University Hospital of Sharjah. Skin prick tests were performed with 15 aeroallergens selected based on the most common identifiable allergens in the region, and 27 individual food allergens according to patient history. A mean wheal diameter of at least 3 mm greater than the negative control was taken as positive. Analysis was conducted via SPSS version 21.

Results: The patients' ages ranged from 2 months to 16 years (84 males, 122 females). From our study population, 60.70% had allergic rhinitis, 46.10% had asthma symptoms, 26.20% had atopic dermatitis, and 26.20% had food allergy. Among the one's positive for aeroallergens, 85% were poly-sensitized and 15% were single sensitized. House dust mites showed the highest prevalence of sensitivity (D. Farinae 37.04%, and D. Pteronyssinus 36.51%), followed by cat dander (32.25%) and Feather mix (31.68%). The least common of all indoor aeroallergens was Cockroach (15.84%). Molds showed the following percentages: Alternaria 25.9%, Cladosporium mix 19.58% and Aspergillus mixture 17.46%. Russian thistle had the highest percentage of sensitivity (32.25%) making it the most prevalent outdoor aeroallergen in our study. Chenopodiaceae showed a prevalence of 26.73% followed by PhleumPart Timothy (20.63%) and Palm date (19.80%). The least common outdoor allergen was Bermuda grass 16.9%. The most common food allergens were peanut (48.15%), egg (46.25) and Cow's milk (40.74%).

Conclusions: In conclusion, the most common aeroallergen identified based on skin prick test in the allergy clinic in the UHS was house dust mites in all allergic diseases, which corresponds with the results of similar studies conducted in our region. Identifying allergens plays an important role in management, giving appropriate allergen avoidance and possible immunotherapy. The commonest allergic disease among our population was allergic rhinitis. The most common food allergen was peanuts, followed by eggs and then milk. Data on food allergy is scarce in the UAE and further studies looking at food allergy prevalence are needed.

Aeroallergen	% of sensitized patients
D. FARINAE	37.04%
D. PTERONYSSINUS	36.51%
ALTERNARIA	25.93%
PHLEUMPARTTIMOTHY	20.63%
CLADOSPORIUM MIX	19.58%
ASPERGILLUS MIX	17.46%
CAT DANDER	32.25%
RUSSIANTHISTLE	32.25%
FEATHERS MIXTURE	31.68%
CHENOPODIACEAE	26.73%
PALMDATE	19.80%
COCKROACH	15.84%
BERMUDA GRASS	16.90%
RABBIT HAIR	7.84%
HORSE HAIR	4.95%

0626 | Sensitisation and allergy patterns to inhalant and food allergens in a population from the Mediterranean area

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Introduction: Olive pollen is one of the most important causes of seasonal respiratory allergy in the Mediterranean basin, and peach is the main cause of vegetable food allergy. However, there is a lack of studies analysing the pattern of sensitisation and allergy of these allergens in this area.

Objectives: We determined the prevalence of sensitisation and allergy to olive pollen and peach in a population from southern Spain (Periana, Málaga). We estimated sample size stratified in 10 age intervals (1-90 y-old). A questionnaire and skin prick tests (SPT) to relevant inhalant and food allergens were performed.

Results: A total of 1396 individuals were included. One third was positive to at least one inhalant allergen and 5.9% to at least one vegetal food allergen. Almost one fifth (18%) were positive to olive pollen (CI: 16.4-20.5) and 2.1% to peach, being all of the latter also positive to Pru p 3. Around half (51%, CI: 48.9-54.3) of individuals reported rhinitis symptoms; 22.6% (CI: 20.6-25.1) reported asthma, and 40% (37.9-43.23) reported conjunctivitis. Clinical entities suggesting food allergy were reported by 8% of the cases (6.3-9.5), with urticaria and/or angioedema being the most common. SPT positivity to olive pollen in the first age interval was 18%, peaking to 29% in the third interval and decreasing progressively ($P < .0001$). No significant variation due to age was observed in SPT to peach and Pru p 3.

Conclusions: In a well-defined areas of high exposure to inhalant (olive tree pollen) and food allergens (peach), a relatively high proportion of individuals become allergic to olive pollen, particularly for those between 20-39 years old. Most of these tolerated peach.

0628 | Control of Fel d 1 levels in a cat allergen exposure chamber

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Introduction: Exposure to cats in an allergen chamber is a naturalistic means to assess responses to cat dander within a controlled

environment. However, control of Fel d 1 levels remain problematic with reported values varying by orders of magnitude within and between chambers possibly because cat dander is aerosolized by shaking blankets used by the cats. The aim of this study is to assess methods to ensure stable and consistent levels of Fel d1 for future cat allergen chamber exposure studies.

Objectives: The chamber, volume 520 ft^3 (14.7 m^3) was designed and built to accommodate two neutered cats and 1-2 subjects. Samples are obtained at 3 locations in the chamber using portable air sampling pumps (Gillian 5000) with glass fiber filters (Millipore), flow rate 4 L/min. Fel d 1 is quantified using ELISA (Indoor Biotechnologies). Samples will be collected daily for 15-minutes, to follow evolution of Fel d 1 levels and their similarity at different points in the room before and after shaking the cats' blanket. Chamber cleaning and air circulation as a means to control and homogenize allergen levels will be evaluated.

Results: Preliminary data from one sampling pump obtained for intervals of 15 minutes, after shaking the cat's blanket, showed a decrease in Fel d 1 levels from 39.7 to 12.3 to 9.2 to 4.4 ng/m^3 after 15, 30, 45, and 60 minutes, respectively suggesting this is sub-optimal to aerosolize cat dander.

Conclusions: The results of validating the chamber should allow controlled levels of Fel d 1 to be maintained in future cat allergy studies. Furthermore, the chamber may enable more accurate evaluations of efficacy of pharmaceutical interventions in cat allergy.