

5.11 The association between respiratory symptoms and gastro-oesophageal reflux events

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ABSTRACT

Introduction: The oesophagus and the airways have a common origin. Abnormal gastrooesophageal reflux (GOR) may predispose to genesis of respiratory symptoms. This association has not been reported previously in Sri Lanka.

Aims: To describe the association between reflux events and respiratory symptoms in a cohort of adult asthmatics in Sri Lanka.

Methods: 30 stable, mild asthmatics (American Thoracic Society criteria) underwent dual-sensor oesophageal pH monitoring. Respiratory symptoms (cough, wheeze, difficulty in breathing, chest tightness) experienced during monitoring were recorded. Respiratory symptoms were correlated with reflux events by reviewing diary events and oesophageal pH tracings. A reflux episode was defined as a drop in pH to values <4 lasting >4 seconds. A respiratory symptom was considered as associated with a reflux episode if it occurred 2 minutes prior to or after a reflux episode.

Results: 50% of the asthmatics complained of one or more respiratory symptoms during the 24-hour recording period. Of 102 respiratory symptoms recorded, 73 were cough, 23 were wheezing and 5 were episodes of chest tightness. None experienced difficulty in breathing. 93% of coughs, 81% of wheezes and all episodes of chest tightness were reflux-associated. In most cases reflux episodes preceded respiratory symptoms. There was no statistically significant difference in any oesophageal monitoring parameter between asthmatics with and without respiratory symptoms.

Conclusion: Asthmatics experience respiratory symptoms during reflux events. The development of respiratory symptoms during an episode of acid reflux or within 2 minutes thereafter suggests that it is probably GOR that triggers asthma.