



From the worldwide impact of a global strategy for asthma (GINA) to the tragic effects of sea oil spill

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The new issue of the upcoming 2019 year begins with an update on key issues related to the *Global Strategy for Asthma (GINA)*, very comprehensively summarised by *Helen K Reddel*, Chair of the *GINA Board of Directors*, from the *Woolcock Institute of Medical Research, University of Sydney, Australia*. This review provides an overview of the immense work developed by the *GINA's* team over the last 25 years, made possible originally through a joint collaboration between the *National Heart, Lung, and Blood Institute (NHLBI)* and the *World Health Organization (WHO)*, firstly headed by *Suzanne Hurd* and *Claude Lenfant* in the early 1990s. Since its inception, *GINA* initiated substantial changes in key concepts about asthma and its management and treatment that have had a substantial global impact on this disease, sometimes associated to a bit of controversy. This review reports several recent vital changes, including a discussion about their rationale and the debate that followed. This is elegantly concentrated in two tables, including a new asthma definition to enhance its heterogeneity, an expansion of the scope of evidence considered by its authors and an integration of practical advice about therapy

across the spectrum of asthma severity, all in all very nicely presented.

The second contribution is centred on a relatively novel field, namely **the interplay between the lungs and the gastrointestinal tract related to chronic obstructive diseases**, by *Emiel FM Wouters*, an international respiratory expert from the renowned *Maastricht University Medical Centre, Horn, in The Netherlands*. The respiratory and gut tract epithelia have common anatomical similarities, both derived from the endoderm, and consist of columnar epithelial cells with projection of microvilli or cilia that function as a physical barrier and as sentinels for the immune system in conjunction with associated lymphoid tissue. The intestinal tract represents not only a crucial component of the body's defence system against the external environment, but it is also responsible for the breakdown and absorption of essential nutrients and the uptake of water and electrolytes. Gastrointestinal tract disorders,

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such as Crohn's disease, are more prevalent in patients with chronic obstructive pulmonary disease (COPD) than in healthy populations; conversely, up to half of adults with inflammatory bowel diseases and one third of patients with irritable bowel syndrome have some pulmonary involvement, such as inflammation or impaired lung function. These are just a few of the inspiring snapshots addressed in this review.

The next review concentrates on interstitial lung disorders to facilitate basic concepts related to a **comprehensive care in pulmonary fibrosis**, a setting in the management of patients with this chronic respiratory disorder, presented by two emerging brilliant scholars in the field, *Maria Molina-Molina*, from *Hospital of Bellvitge, Universitat de Barcelona, Barcelona*, and *Marlies Wijsenbeek*, from *Erasmus University Medical Centre, Rotterdam, The Netherlands*, a duo of successful emerging researchers in the field. It is of note that idiopathic pulmonary fibrosis is viewed as the most frequent and lethal pulmonary fibrosis among the family of interstitial lung disorders being considered the paradigm of lung fibrosis. However, other progressive fibrotic interstitial lung entities, such as chronic hypersensitivity pneumonitis or fibrotic non-specific interstitial pneumonia, share some common diagnostic and treatment challenges. Patient empowering and its priorities, symptomatic alleviation, preventative measures and early therapeutic approaches of medication-induced side effects, mental welfare and physical health are proposed as principal aims of this supportive care in patients with pulmonary fibrosis while in parallel exploring new tools to optimise the complexities and difficulties of its management and therapy.

The next contribution refers to a provocative therapeutic area of COPD, extensively and originally reviewed by *Andrea Rossi*, an experienced international respiratory investigator, and *Erika Zanardi*, from the *Study Centre of the Italian Association of Hospital Pulmonologists (AIPO)*. The review focuses on **the pros and cons of the potential withdrawal of inhaled corticosteroids (ICS) in COPD**, a controversial topic given the large number of COPD patients currently receiving inappropriate when not excessive prescription of ICS with or without long-acting bronchodilators. The issue of ICS withdrawal from maintenance therapy in COPD deserves great attention in view of the long-term safety issue associated with ICS use and abuse. Although the role of inflammation cannot be discharged, the pathogenesis of COPD is much more complex and different from that of bronchial asthma. If the maintenance therapy with long-acting bronchodilators is in place and the COPD patient takes the prescribed medications, the issue of ICS withdrawal should not be anticipated in patients with a history of frequent exacerbations and/or co-existence of a history of asthma. Similarly, the presence of an elevated number of peripheral blood eosinophils recommends caution in the discontinuation of ICS. These conclusions are in line with the new recommendations recently released by the *Global Strategy for Obstructive Lung Disease (GOLD) 2019 Report*¹.

The final contribution points to **the long-term respiratory and genotoxic effects in the Prestige oil spill**, written by three members of the team of Spanish researchers originally involved in the seminal investigation, *Gema Rodriguez-Trigo*, from *Hospital Clínico San Carlos, Universidad Complutense, Madrid*, *Jan-Paul*

Zock, from *Universitat Pompeu Fabra and Institute of Global Health (ISGlobal), Barcelona*, and Joan A Barberà, from *Hospital Clínic, Universitat de Barcelona, Barcelona*, all in Spain and with a worldwide reputation in respiratory research, in particular the latter two. The wreckage of the *Prestige* tanker in the late 2000s and the subsequent oil spill in the sea prompted the study of the long-term respiratory and genotoxic side effects of oil exposure on all sorts of individuals involved in clean-up activities. After the *Prestige* calamity, three additional major oil spill accidents have occurred worldwide. Nowadays oil spills occur with certain frequency, inducing serious consequences to ecosystems, economy and human health. Cleaning activities of the spills are undertaken by professionals or volunteers that may not be well prepared or protected. Since, unfortunately, these disasters may occur again anywhere, the authors consider it essential to

use adequate protection measures and actively monitor the health status of individuals exposed to the oil. From the viewpoint of respiratory research studies, the response should also be immediate and funded by public health authorities.

As in former issues of our Journal, I do hope that the reader of the Journal will be attracted by these new reviews authorised by experienced researchers in each of the fields!

REFERENCES

1. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. 2018/11/GOLD-2019-v1.7-FINAL-accessed 03/12/2018. Available from: www.goldcopd.org.

