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Pulmonary Vascular Pathology: A Clinical Update

Edited by
M. Demedts, M. Delcroix, R. Verhaeghe,
G.M. Verleden

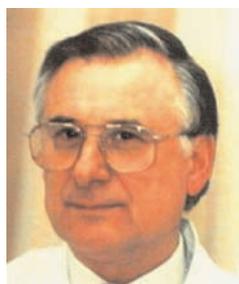


EUROPEAN
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European Respiratory Monograph

Pulmonary Vascular Pathology: A Clinical Update

Edited by



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EUROPEAN RESPIRATORY MONOGRAPH

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Preface

Pulmonary vascular pathology forms an important challenge in daily clinical practice; pulmonary embolism (PE) is the third leading cause of cardiovascular mortality in North America and is responsible for 5–10% of all in-hospital deaths. Furthermore, the diagnosis of PE remains one of the most difficult problems confronting clinicians. Timely diagnostic testing must be performed to enable the initiation of antithrombotic therapy for patients proven to have this condition while avoiding the risks of anticoagulation for patients without PE.

The widespread adoption of right heart catheterisation in the 1950s, for the study of heart and lung disease in humans, allows identification of patients suffering from pulmonary hypertension (PH). In case of exclusion of other causes of PH, this unexplained PH is designated as primary. Although descriptions of young people dying of right heart failure for unexplained reasons existed in the literature, it was not until 1951 that R. Dresdale published findings on a small series of patients and used the appellation "primary pulmonary hypertension".

The present monograph "Pulmonary Vascular Pathology: A Clinical Update" reviews the current knowledge in this field of pulmonary medicine. In particular, a better understanding of the actual pathogenesis of these pathologies offers perspectives of optimism in the future management of these patients. This monograph is the outcome of a workshop organised by the guest editors in Leuven, Belgium, in 2002. Experts in respiratory circulation present a valuable update in the different domains. Therefore, this monograph provides an informative and authoritative review on pulmonary vascular pathology for the respiratory physician.

E.F.M. Wouters

Editor in Chief

INTRODUCTION

M. Demedts, M. Delcroix, R. Verhaeghe, G.M. Verleden

In the last decade there have been important innovations in the diagnostic work-up and treatment of pulmonary vascular pathology, especially pulmonary embolism (PE) and pulmonary arterial hypertension (PAH). In the field of venous thromboembolism, the novelties in imaging techniques attracted much interest, and new evidence-based diagnostic algorithms are being proposed. As far as therapy is concerned, the low molecular weight heparins gained confidence, and prevention and duration of treatment are fields of increased interest. Finally, the knowledge on genetic and acquired risk factors increased considerably.

For pulmonary hypertension, a new World Health Organization classification has recently been published. The pathogenesis has been better understood and a genetic anomaly has been identified in patients with primary pulmonary hypertension. Considerable improvement in quality of life and survival has been obtained with the successive introduction of prostaglandin I₂ derivatives and anti-endothelins. Further investigations are underway exploring totally new therapeutical strategies.

The purpose of this international symposium on "Pulmonary vascular pathology: a clinical update" organised by the Pulmonary Diseases Department of the University Hospital Gasthuisberg at the Katholieke Universiteit Leuven, Belgium, on March 7-9 2002, was to provide a balanced update of these issues with particular focus on areas that are still investigational. Some 40 clinical and basic researchers and recognised experts in PE or PAH from all over Europe were gathered for 3 days to prepare the present publication.

These experts participated in one of two working groups and each group was assigned the task of producing working group reports on risk factors, and diagnostic and therapeutic aspects. In addition, selected reviews were commissioned on several issues, especially related to these topics.

It is hoped that this *European Respiratory Monograph* will provide an interesting synthesis and update of prevention, early detection, diagnostic work-up and management of PE and PAH.

This symposium was accredited as a "European School of Respiratory Medicine" seminar, and was generously sponsored by GlaxoSmithKline, Belgium, in the framework of the "GSK Chair of Respiratory Pharmacology" attributed to G.M. Verleden.

We are very grateful to A. Rossi, and E.F.M. Wouters, the past and present editors, respectively, of the *European Respiratory Monograph*, for granting us the privilege of publishing this symposium as a *European Respiratory Monograph*.