

## Allergen Sensitization in Allergic Respiratory Diseases in Children from Northeast, Thailand

Rachaneekorn Panichnok, Sureeporn Srisuthikamol, Rattapon Uppala, Jamaree Teeratakulpisarn  
Department of Pediatrics, Faculty of Medicine, Khon Kaen University, Khon Kaen

**Background:** Allergic respiratory diseases composed of asthma and allergic rhinitis are the common chronic illnesses which have great impact on children's quality of life. Despite many years of the introduction of the international guidelines for symptom-control of both diseases, children still suffered from disease exacerbation especially for asthma. Adding to the controller medication, outdoor/indoor allergens should be controlled to achieve the treatment goal for pediatric patients. This objective of this study is to identify the common allergen sensitization in children presented with allergic respiratory diseases from Northeast, Thailand

**Methods:** A retrospectively health records of children ages  $\leq 15$  years old who presented with respiratory symptoms and had been performed skin prick test at Allergy clinic, Srinagarind hospital between January 1, 2009 to May 30, 2014 were reviewed. The routine common aeroallergens for sensitization in each patient were house dust (HD), *Dermatophagoides pteronyssinus* (DP), *Dermatophagoides farinae* (DF), Cock roach, Dog, Cat, Timothy grass (Tg), Aspergillus (Ag), Alternaria, and Mix Feathers (F).

**Results:** 218 children with respiratory disease were enrolled to the study. The mean age of the participants was  $6.0 \pm 3.7$  years, (max 15 year, min 6

month, median was 5 year) and 120 (55.05%) of them were males and 98 of them were females (44.95%). The study founded that common allergens in respiratory disease of childrens (asthma and allergic rhinitis) which positive skin prick test were *Dermatophagoides pteronyssinus* (Dp) (40.82%), *Dermatophagoides farinae* (Df) (36.7%), cockroaches(31.19%), house dust-mites (HD)(30.28%), Timothy grass (13.08%), Dog (11.93%), Cat (11.47%), Feather Mix (6.67%), Aspergillus (5.91%), and Alternaria (4.43%).

**Conclusion :** The most common sensitized allergen in 218 respiratory disease childrens that evaluated at the pediatric allergy clinic, Srinagarind hospital between January 1, 2009 to May 30, 2014 based on the results of positive skin prick test (SPT) was *Dermatophagoides pteronyssinus* (Dp) (40.82%). This is the first time to study the commons allergens in respiratory disease children in Northeast, Thailand and the results were similar with previous studies.

**Key word:** Allergic respiratory disease, asthma, allergic rhinitis, skin prick test, allergens

