

Re: Recurrent asystole during laryngoscopy - A nightmare for the anesthesiologists

To the editor,

We read the paper written by Dr. Vinayagam *et al.*^[1] with great interest. The authors should be commended for attempting to answer the question of why their patient presented recurrent asystole during laryngoscopy. According to the authors, the main causes were attributed to the exaggerated vagal reflexes during laryngoscopy in a hypertensive patient or the effect of raised bilirubin-associated obstructive jaundice on the sinoatrial node.

We would like to draw attention to another possible cause. What arouses our curiosity is the possibility that triggering of asystole can be linked to a head movement during laryngoscopy and thus, it must be taken into account the possibility of a diagnosis of Arnold-Chiari malformation type I, as a specific treatment is possible. Arnold Chiari malformation type I is a congenital anomaly in which the cerebellum herniates through the foramen magnum into the cervical canal, displacing the lower pons and medulla.^[2] This condition may be asymptomatic or may manifest symptoms, such as cerebellar ataxia, intracranial hypertension, or even syncope usually related to movements of the head or Valsalva maneuvers.^[3,4]

Initiation by a brisk head movement when performing laryngoscopy in this patient suggests that the mechanism can also be done by a transient compression of the brainstem. A definitive diagnosis is generally made after an MRI scan. Treatment relies on a surgical procedure aimed at making more space at the site of compression with excellent results. The majority of patients experience partial (80-90%) or complete resolution with few or no complications.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Vinayagam S, Dhanger S. Recurrent asystole during laryngoscopy - A nightmare for the anesthesiologists. *Saudi J Anaesth* 2019;13:362-4.
2. Meadows J, Kraut M, Guarnieri M, Haroun RI, Carson BS. Asymptomatic chiari type I malformations identified on magnetic resonance imaging. *J Neurosurg* 2000;92:920-6.
3. Weig SG, Buckthal PE, Choi SK, Zellem RT. Recurrent syncope as the presenting symptom of Arnold-Chiari malformation. *Neurology* 1991;41:1673-4.
4. Alarcón J, Dobato JL, Mateo D, Benito C, Giménez-Roldán S. Arnold-Chiari malformation with multiple paroxysmal manifestations induced by coughing. *Neurologia* 1992;7:25-9.

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