Stroke Code to Saturday Night Palsy: A Complex Neurologic Presentation

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Introduction

- Compressive radial neuropathy ("Saturday night palsy") follows prolonged external compression. It causes wrist and finger extensor weakness with radial sensory loss.
- Broader unilateral symptoms may overlap with acute cerebrovascular syndromes, especially when intoxication limits history.
- This case describes recurrent right-sided symptoms after intoxication with a negative stroke evaluation and persistent focal radial-pattern deficit.
- Recognition of the peripheral nerve pattern directed rehabilitation and electrodiagnostic follow-up.

Objectives

- Highlight radial neuropathy as a stroke mimic.
- Emphasize localization after a negative stroke workup.
- Show the role of rehabilitation and EMG/NCS follow-up.

Materials & Methods

- All protected health information was de-identified. This case report was exempt from institutional review board review under NuHealth policy

Imaging



Figure 1. Lateral radiograph of distal right femur demonstrating a retained metallic fragment.



Figure 2. AP radiograph of right femur demonstrating a retained metallic fragment

Case Presentation

- 39-year-old man with hypertension, hyperlipidemia, and alcohol use disorder developed right wrist drop and numbness after falling asleep while intoxicated with his arm draped over a chair.
- Prior cerebrovascular evaluations were unrevealing; compressive radial neuropathy was suspected.
- He later presented intoxicated with headache and right upper- and lower-extremity numbness and weakness; a stroke code was activated (NIHSS 5)
- CT head, CTA, and CT perfusion showed no acute intracranial pathology, large-vessel occlusion, or perfusion deficit.
- MRI was unavailable due to retained metallic fragments. Symptoms improved on reassessment (NIHSS 2).
- Serial examination showed radial-distribution sensory loss and weakness of wrist and finger extension; PM&R and OT addressed grasp and fine-motor deficits.
- At follow-up, wrist drop had resolved, forearm extensor strength improved to 4–5/5, residual sensory symptoms persisted, and EMG/NCS was scheduled.

Discussion

- Compressive radial neuropathy may mimic acute stroke when prolonged compression is unrecognized or symptoms are described as generalized unilateral weakness.
- Stroke precautions and emergent cerebrovascular imaging were appropriate given the broader unilateral presentation.
- After acute cerebrovascular pathology is excluded, careful neuroanatomic localization can identify a peripheral nerve pattern.
- When MRI is unavailable, serial neurologic exams and electrodiagnostic testing become especially important.
- Recognizing a radial neuropathy pattern supports EMG/NCS evaluation and targeted rehabilitation.

Conclusion

- Saturday night palsy can present as a stroke mimic after intoxication-related prolonged compression.
- Serial examination, localization, rehabilitation, and electrodiagnostic follow-up are key after a negative stroke evaluation.

References

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