Laryngopharyngeal reflux induced sleep-related laryngospasm

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Background: Sleep-related laryngospasm (SRL) is a condition not well described in the literature. Laryngospasm has been defined as the sustained closure of the vocal cords which results in partial or complete loss of airway patency. SRL exclusively occurs while the patient is asleep and is characterized by sudden wakening with an inability to breathe. Fear of suffocation while sleeping has also been reported in the literature. SRL has been shown to have a detrimental effect on a patient’s quality of life. The aim of our study is to investigate if LPR is the cause of SRL in our patients. We hypothesize that SRL without signs of nasopharyngitis will be explained by our patient’s eating habits. We also hypothesize that SRL with signs of nasopharyngitis is indicative of chronic LPR in our patients.

Methods: A retrospective chart assessment involving patients who have presented to the routine outpatient’s service of the senior author was performed. All data was anonymised before being analysed. Each patient’s history of presenting a complaint was interrogated for evidence of late-night eating or acid reflux. Results of the nasopharyngoscopy performed by the senior author for signs of nasopharyngitis and the degree of inflammation were recorded.

Results: Ten patients were identified and all had a history of eating large meals late at night. Five has evidence of nasopharyngitis with a history of reflux-type symptoms. Five had no history of indigestion with no sign of inflammation of the pharynx.

Conclusions: Although laryngopharyngeal reflux is a factor in SRL a large late meal can induce it in any patient whether they have a history of reflux or not.

Keywords: Sleep; laryngospasm; laryngopharyngeal; reflux

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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