

European Respiratory Society Annual Congress 2013

Abstract Number: 2166

Publication Number: P1634

Abstract Group: 7.6. Paediatric Respiratory Epidemiology

Keyword 1: Wheezing **Keyword 2:** Infants **Keyword 3:** Epidemiology

Title: Parental history of atopy modifies the effect of breast feeding on recurrent wheeze in infants

Dr. Patricia 16340 Garcia-Marcos pat.garcia.marcos@gmail.com MD ¹, Dr. Rosa 16359 Pacheco-Gonzalez sapachego@hotmail.com MD ¹, Prof. Dr Manuel 16360 Sanchez-Solis msolis@um.es MD ¹, Prof. Dr Javier 16361 Mallol jmallol@vtr.net MD , Prof. Dr Paul 16366 Brand p.l.p.brand@isala.nl MD , Prof. Dr Dirceu 16367 Sole sole.dirceu@gmail.com MD and Prof. Dr Luis 16368 Garcia-Marcos lgmarcos@um.es MD . ¹ Pediatric Respiratory and Allergy Unit, "Virgen De La Arrixaca" University Children's Hospital, University of Murcia, Murcia, Spain, 30120 ; ² Department of Pediatric Respiratory Medicine, Hospital El Pino, University of Santiago De Chile (USACH), Santiago, Chile ; ³ Princess Amalia Children's Clinic & UMCG Postgraduate School of Medicine, Isala Klinieken & University Medical Centre Groningen, Zwolle & Groningen, Netherlands and ⁴ Division of Allergy, Clinical Immunology and Rheumatology, Department of Pediatrics, Federal University of São Paulo (UNIFESP), Sao Paulo, Brazil .

Body: Aim: To know how family history of atopy modifies the protective effect of breast feeding (3+ months) (BF) on recurrent wheeze (3+ episodes) (RW) of infants during the 1st year of life. Methods: EISL has been described previously (Thorax 2010;65:1004-9). Briefly, parents from 22 centres answered a validated questionnaire (Int Arch Allergy Immunol 2007;144:44-50) on wheezing and risk factors during the 1st year of life of their children. Using the random effect logit model, using centre as panel variable, four models were built according to the existence of 0, 1, 2 or 3 parental (father and/or mother) atopic diseases (asthma, rhinoconjunctivitis or eczema). RW was compared to no wheeze (OR; 95% CI), and all models included as covariates: gender, smoking in pregnancy, having a cold in the 1st three months of life, attending to a nursery school, infant eczema, n. of siblings and persons at home, mould stains in the household walls and mother's study level. Results: Of 35,049 infants, 19,811 had no wheeze and 6,161 had RW (8,962 had 1/2 episodes and 115 had no information available). Compared with male gender, which was a significant risk factor across all strata, BF tended to be increasingly more protective as family history was less atopic.

Associations (odds ratios) of breast feeding and gender with recurrent wheeze according to the number of parental allergic diseases

	Parental allergic diseases (n)			
	0	1	2	3
Breast feeding 3+ months	0.73 (0.65-0.82)	0.80 (0.70-0.91)	0.88 (0.75-1.04)	0.84 (0.64-1.10)
Male gender	1.41 (1.26-1.57)	1.54 (1.36-1.73)	1.60 (1.37-1.85)	1.57 (1.22-2.01)

Conclusion: The protective effect of BF on RW during the 1st year of life varies according to the parental history of atopy.