

## PS2.196

### **Describing sleep apnea as a less known preventable association of stroke in a young man**

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**Background:** Extensive studies strongly suggest that Obstructive sleep apnea (OSA) causes secondary hypertension. It is also well known that uncontrolled hypertension causes hemorrhagic stroke. Here we describe a young gentleman with subclinical OSA which could have contributed to hemorrhagic stroke.

**Method:** A 33 year old gentleman (BMI 23.3), presented to the emergency department following sudden onset of focal neurological deficits after sexual intercourse with his wife. His past medical history was insignificant. He did not have any stressors at home or work, nor prior history of somnolence or fatigue. His father was advised to undergo sleep study in view of presumptive OSA by his primary care physician which he declined. Family history was otherwise noncontributory. On arrival, patient's Blood Pressure (BP) was 135/93 mmHg, (which is in the pre-hypertension reference range for his age). Neurological examination showed right hemiparesis and facial deviation.

**Result:** Initial imaging of Brain with Computed Tomography showed a 1.7x3.9x3.6 cm acute intra-parenchymal hematoma in the left basal ganglia, later confirmed with Magnetic Resonance Imaging brain. No obvious etiology of stroke was identified despite a thorough workup. Though sexual intercourse has been reported to be a trigger for stroke, the reason why this gentleman was at high risk was intriguing. In view of this unexplained cause of stroke, a sleep study was done, which showed an apnea-hypopnea index of 15, suggesting moderate sleep apnea, however, he was clinically asymptomatic.

**Conclusion:** This stroke could have resulted from hypertension likely secondary to OSA. Timely interventions like lifestyle modifications and continuous positive airway pressure could address his OSA and resulting hypertension. Regular BP monitoring is thus important. Family Physicians must be aware of the potential catastrophic consequences of undetected OSA, which will help to prevent not just long term consequences but short term consequences too as evidenced in this case.