Improvement in quality of life following peanut oral immunotherapy in a paediatric population at the Cambridge Peanut Allergy Clinic

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Objective: To assess the change in quality of life from baseline to one year following commencing peanut oral immunotherapy.

Patients and Methods
• 111 notes reviewed from children, aged 7-16y, attending the Cambridge Peanut Allergy Clinic for PNOIT (figure 1 for immunotherapy schedule, and figure 2a for notes review)
• Quality of life scores (using validated Food Allergy Quality of Life Questionnaire (FAQLQ) child and parent form (7-12 years) or teenage form) were completed at baseline, stage 7 (completion of up-dosing) and one year

Results
• 69 patients ([33 teenage forms (TF), 35 child (CF) and 36 parent (PF) (35 with corresponding child forms)] had sufficient data to compare quality of life at baseline and one year
• Significant improvement in Quality of Life (QoL) was observed in all age groups, from baseline to one year
• The mean reduction (improvement) in FAQLQ was 1.6 (CF), 1.2 (PF) and 1.6 (TF) (figure 3)

Conclusions
• Peanut oral immunotherapy was associated with an improvement in FAQLQ for children, their parents and teenagers
• Improvement in QoL was seen across all subscales of each FAQLQ form

References
• Few studies of peanut immunotherapy have included an assessment of quality of life; factors affecting a change in QoL are unknown
• There is an increase in allergic reactions with treatment with peanut immunotherapy compared to standard avoidance, despite this, quality of life may be improved

Patients and Methods
• Clinical factors were recorded using a data collection proforma (figure 2b)
• Non-parametric Wilcoxon signed rank test was used to compare baseline and one year FAQLQ scores
• Linear regression analysis were used to identify factors associated with change in FAQLQ

Results
• Improvement in quality of life was seen across each domain of FAQLQ, and was associated with baseline FAQLQ
• Improvement was greater than the minimally important difference for FAQLQ (>0.5) and was similar to the improvement seen in a previous open label randomised controlled trial (Anagnostou 2014)
• Magnitude of change in FAQLQ was correlated with baseline FAQLQ score
• The change in FAQLQ was not associated with sex, age started immunotherapy, previous experience of anaphylaxis, history of asthma or allergic rhinitis, or baseline skin prick test size
• The change in FAQLQ was associated with total baseline FAQLQ score – suggesting the greater the initial impairment in QoL the greater the change in QoL following PNOIT