




# Introduction

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**Pleural diseases are common and associated with specialist procedures and a growing evidence base. This book, written by experts in the field, summarises up-to-date knowledge of the investigation, management and future directions of this exciting field.** <http://bit.ly/2uFiDCO>

Pleural diseases have been recognised since ancient times, with Imhotep providing the first known written description of pleural infection in 2700 BCE, and Hippocrates credited with the first descriptions of pleurisy and its treatment over 2000 years ago. These diseases are common, presenting as entities in themselves or as part of a wide-ranging number of other medical and surgical conditions. Pleural disease may therefore present to specialist respiratory physicians or to many other healthcare professionals, including surgery, general internal medicine, oncology, infectious diseases and oncology. There are currently over 65 recognised causes of pleural effusion, and in addition, other pleural conditions such as pleural thickening and pneumothorax represent a significant burden to the healthcare system and to patients. Largely due to the increasing evidence base and the provision of highly specialist procedures, pleural disease is now considered a distinct subspecialty, with a particular requirement for good liaison with the many other specialties it touches.

Given this vast array of causes and presentations, a thorough knowledge of the most up-to-date evidence in the diagnosis, investigation and management of patients with pleural conditions is essential for good medical practice. Historically, many patients with pleural effusion were simply drained to achieve some symptom benefit; the field is now far more nuanced, and understanding the evidence behind pathway-based management has become essential in order to provide accurate diagnosis and timely care to patient benefit. Perhaps uniquely, the last 20 years has seen a huge increase in our understanding of the mechanisms of pleural disease, and a significant number of studies have been published that bring high-quality evidence to the field, improving the diagnostic and treatment pathway on the basis of randomised trials that inform practice.

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Navigating this ever-changing field is the major purpose of this *ERS Monograph*, through summarised information on all major pleural diseases, written by experts in the field who have often contributed directly to the evidence base. The *Monograph* therefore covers aspects of background and investigation, including epidemiology [1], physiology and its relationship to symptoms and management [2], basic science and animal models of pleural disease [3], the role of radiology [4] and ultrasound [5], which is now considered an essential tool for pleural disease management. We have also included chapters on the major pleural entities including pleural infection [6], MPE [7], mesothelioma [8], pneumothorax [9], TB [10] and non-specific pleuritis [11]. Finally, liaison with other specialities and delivery of a pleural service has been addressed through chapters on surgery for pleural disease [12] and the key components of an active pleural service [13].

We hope that this *Monograph* will serve as an up-to-date resource for clinicians wishing to understand how to investigate and manage an array of pleural disease on the basis of evidence, thereby improving delivery of care, and expanding awareness of the development, biology and progression of pleural conditions. As a highly active research field, we also hope that this *Monograph* will inspire further studies and research programmes, and we have asked our authors to highlight areas in which evidence is lacking to promote this important goal.

It has been a privilege to edit this *Monograph*; the many contributing authors are leaders in their respective fields, and we feel this has created a highly focussed and relevant piece of work that will improve practice. We would like to thank the contributors for their input in the context of busy clinical and academic practices, and the European Respiratory Society for taking forward this much needed work.

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