

Watch that bite: syncope versus seizure

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Clinical details

A referral was received from the emergency department for review of a middle-aged woman who presented with several months of recurrent unwitnessed “blackouts”. Upon direct questioning, the patient admitted to occasionally waking up after these events with a sore tongue and the taste of blood in her mouth. In addition, she noticed the gradual development of a lump on her tongue with did not interfere with speech or swallowing. No collateral history was available at the time of presentation. Neurological exam was normal.

The clinical question was: syncope, vs seizure?

The following finding was discovered on examination of the tongue.

Discussion

After the above observation, seizures were immediately suspected as the culprit of her recurrent blackouts. Subsequent investigations confirmed a diagnosis of epilepsy, and she was commenced on appropriate treatment for this. The conclusion was that repeated tongue biting in the context of seizures had resulted in formation of accessory tissue on the left lateral aspect of her tongue. The absence of acute bleeding at presentation and the presence of granulation tissue at the stalk suggested a more chronic process. As was the case here, it is important to acknowledge that not all patients may associate tongue biting as an important clue to the aetiology of their “blackouts” and therefore may not volunteer this information if not specifically asked.

Figure 1: This demonstrates accessory tongue tissue extruding from the left lateral side of the patient’s tongue via a granulated stalk. There was no evidence of acute bleeding.



The presence of lateral tongue biting is strongly suggestive of a generalised tonic-clonic seizure, initially reported in 1995 to have a specificity of 99%.¹ This was supported by a more recent systematic review in 2012 confirming lateral tongue biting to have a specificity of 100% when differentiating seizures from non-epileptic seizures, but a sensitivity of only 22%. Therefore, lateral tongue biting is a good “rule in” sign; however, the absence of this sign cannot be used to “rule out” seizures.² One can also see tongue

biting in syncope or non-epileptic seizures, but this is more often at the tip of the tongue.¹⁻³

Although this case represents an exaggerated example of a relatively common clinical sign, careful examination of the tongue should always be performed in instances of unexplained loss of consciousness. The presence of lateral tongue biting highly supports the diagnosis of seizures; however, all clinical signs need to be interpreted in the context of the patient as whole.

COMPETING INTERESTS

None.

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