

Foreword

Conditions Mimicking Asthma

We all see patients who complain of shortness of breath, which is improved with the use of a bronchodilator. The simplest definition of asthma is that it is caused by reversible airway obstruction. Airway obstruction can present with shortness of breath. The improvement with a bronchodilator indicates reversibility. So, is this asthma? Asthma is a syndrome of various pathophysiologic conditions that result in reversible airway obstruction. The latter produces typical symptoms of asthma—shortness of breath, wheezing, and cough. However, none of these symptoms are pathognomic for asthma as they can be elicited by many illnesses of the lungs. As a consequence, many conditions mimic asthma, which leads to misdiagnosis and inappropriate treatment. Bronchial hyperreactivity, as detected by a methacholine test, although a relatively specific and sensitive test, is not foolproof. It is less sensitive in white and nonatopic patients (sensitivity ~77%).¹ It is also not very specific when 8 mg/mL concentration of methacholine is used as a cutoff point. At this cutoff level, the positive predictive value of methacholine test is less than 50% (ie, <50% of the subjects in a random population with a PC₂₀ <8 mg/mL have clinically current asthma symptoms).² Thus, there is no perfect test for asthma. We rely heavily on our clinical judgment. Hence, the consideration of asthma mimickers in our differential diagnoses becomes a top priority. The problem is confounded by the fact that the asthma masqueraders can coexist with asthma in the same patient. Thus, the proper diagnosis of asthma and its masqueraders, and determination of their relative contribution to the clinical presentation, if they co-exist, is extremely important.

Asthma management can be further complicated by comorbidities that aggravate asthma or one of its symptoms. The diagnosis of asthma confounders and their proper treatment play an essential role in optimal management of asthma. To address this important topic of asthma masqueraders and confounders, I have asked my colleague Dr Eugene Choo to lead the way. He has invited an excellent group of experts and put together a comprehensive list of articles that will surely enrich our knowledge and improve our practice.

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