Comparison of Skin Prick Tests and Allergen-specific IgE by MAST-CLA Technique in Allergic Thai Children

P. Vilaiphan, S. Numkiatwongsa, P. Chatchatee, J. Ngamphaiboon; King Chulalongkorn Memorial Hospital, Bangkok, THAILAND.

RATIONALE: The prevalence of allergic disease is increasing all over the world. In vitro IgE measurement is useful for diagnosis. Multiple allergosorbent chemiluminescent assay (MAST-CLA) is the method for detect allergen specific IgE by multiple allergen allergosorbent chemiluminescent technique using small amount of blood sample and less expensive than testing for specific IgE to each allergen separately. There have been only few studies about sensivity and specificity of MAST-CLA compared with skin prick test (SPT) in Asian population.

METHODS: One hundred allergic children, aged between 3-18 years were evaluated for allergen specific IgE using MAST-CLA. The results were compared with SPT for rate of positivity, sensitivity and specificity.

RESULTS: The most common aeroallergen sensitization in allergic Thai children were Dermatophagoides pteronyssinus (Dp) and Dermatophagoides farinae (Df) (88% and 87%, respectively). The most common food allergens sensitization were mixed shellfishes and shrimp (14% and 13%, respectively). The agreement between the results of MAST-CLA and SPT was best for Dp and Df with sensitivity of 85.4%. When all of the allergens in MAST-CLA panel were considered, the sensitivity rose to 90%. The agreement was poor for food allergens. Shrimp and shellfishes, the most common food allergens in allergic Thai children were not included in MAST-CLA panel.

CONCLUSIONS: MAST-CLA technique may be use to detect allergenspecific IgE. There was good correlation with SPT result especially for aeroallergens. However the panel need to be modified according to common allergens in different geographical location.

Funding: Ratchadapiseksompotch Research Fund

Source: J ALLERGY CLIN IMMUNOL JANUARY 2007

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WH44M9SH9V8&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1045674458&rerunOrigin=google&_acct=C00000000878&_version=7&_userid=122832&md5=edf701b9e6953515e7817b9e39c