

SVIN ANNUAL MEETING E-POSTER ABSTRACTS

Abstract 278: Extremely uncommon complication of a routine procedure that manifests as large vessel occlusion

S. Abdul Kareem, K. Bell, and R. Al Subu

Introduction Cerebral air embolism is an exceedingly rare but serious complication that can occur after medical procedures, including epidural injections. This case report details the presentation, diagnosis, and successful treatment of a patient who developed symptoms mimicking large vessel occlusion (LVO) stroke following an epidural injection for back pain. To our knowledge, this is the first case report of LVO like symptoms secondary to epidural injection. **Case Presentation:** A 55-year-old female patient with a history of chronic back pain presented to the emergency department (ED) with acute onset headaches, neck pain and right sided weakness shortly after receiving an epidural injection. Given the clinical presentation, an initial diagnosis of large vessel occlusion stroke was considered with initial NIHSS of 8. Initial CT head showed multiple foci of pneumocephalus over the intra and extra axial space over the left cerebral hemisphere. CTA of the head and neck was unremarkable for large vessel occlusion. The patient was promptly treated with 100% oxygen therapy while in the ED, resulting in complete resolution of her symptoms within 30 minutes of therapy. Headaches improved over 24 hours. Follow-up imaging showed complete resolution of pneumocephalus.

Discussion Cerebral air embolism is an uncommon cause of stroke-like symptoms and is particularly rare following an epidural injection. A review of the literature reveals only very few documented cases of cerebral air embolism post-epidural injection, highlighting the rarity of this complication. The pathophysiology involves the inadvertent introduction of air into the vasculature, which can travel to the cerebral circulation and occlude or compress brain vessels or brain structures. Presentation typically includes acute neurological deficits that can mimic large vessel occlusion strokes. Immediate recognition and treatment with 100% oxygen therapy are crucial for favorable outcomes.

Conclusion This case underscores the importance of considering cerebral air embolism in the differential diagnosis of acute neurological symptoms following procedures involving the epidural space. Prompt diagnosis and treatment with 100% oxygen and hyperbaric oxygen therapy can lead to complete recovery.



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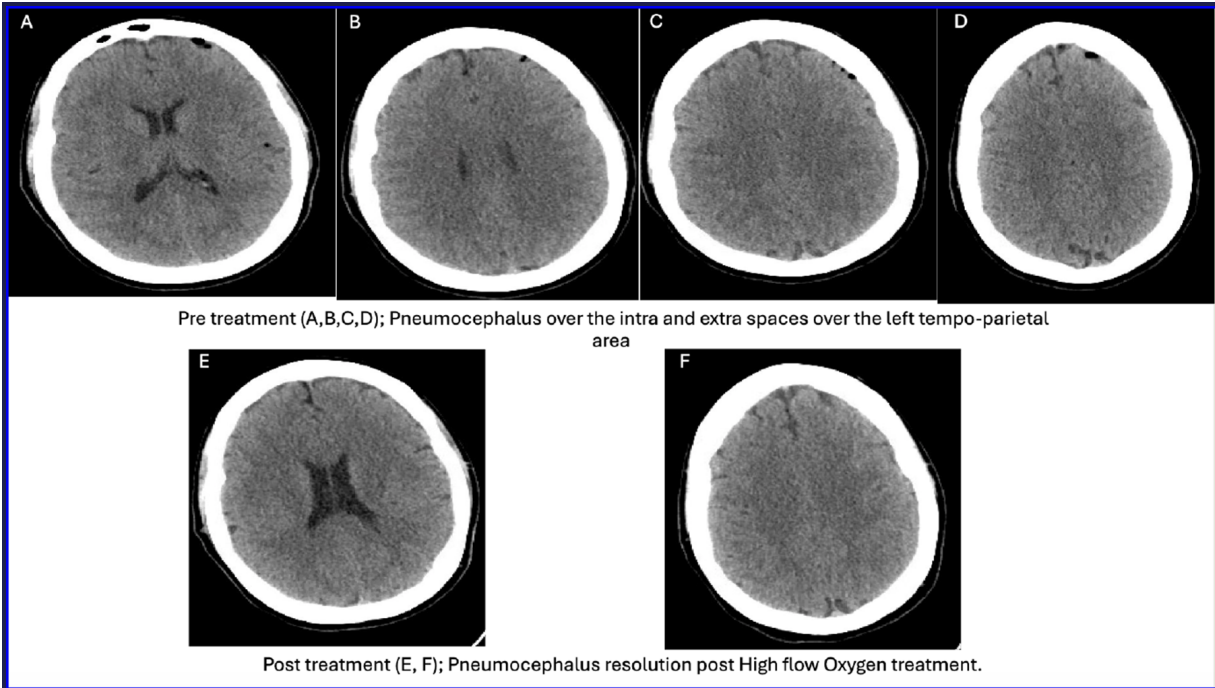
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Disclosures

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