

Abstract

We present a case of an 84-year-old hypertensive male with a confirmed Russell's viper snake bite. Despite receiving antivenom, the patient developed consumptive coagulopathy, acute renal failure, cardiopulmonary complications, and ultimately succumbed to intracranial hemorrhage. Multisystemic complications associated with Russell's viper bites can be severe, leading to significant morbidity and mortality. This case highlights the importance of prompt recognition, appropriate antivenom administration, and comprehensive management in improving outcomes for snakebite victims. Further research and awareness are necessary to enhance the understanding and treatment of these complex envenomation cases.

Case presentation

We present a case report of an 84-year-old hypertensive male who was admitted to the Emergency Treatment Unit (ETU) with a proven Russell's viper snake bite that occurred 16 hours prior. The patient had bilateral ptosis with ophthalmoplegia, and on examination, a fang mark with mild cellulitis was observed on the lower limb. Blood investigations revealed prolonged whole-blood clotting test (WBCT) and evidence of venom-induced consumptive coagulopathy. Prompt administration of antivenom was initiated, but the WBCT did not improve, necessitating additional doses of antivenom.

During the course of hospitalization, the patient developed acute renal failure. Hemodialysis was performed. On day 5, the patient experienced chest pain, shortness of breath, and pulmonary edema, indicating cardiac involvement. Subsequent investigations revealed elevated troponin levels and echocardiographic evidence of mild global hypokinesia with reduced ejection fraction. A non-contrast computed tomography (NCCT) scan of the brain

showed left parietal intra cranial hemorrhage with midline shift. Despite aggressive management, the patient's condition worsened, leading to acute confusion and cardiac arrest on day 9.

This case highlights the severe multisystemic complications associated with Russell's viper snake bite, including consumptive coagulopathy, renal failure, cardiopulmonary involvement, and intracranial hemorrhage. Despite receiving appropriate antivenom therapy and supportive care, the patient's outcome was unfavorable. Further research and awareness are warranted to improve the management and outcomes of such complex snake envenomation cases.

Conclusion

This case report highlights the grave consequences of Russell's viper snakebite, leading to severe multisystemic complications. The patient's admission to the Emergency Treatment Unit 16 hours after the snakebite likely contributed to the development of severe multisystemic complications. Despite timely administration of antivenom and aggressive supportive care, the patient's condition rapidly deteriorated. Snakebites, particularly from venomous species like the Russell's viper, require immediate medical attention and comprehensive management to mitigate the potentially devastating effects.
