

Abstract winners 2015: summaries

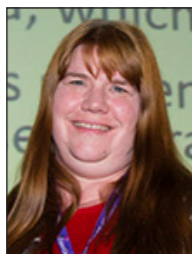
BSACI 2015 accepted 131 abstracts for presentation and the majority are being considered for publication in the journal 'Clinical and Experimental Allergy'. Fifteen abstracts were selected for oral presentation in the Basic Science, Paediatric Clinical and Adult Clinical oral abstract sessions. Many thanks to the poster judges for engendering interesting discussions during the poster session and to Dr Tom Marrs for expertly fielding this session.

Professor Barry Kay presented the following six delegates an award in the following categories for excellent research in allergy:

Paediatric Clinical

Heather Hanna

St. Thomas' Hospital,
London, United
Kingdom



Title: Nasal influenza immunisation with LAIV is safe in egg-allergic children - results from the SNIFFLE-2 study.

This study sought to assess the safety of intranasal Live Attenuated Influenza Vaccine (LAIV; FluMist®, Fluenz®), which contains egg protein, in egg-allergic children with and without asthma. We conducted a multi-centre phase IV observational study in children with a physician-diagnosis of egg allergy, administering 808 doses of LAIV in 779 children under medical supervision.

There were no systemic reactions, nine local reported reactions which were mild and self-limiting. There was no identified signal for increased wheezing post LAIV. The study has been reviewed by the Joint Committee on Vaccination and Immunisation (JCVI) which advises UK health departments on immunisation, and has resulted in a change in UK vaccine policy.

Allied Health

Janette Bartle

Imperial College
London,
United Kingdom



Title: Ten years of grass pollen counting at The Ipswich Hospital.

Ipswich has ten years of grass pollen counting data which has been reviewed and related to trends in reported hayfever symptoms and local information on prescribing.

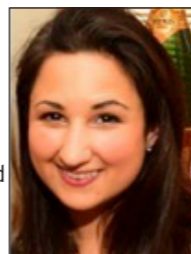
The annual pollen counts show a repeated pattern of grass pollen dispersal despite weather conditions. The start of counting has increased by approximately two weeks and extends beyond July demonstrating a longer period of grass pollen exposure.

The RCGP's reported 114% increase in patient consultations at GP surgeries for hayfever in 2014 compared with 2013. Local prescribing data indicates a greater reliance on antihistamine rather than steroid nasal sprays contrary to recommended treatment guidelines.

Basic Science

Nadine Upton

Aston University,
Birmingham, United
Kingdom



Title: The effect of the common cold (Rhinovirus) on local and peripheral B cell responses in allergic asthma.

Respiratory viral infection is a major cause for asthma exacerbations. Rhinovirus (RV) is frequently associated with viral-induced exacerbations in patients with asthma. We hypothesized that a major consequence of RV infection in allergic asthma is propagation of pre-existing allergic IgE+ B cell responses. We found that in vivo RV infection does indeed alter both secreted IgE and proportions of IgE+ B cells in peripheral blood from allergic asthmatics. Alterations in IgE were accompanied by functional changes in the activation of Basophils in peripheral blood. Our work demonstrates that rhinovirus infection alters underlying IgE in patients with allergic asthma, highlighting the importance of furthering our understanding into both the short and long-term consequences for these changes.

Adult Clinical

Anna Slovick

Imperial College
London,
United Kingdom



Title: Probiotic supplementation for the prevention of eczema and allergic sensitization: A systematic review.

Several million people in the UK have hay fever, which significantly affects their quality of life. Although current immunotherapy is effective, it is expensive and involves frequent visits to specialist clinics for injections or daily self-dosing with tablets or drops for several years.

Based on encouraging results from a pilot study, we undertook a clinical trial of a novel low dose intradermal grass pollen immunotherapy (over 2000 fold less than subcutaneous immunotherapy). We recruited 93 participants who were randomised to receive 7 two weekly pre-seasonal intradermal grass pollen or histamine control injections. The primary outcome was the combined symptom and medication scores over the 2013 season. Mechanistic studies were also performed.

The results showed that the new approach had no benefit in reducing hay fever symptoms or medication usage. Unexpectedly, symptoms in the nose were significantly worse in those who received intradermal grass pollen injections. Mechanistic studies indicated intradermal immunotherapy induced immunological priming. These results have implications for novel immunotherapies delivering allergen to the skin.

Primary Care

Alpasian Bulbul

Brighton and Sussex
Medical School,
United Kingdom



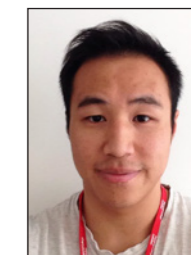
Title: Administration of nasal medications to infants and young children - thematic analysis of parents' experiences in online forum discussions and blogs.

I am a PhD student at Brighton and Sussex Medical School, and my research project is about the experiences of parents administering medications to their atopic children. As part of my project, I analysed the experiences of parents administering nasal medications to their children with rhinitis symptoms found on online forum discussions and blogposts. The main findings were that parents faced challenges in administering nasal medications because of the extreme resistance of the children. Health professionals, who are consulting parents of atopic children regularly, need to be aware of these difficulties in order to advise parents appropriately.

Undergraduate

Alistair Tang

Imperial College
London,
United Kingdom



Title: Assessment of cardiac changes during peanut allergic reactions.

The physiological events which occur during IgE-mediated allergic reactions to food are poorly understood. We evaluated the ECG changes during acute peanut allergic reactions, in 25 adults undergoing double-blind placebo-controlled challenges as part of the TRACE study, and their relationship to reaction severity.

On reactive compared to non-reactive days, we found significant increases in heart rate (mean 10.8bpm, 95% CI 5.73 to 15.88) and QTc interval (mean 14.92ms, 95% CI 7.34 to 22.50). We also found changes in heart rate variability with increased dfal (P=0.047) and decreased sampen (P=0.0017). Additionally, atrioventricular conduction block was observed in 2 participants.

The changes observed were consistent with sympathetic activation and decreased heart rate variability. These changes were not significantly associated with reaction severity.

Abstract Submissions for
2016 BSACI Meeting

Opening date:

Monday 25 January, 2016