

Case Study Poster Competition- Abstract  
ACOEP Spring Seminar 2016

**Title:** Intermittent Dysarthria in the Face of Intracranial Bleeding

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**Introduction:**

This case describes a patient who presented to the emergency department with complaints of difficulty speaking that only occurred during times of extreme emotional stress. Despite complete resolution of her dysarthria and an unremarkable neurological exam, CT demonstrated a left temporal lobe parenchymal hemorrhage with left temporoparietal subarachnoid hemorrhage. This case demonstrates an unusual presentation of a life threatening process.

**Case Description:**

A 65 year old Caucasian female with a past medical history of hypertension presented to the emergency department with complaints of difficulty speaking. Her dysarthria had started one hour prior to arrival and had completely resolved prior to examination. She described her dysarthria as “difficulty finding the right words and slurred speech”. The patient stated her dysarthria had been occurring intermittently over the previous 3 days when she was under extreme emotional stress. The first episode occurred while she was planning her father’s funeral. The second episode occurred while she was upset looking through family photos, and the third episode occurred while at her father’s funeral. Each episode lasted approximately one hour and spontaneously resolved without any residual deficit. The patient’s history also supplied the physician with an acute versus chronic presentation because she believed she had experienced a similar episode one year ago while under emotional stress. Her dysarthria was not accompanied by any other neurological complaints. An extensive physical exam was benign. Her review of symptoms demonstrated a mild headache that was neither the worst headache of her life or sudden in onset.

The differential diagnosis included partial seizures, complex migraines, conversion syndrome, transient ischemic attack, ingestions, and head injury. A CT head without contrast was obtained and demonstrated an area of parenchymal hemorrhage involving left temporal lobe with left temporoparietal subarachnoid hemorrhage. At the time of evaluation neurosurgery was not available and the patient was transferred to a center with the capacity to provide definitive surgical care. She remained in stable condition with appropriate hemodynamic management during evaluation and transport. The patient ultimately had a positive outcome

**Discussion:**

This patient’s atypical presentation of primary intracerebral hemorrhage could have had devastating consequences had providers not promptly utilized diagnostic CT imaging. The estimated 30 day mortality of primary intracerebral hemorrhage is between 35% and 52%, with only 20% of patients expected to make a full recovery at six months. This patient’s history of hypertension was her only known risk factor for primary intracerebral hemorrhage.

This patient's benign presentation is particularly daunting given her subarachnoid extension of the primary bleed, which is associated with poor outcomes. Upon literature review, it can be hypothesized that this patient's elevated blood pressure and size of initial intracerebral hemorrhage contributed to her subarachnoid extension. This case demonstrates the ED provider's responsibility to detect life threatening disease processes despite uncharacteristic presentations.

### **References:**

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