



Endotipos lipodómicos nasofaríngeos en niños con bronquiolitis y riesgo de asma infantil: estudio multicéntrico

Fujiogi M, Zhu Z, Raita Y, Ooka T, Celedon JC, Freishtat R, *et al.* Nasopharyngeal lipidomic endotypes of infants with bronchiolitis and risk of childhood asthma: a multicentre prospective study *Nasopharyngeal lipidomic endotypes of infants with bronchiolitis and risk of childhood asthma: a multicentre prospective study*. [Thorax. 2022;77:1059-69.](#)

La bronquiolitis es un importante factor de riesgo para padecer asma. La evidencia reciente sugiere que la bronquiolitis es clínicamente heterogénea y están en investigación posibles endotipos, como los que se encuentran en este trabajo.

Es un estudio de cohortes prospectivo multicéntrico de 917 menores de 12 meses (mediana de edad: 3 meses) hospitalizados por esta causa. Han encontrado, mediante el agrupamiento integrado de datos clínicos, virus y análisis lipodómico, cuatro endotipos diferentes de bronquiolitis con muy distinto riesgo de padecer asma.

Supone un nuevo apoyo que demuestra que la bronquiolitis es una enfermedad heterogénea y que poco a poco se conseguirá identificar diferentes tipos con diferente pronóstico.

BMJ Journals

Thorax

Asthma
Original research

Nasopharyngeal lipidomic endotypes of infants with bronchiolitis and risk of childhood asthma: a multicentre prospective study

Michimasa Fujiogi¹, Zhaozhong Zhu¹, Yoshihiko Raita¹, Tadao Ooka¹, Juan C Celedon², Robert Freishtat^{3, 4, 5}, Carlos A Camargo¹, Kohei Hasegawa¹

Correspondence to Dr Michimasa Fujiogi, Department of Emergency Medicine, Massachusetts General Hospital, Boston, Massachusetts, USA; fujiogi-stmi@uminn.ac.jp

Abstract

Background Bronchiolitis is the leading cause of hospitalisation of US infants and an important risk factor for childhood asthma. Recent evidence suggests that bronchiolitis is clinically heterogeneous. We sought to derive bronchiolitis endotypes by integrating clinical, virus and lipidomics data and to examine their relationship with subsequent asthma risk.

Methods This is a multicentre prospective cohort study of infants (age <12 months) hospitalised for bronchiolitis. We identified endotypes by applying clustering approaches to clinical, virus and nasopharyngeal airway lipidomic data measured at hospitalisation. We then determined their longitudinal association with the risk for developing asthma by age 6 years by fitting a mixed effects logistic regression model. To account for multiple comparisons of the lipidomics data, we computed the false discovery rate (FDR). To understand the underlying biological mechanism of the endotypes, we also applied pathway analyses to the lipidomics data.