The changing perspectives of respiratory diseases in infancy and childhood

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In this issue of *Breathe*, we highlight paediatric respiratory medicine with four reviews on diseases that are common and/or for which there has been an increase in knowledge and an improvement in care during the last decade, with possible long-term consequences. Awareness has markedly grown that respiratory problems at birth, during the neonatal period and/or in early infancy very often have consequences into adult age [1, 2].

The fact that children born prematurely are at risk for development of bronchopulmonary dysplasia (chronic lung disease of infancy) has been well known for many years. Knowledge of how to prevent this damage has grown considerably and is demonstrated in the first, thorough review of prevention of adverse pulmonary outcome of preterm birth. Neonatal resuscitation and respiratory support after birth are discussed in detail [3].

The life-long and incurable disease of cystic fibrosis has changed its clinical presentation and progression as a consequence of improved care. The multidisciplinary approach of treating all aspects of this lethal disease has changed the prognosis dramatically. Neonatal screening and thus earlier diagnosis will probably pursue this success story. Potential problems with diagnosing a disease before symptoms appear will also be discussed in the second review [4].

Viral respiratory infections in early childhood are the most common diseases in this age, often without any long-term consequences. Bronchiolitis is the most common lower respiratory tract infection in the first year of life. The risk of RSV-induced bronchiolitis is well known but the impact of other viruses, particularly rhinovirus, is also important. The significance of these early infections on development of wheeze in preschool children is the subject of debate. The spectrum between acute respiratory disease, on one hand, and development of recurrent preschool wheeze as a consequence of specific viral infections, on the other, is discussed in the third review, as well as the results of long-term follow-up studies [5].

Finally, the most common chronic respiratory disease in childhood, asthma, and its different phenotypes are the subject of the fourth review. Asthma is not one disease but many, and we have earlier suggested an approach to assess problematic severe asthma [6]. Here, the different phenotypes of asthma are discussed and the complexity of this common disease and the problems perceived when we characterise (or phenotype) childhood asthma are described [7].

References

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