

Postersession - How to Improve Clinical Aspects of Immunotherapy

1362b - Preseasonal immunotherapy with a hypoallergenic six-grass pollen allergoid: a three year follow-up in adults

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Background: Preseasonal immunotherapy (SIT) with a hypoallergenic six-grass pollen allergoid proved to be safe and efficacious in a multi-centre, randomised, double-blind, placebo-controlled trial for 3 years (2002-2004). Until now, long-term efficacy of SIT has been investigated primarily in children. Here we present data for actively treated grass pollen allergic adults 3 years after completion of SIT.

Methods: 26 subjects (7 male, 19 female; mean age 41.7 (range 24-63)), who had previously received immunotherapy with a 6-grass pollen allergoid for 3 consecutive years, were observed prospectively for 3 years after completing treatment. Symptom-medication score (SMS) and quality of life, assessed by means of a standardised questionnaire (RQLQ), were evaluated during a 42-day observation period in the grass pollen season. Skin prick testing (SPT) was performed with various seasonal and perennial allergens (grass and tree pollens, cat, dog, house dust mites, moulds, herbs) to evaluate the number of new sensitisations in comparison to baseline.

Results: Median AUC of SMS further improved in 2007 (44.0) in comparison to the 2004 season 3 years previously (131.0) ($p=0.0222$). Six patients were free of symptoms and did not need any rescue medication. The median number of 'well days' for all subjects was 39/42 (93%) (days with a symptom score ≤ 4 and without intake of any medication). Overall RQLQ remained unchanged (median 0.8 in 2004; 0.8 in 2007). 14 (54%) of subjects lost their former positive SPT reaction to 6-grasses mixture. The number of subjects with multiple sensitisations (against at least two allergens) was reduced (58% in 2002 vs. 35% in 2007). 18 (69%) subjects did not show any new positive results in SPT indicating that they did not develop new sensitisations.

Conclusion: The hypoallergenic 6-grass pollen preparation has a long term effect in adults for at least 3 years after completion of a 3-year preseasonal SIT course. SMS was further reduced and quality of life remained improved. 69% of patients did not develop new sensitisations. The results are consistent with 3-year results of a controlled trial with the same preparation in children (Eng PA et al., *Allergy* 2002): Only 61% of children under previous SIT showed new sensitisations in contrast to 100% of the symptomatically treated control group.