

Cough: Causes, Mechanisms and Therapy

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Preface

Cough is the most common symptom of airway and lung disease. More money is spent at the pharmacy on 'coughs and colds' than on any other symptom except perhaps 'aches and pains'. It can be a presenting symptom of more than 100 clinical conditions of the respiratory system. At international meetings of, for example, the American Thoracic Society and the European Respiratory Society, cough is one of the most frequent items listed in the Proceedings' indices. Surprisingly, it has seldom been comprehensively reviewed, although most textbooks of respiratory medicine contain a short chapter on the subject, as do texts on respiratory pharmacology and therapeutics. Physiology textbooks largely ignore it.

In 1970, Salem and Aviado published a three-volume text on *Antitussive Agents* [1] which has become a classic that, while of limited scope, badly needs updating. In 1974, Korpas and Tomori published *Cough and Other Respiratory Reflexes* [2], a valuable text dealing mainly with animal studies from distinguished research centres in Eastern Europe. There is an excellent short book (published in 2001 but in Italian!) *La Tosse Fisiopatologia e Clinica* by Fontana, Lavorini, Pantaleo and Pistolesi [3]. There have been a number of published symposium proceedings dedicated to cough [4–9]. All these publications are somewhat restricted in their approach and most need to be brought up to date. Two of the symposia [7,8], based on the 1st and 2nd International Symposia on Cough held in London in 1996 and 2001, attracted much support and interest; this response was in large part the stimulus to the present book.

We therefore believe that this book is the first comprehensive review, by internationally distinguished authors, of a subject of great importance to respiratory basic science and medicine, and to health care. We have tried to make it inclusive, but are aware that there may be gaps. We have particularly tried to review the significance of cough in the wider context of clinical medicine, a subject which has seen impressive advances in understanding in recent years; and in the basic physiological mechanisms of cough. Understanding of the latter has been transformed recently by studies of the

plasticity of cough mechanisms at peripheral and central nervous levels, research that has important relevance to what happens in acute, subacute and chronic airways' disease. Basic pharmacological studies are also having a significant impact on the therapy of cough, an influence which is likely to be dramatically extended in the near future. With such an approach and coverage, we hope that our book will be helpful to a wide readership of clinicians (particularly general practitioners), respiratory and paediatric physicians, respiratory physiologists and scientists interested in cough and lung reflexes, and pharmacologists in search of better treatments for cough.

In compiling this volume, we have ourselves learnt a lot more but have also realized that there are large gaps both at the clinical and basic level of understanding and treatment of this common symptom. We hope that the readers will be similarly challenged.

We are grateful for the cooperation, diligence and expertise of our many contributors; for the valuable advice and support of our colleague Tim Higenbottam at AstraZeneca UK; and for the skill and efficiency of our publishers, Blackwell Publishing, in particular Maria Khan, Rupal Malde and Nick Morgan.

Fan Chung
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SECTION 1

Introduction