253 Respiratory Protection and Incident Skin Test Sensitivity Among Laboratory Mouse Workers

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RATIONALE: Although respiratory protection (RP) is believed to prevent laboratory animal allergy (LAA), no studies, to our knowledge, have evaluated RP use as a primary prevention strategy.

METHODS: Employees at a mouse facility (N=144) were enrolled in a prospective cohort study. Skin testing and questionnaire administration were performed at 0, 6, and 12 months. Survival analysis methods were used to analyze relationships between RP use and skin test sensitivity (+mSPT) and LAA. LAA was defined as a +mSPT and reported mouse-related symptoms.

RESULTS: 57% of participants were female, 89% were white and the mean age was 31.5 y. Sixty percent were atopic, and 17% had asthma. At 12 months, the rates of developing a +mSPT and LAA were 15.9% and 5.4%, respectively. Workers reported RP use as follows: 40.6% always, 18.8% sometimes, and 40.6% never. Workers who reported always using RP were less likely to develop a +mSPT and LAA than workers who sometimes used RP (+mSPT: 5% vs. 37.0%, respectively [p= .06]; LAA: 0% vs. 15.4%, respectively [p=.09]). The protective effect of consistent RP use was independent of atopy and mouse allergen exposure. Rates of +mSPT and LAA among never users were similar to rates among consistent RP users, but only a minority of never users had LAA risk factors.

CONCLUSION: These findings suggest that at-risk workers who consistently use RP are less likely to develop skin test sensitivity and LAA compared to those who sometimes use RP. Consistent RP use may be required to decrease the risk of sensitization and LAA.

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254 Once Daily Fluticasone Furoate* Nasal Spray (FFNS), a Novel Enhanced Affinity Steroid, Provides 24-hour Relief for the Nasal Symptoms of Perennial Allergic Rhinitis (PAR)

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RATIONALE: The objective of this study was to investigate the efficacy and safety of a novel, enhanced affinity steroid, FFNS, in treating PAR in adults and adolescents.

METHODS: Three hundred and two subjects (≥12 years) were randomized to double-blind treatment for four weeks with FFNS 110mcg or vehicle placebo, administered using a unique, side-actuated device. Primary endpoint: mean change from baseline (MCFB) over the entire treatment period in daily reflective total nasal symptom scores (rTNSS), which is the sum of nasal congestion, itching, rhinorrhea, and sneezing symptoms scored on a 0-3 (none to severe) scale. Key secondary endpoints: 1) MCFB in morning pre-dose, instantaneous total nasal symptom scores (iTNSS) and 2) Overall evaluation of response to therapy (ORT). ANCOVA was the primary analysis method, adjusted for baseline value, age, sex, and country. Safety was assessed by adverse events (AEs) and laboratory tests.

RESULTS: Mean baseline rTNSS were similar. For the primary endpoint, FFNS showed significantly greater reductions (Least Squared [LS] MCFB of -0.706, p=0.005) in the nasal symptoms of PAR. Once daily dosing of FFNS was confirmed based on the reduction in AM pre-dose iTNSS (LS mean difference = -0.705, p=0.006). For the ORT, the response between FFNS and placebo was statistically significant (p=0.005), and combined ratings of moderately or significantly improved were 33% for placebo and 44% for FFNS. Overall, FFNS was well tolerated, with no safety issues identified.

CONCLUSION: Once daily FFNS 110mcg demonstrated clinically significant, sustained 24-hour efficacy, for nasal symptoms of PAR in adults and adolescents.

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255 Identification Of Ige-mediated Drug Allergy In Patients With Adverse Drug Reactions Categorized By World Health Organization-the Uppsala Monitoring Centre (who-umc) System

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RATIONALE: World Health Organization-The Uppsala Monitoring Centre (WHO-UMC) system is a practical tool for assessment of adverse drug reactions (ADR). However identification of IgE-mediated drug allergy is important for proper management. The gold standard for diagnosis of IgE-mediated drug allergy is drug challenge. We investigate the IgE-mediated drug allergy in the cases of ADR categorized by WHO-UMC system between January-December 2005 at Siriraj hospital, Thailand.

METHODS: Cases of ADR documented by WHO-UMC criteria were investigated by skin prick tests (SPT), drug challenges and serum tryptase (in case of anaphylaxis).

RESULTS: Thirteen patients (9 boys and 4 girls with mean age 6.4 years) were documented to have ADR by WHO-UMC criteria which causality terms were certain 2/13, probable 3/13, possible 6/13 and unlikely 2/13 cases. Antibiotics were the most common drugs (4/13) which beta-lactam and sulfa groups were the common causes (2/13 each). SPT and drug challenges were performed in 12 patients and serum tryptase in 1 patient. Drug challenge tests were positive in 4 patients and serum tryptase was positive (rising over baseline tryptase 3.97 time) in 1.Therefore, the additional cases of certain drug allergy were 5/13 of certain cases and 8/13 of unlikely cases.

CONCLUSIONS: SPT, drug challenges and serum tryptase are crucial to further identify IgE-mediated drug allergy in patients categorized by WHO-UMC system.

256 A Survey of Community Physicians' Perceptions Related to Asthma Education

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RATIONALE: To determine community physicians perceptions of value for asthma education and the Children's Asthma Education Centre (CAEC).

METHODS: A survey developed by an asthma nurse specialist, a pediatric allergist and a family physician was distributed to family physicians (n=440) and pediatricians (n=58) in a moderate sized Canadian city. The survey used a 5-point Likert response scale (range "not at all" to "extremely helpful"). Questions asked about the value of referral to the CAEC, having a Certified Asthma Educator (CAE) come to the physician's office and having an asthma nurse specialist available by phone.

RESULTS: 122 physicians returned the survey, 93 family physicians and 29 pediatricians representing response rates of 21% and 50% respectively. Pediatricians were more positive about referral to the CAEC (96% vs. 78%, p<0.01). Family physicians expressed more interest than pediatricians in having a CAE come to their office (68% vs. 50%, p=NS) and significantly more interest in having an asthma nurse specialist available by phone to discuss specific children (71% vs. 33%, p<0.01), provide the physician with asthma information (66% vs. 29%, p<0.01), direct families to for information (91% vs. 78%, p=NS) and as a link to an allergist or educator (91% vs. 67%, p<0.05).

CONCLUSIONS: Pediatricians may be more aware of the CAEC and comfortable with referring to the Centre. Although there may be some selection bias, family physicians who responded indicated a strong interest in asthma support services. It is important to ensure family physicians know about opportunities to work more closely with Certified Asthma Educators.

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