

## CASE-BASED LEARNING

# Poor asthma control? – then look up the nose. The importance of co-morbid rhinitis in patients with asthma

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### Summary

Many factors can impair asthma control. One which is frequently overlooked is rhinitis. Asthma patients with significant rhinitis are over four times more likely to have poorly controlled asthma than those without. Over 80% of patients with asthma have rhinitis, which may be allergic or inflammatory/non-allergic. Both types of rhinitis share pathophysiological similarities with eosinophilic asthma, cause bronchial hyper-reactivity, and are predisposing factors for the subsequent development of asthma. Nasal allergen challenge in allergic rhinitis results in inflammation in the bronchi as well as the nose, and the reverse is also true. This article reviews briefly the evidence for the link between asthma and rhinitis, advocates looking for rhinitis when patients present with poorly controlled asthma, and provides guidance for the diagnosis and treatment of rhinitis.

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### Clinical scenario

A young woman has just moved into the area and has registered as a patient at your primary care practice. Two weeks later she attends your asthma clinic complaining that she is bothered by intermittent coughing at night and by chest tightness and wheezing if she has to hurry. She has to use her reliever salbutamol inhaler at least twice a day. She is a non-smoker and insists that she is using her inhaled corticosteroid (ICS) plus long-acting  $\beta_2$ -agonist (LABA) inhaler regularly as directed. She is on no other medication and has had no recent change in her circumstances. Her inhaler technique is good. She has a family history of hay fever, and admits to occasional sneezing in the summer months.

One possibility is that she has concomitant rhinitis – like 80% of patients with asthma – and that this is presently untreated. On taking a history it becomes clear that rhinitis has not previously been considered and that she has not undergone examination or clinical tests to establish a diagnosis.

(Fictional clinical case; no signed consent form required)

### Introduction: the difference between asthma severity and asthma control

National and international asthma treatment guidelines have previously focused on the assessment and classification of the severity of symptoms.<sup>1-4</sup> Evidence now suggests that asthma severity is a variable feature of a patient's condition and may fluctuate over months or years,<sup>5,6</sup> possibly leading to underestimation of severity, inadequate therapy and increased morbidity. Findings from studies of discordance between asthma severity and symptoms/lung function, and between severity, inhaled corticosteroid (ICS) and reliever medication use,<sup>7</sup> suggest that classification and treatment of asthma based on severity alone is inappropriate.

In view of these considerations, and the demonstration in several studies that asthma control was achievable in most patients,<sup>8-13</sup> the Global Initiative for Asthma (GINA) guidelines currently recommend treatment based on achieving and maintaining asthma control.<sup>1</sup> This is defined as "the extent to which the manifestations of asthma have been reduced or removed by treatment" based on assessment of the dual

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