumferential Compression Device. *Journal of Clinical Orthopaedics and Trauma*. Volume 10, Issue 4, July–August 2019, Pages 831-832
- 5) Cooper AM; Aouthmany S; Shah K; Rega PP. Killer amoebas: Primary amoebic meningoencephalitis in a changing climate. *JAAPA*. 2019 Jun;32(6):30-35.
- 6) Dagenhard, P., Thompson, A., Dake, J., Pescara-Kovach, L., Rega, P., Active Shooter Events in Schools: A review of reports and related materials. *Health Behav Policy Rev*. 2019; 6(3): 219-231.