



POSTER DISCUSSION PRESENTATION

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PD13 - Gender differences in rhinitic children

Giuliana Ferrante^{1,2}, Velia Malizia², Maria Tornatore², Laura Montalbano¹, Roberta Antona², Giovanni Corsello¹, Stefania La Grutta^{2*}

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Gender differential effects on rhinitis are infrequently studied.

Aim of our study is to assess gender differences in host and environmental characteristics and in rhinitis severity level within the IBIM Pulmonary and Allergy Pediatric Clinic. A series of rhinitic (R) patients (September 2011 - May 2013) were investigated through standardized questionnaire and spirometry. Statistical analyses were performed with SPSS.

Preliminary results refer to 122 R patients: 77 males (M) (63.1%) and 45 females (F) (36.9%); age (years): $9.23 \pm 3.42M$ vs $9.38 \pm 3.02F$; maternal history of rhinitis: $45.5\%M$ vs $32.3\%F$ ($p < 0.090$); exposure to maternal smoking during pregnancy: $15.6\%M$ vs $2.2\%F$ ($p < 0.021$); exposure to passive smoke: $49.4\%M$ vs $33.3\%F$ ($p < 0.086$); exposure to only current maternal smoke: $24.7\%M$ vs $11.1\%F$ ($p < 0.070$); current exposure to pet: $31.2\%M$ vs $15.6\%F$ ($p < 0.057$); exclusive breast feeding (4mos): $33.8\%M$ vs $53.3\%F$ ($p < 0.034$); BMI (Kg/m^2): $18.98 \pm 3.99M$ vs $17.95 \pm 2.94F$ ($p < 0.133$); being overweight: $39\%M$ vs $24.4\%F$ ($p < 0.083$). After stratifying by presence/absence of asthma, in those with R only (57, 46.7%): $42\%M$ vs $53.3\%F$ ($p < 0.267$); VAS (mean \pm s.d.): $8.18 \pm 1.46 M$ vs $7.60 \pm 1.71F$ ($p < 0.099$); PSQI (mean \pm s.d.): $2.33 \pm 1.53M$ vs $1.44 \pm 0.73F$ ($p < 0.009$); FVC (%Pred) (mean \pm s.d.): $98.14 \pm 10.51M$ vs $103.27 \pm 7.83F$ ($p < 0.068$); in those with rhinitis and asthma (RA, 65, 53.3%): $57.1\% M$ vs $46.7\%F$ ($p < 0.267$); asthma severity level: intermittent, $32.5\%M$ vs $11.1\%F$ ($p < 0.008$); moderate persistent, $9.1\%M$ vs $15.6\%F$ ($p < 0.063$); rhinitis severity level: mild persistent $33.8\% RA$ vs $17.5\% R$ -only ($p < 0.041$); VAS (mean \pm s.d.): $6.91 \pm 1.57 M$ vs $8.50 \pm 1.68F$ ($p < 0.010$); food allergy $36.4\%M$ vs $4.8\%F$ ($p < 0.008$).

In conclusion, we have shown in a consecutive series of rhinitic patients that male gender is mainly associated

with more frequent exposure to environmental and parental risk factor, burden of disease, pulmonary function tests and co-morbidity, but also with less severe rhinitis level. Further analyses on a larger series of pediatric patients are needed in order to assess the impact of gender differences on rhinitis management.

Authors' details

¹Department of Science for Mother and Child Health Promotion, University of Palermo, Palermo, Italy. ²Institute of Biomedicine and Molecular Immunology IBIM, National Research Council, Palermo, Italy.

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²Institute of Biomedicine and Molecular Immunology IBIM, National Research Council, Palermo, Italy

Full list of author information is available at the end of the article