

Introduction

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This *Monograph* provides a comprehensive guide to the assessment and management of individuals presenting with seemingly “unexplained” or complex respiratory symptoms, which are frequently overlooked and often associated with significant patient morbidity <https://bit.ly/3HbXEs6>

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Breathlessness is the key presenting symptom in many heart or lung diseases and thus its presence mandates a systematic and thorough search for any underlying pathological cause. In a proportion of individuals, however, despite extensive investigation, the origin and aetiology of their breathlessness may remain unclear or appear disproportionate to any underlying condition that is identified. In this context, the term “complex breathlessness” may be applied.

The assessment and management of complex breathlessness is challenging both from the patient’s and the clinician’s perspective. For patients suffering with this issue, there are usually three main concerns: 1) the need to be satisfied that no pathological explanation has been overlooked; 2) to obtain acknowledgement of the impact of symptoms; and 3) to be reassured that there is a logical approach to their treatment.

The overall aim of this *Monograph* is therefore to provide clinicians at all levels with a comprehensive guide to the assessment and management of individuals presenting with seemingly “unexplained” or complex breathlessness. Its 15 chapters cover all aspects needed to assess and successfully manage this challenging clinical scenario, providing clinicians with a useful reference when faced with a symptomatic breathless patient with no obvious underlying cause or with disproportionate symptoms. Specifically, the *Monograph* acts to highlight several potentially less commonly considered clinical entities and their associated features, to ensure that they are not overlooked. Secondly, it considers the symptom of breathlessness and how to approach its management, potentially in the absence of a clear diagnosis or set of abnormalities on investigation.

The introductory chapters provide the reader with a solid foundation from which to better understand the context of complex breathlessness. The epidemiology of breathlessness is considered in chapter 1, which explores persistent breathlessness symptom prevalence across

populations, pathophysiological models, risk factors and the adverse health consequences this brings [1]. Individuals suffering breathlessness not explained by objective measures of disease, prove challenging to clinicians. The neurocognitive basis of breathlessness is therefore important, and chapter 2 on the neuroscience of breathlessness offers a useful consideration of current theories of perception applied to the understanding of breathlessness [2]. To cement the foundations, chapter 3 examines the physiology of breathlessness and summarises how specific physiological factors may contribute to symptoms, offering guidance on how these should be measured [3].

Next, assessment guidance is provided in chapter 4, initially exploring the tools required and available, followed by a discussion on the appropriateness of tool selection, depending on which aspect of breathlessness is under review [4]. This then leads into a useful chapter detailing a systematic clinical approach to assessing complex breathlessness, which includes points for a comprehensive evaluation with a focus on the nature and impact of the patient's breathlessness symptom(s) [5].

Airway-focused chapters follow to educate the reader on specific disorders associated with complex breathlessness, including: laryngeal considerations in chapter 6, with detail on inducible laryngeal dysfunction; excessive airways collapse in chapter 7; BPD in chapter 8; and allergic factors in chapter 9 [6–9]. Each chapter provides a summary overview, associated assessment specifics and management approaches.

Cardiopulmonary vascular considerations are next addressed to provide detailed insight into uncommon but often overlooked causes of breathlessness. These include pulmonary vascular causes in chapter 10, cardiovascular drivers in chapter 11 and autonomic dysfunction presentations, including PoTS, in chapter 12 [10–12].

The final chapters of the *Monograph* are dedicated to overall holistic management [13–15]. Suboptimal treatment adherence, whether intentional or not, has the potential to play a role in amplifying the complexity of breathlessness and its management, so this is explored first [13]. The subsequent chapters then provide an invaluable lens on the latest evidence on treating unexplained breathlessness holistically [14, 15].

We are particularly grateful to our authors and reviewers, who have dedicated their time and expertise to enable this *Monograph* to come to fruition. We would also like to acknowledge the support given to us by the *ERS Monograph* team who have expertly guided us throughout. We hope readers will find this resource a useful guide to support the assessment and management of individuals who present with seemingly “unexplained” or complex breathlessness.

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