Bronchopulmonary dysplasia: a crime of opportunity?

Aaron C. Ericsson

Affiliation: University of Missouri Metagenomics Center (MUMC), Dept of Veterinary Pathobiology, University of Missouri, Columbia, MO, USA.

Correspondence: Aaron C. Ericsson, University of Missouri, 4011 Discovery Drive, Columbia, MO 65201, USA. E-mail: ericssona@missouri.edu

@ERSpublications
The manuscript by Gallacher and co-workers reveals specific bacteria associated with innate immune responses in ventilated preterm infants affected with bronchopulmonary dysplasia https://bit.ly/2Xfaq4b

Cite this article as: Ericsson AC. Bronchopulmonary dysplasia: a crime of opportunity? *Eur Respir J* 2020; 55: 2000551 [https://doi.org/10.1183/13993003.00551-2020].

First described in 1967, one of the most vexing problems in the care of preterm infants continues to be bronchopulmonary dysplasia (BPD). The clinical presentation and pathological changes associated with BPD, also referred to as chronic lung disease of prematurity, have changed substantially since that initial description by Northway *et al.* [1]. The condition described in that seminal report, characterised by marked respiratory distress associated with pulmonary oedema due to shunting across the patent ductus arteriosus, was also specific to preterm infants that had received high inspired oxygen concentrations for at least a week. This newly recognised form of respiratory failure was attributed to aggressive mechanical ventilation and hyper-oxygenation, as it was typified by pulmonary hypertension and oedema, and *cor pulmonale*. Thus, those astute observations of a clinical syndrome likely occurring in hospitals across the world led to changes in the use of mechanical ventilation in preterm infants, and innovative research resulting in ground-breaking treatments such as antenatal glucocorticoids and synthetic surfactant therapy. While these approaches in the care of preterm infants dramatically improved survival rates of preterm infants and markedly reduced the incidence of the BPD reported by Northway *et al.* [1], BPD did not disappear – it just changed.