

# Episode 12

This week's episode of the CPSers, guest Dr. Stephanie Sherman discusses her approach to syncope.

## **Problem Representation**

A 58-year-old man with a history of non-ischemic cardiomyopathy & hypertension presented after an acute episode of unheralded syncope and was found to have arrhythmias on ECG and telemetry.

## **Schemas**

Dr. Sherman's schema divides the causes of syncope into three broad categories - neurocardiogenic/reflex, orthostasis, and cardiac syncope.

## **Diagnosis**

ECG and telemetry demonstrated slow atrial fibrillation with prolonged pauses as well as non-sustained VT, suggesting **cardiac syncope**. He was recommended to undergo implantation of a cardioverter-defibrillator.

## **Teaching points**

- Syncope is a syndrome of global cerebral *hypoperfusion* that leads to a **transient loss of consciousness**.
- A number of conditions can mimic<sup>1</sup> syncope - including seizures, brainstem stroke, hypoglycemia, and conditions that make people unexpectedly fall to the ground (falls, drop attacks, cataplexy).
- Distinguishing between seizures and syncope can be difficult. **Jerking movements occur in both seizure and syncope**. In contrast, tongue biting<sup>2</sup> is *specific but not sensitive* for a preceding seizure.

## **Clinical Reasoning Pearl**

Dr. Sherman highlights the importance of the directed patient history.

Constructing the history is an *active* exercise, focusing on symptom-specific details that can be translated into "semantic qualifiers" in our problem representations. These help us **navigate** down the different branches of our schemas.

### For example:

Carefully exploring *the moments prior* to the syncopal event helps distinguish between "heralded" and "unheralded" syncope - a useful diagnostic branch point.

## **References**

- 1) Coleman DK, Long B, Koyfman A. Clinical Mimics: An Emergency Medicine-Focused Review of Syncope Mimics. J Emerg Med. 2018 Jan;54(1):81-89.
- 2) Brigo F, Nardone R, Bongiovanni LG. Value of tongue biting in the differential diagnosis between epileptic seizures and syncope. Seizure. 2012 Oct;21(8):568-72.
- 3) Nendaz MR, Bordage G. Promoting diagnostic problem representation. Med Educ. 2002 Aug;36(8):760-6.