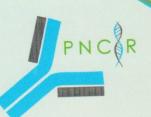


The 1st Symposium for Immunology Research





The 2nd Asthma Research Chair Meeting

FINAL PROGRAM & ABSTRACTS

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First Day Abstracts



Scope of Asthma Research in Saudi Arabia

Abdulrahman Al Frayh

Studies on prevalence on bronchial asthma and other allergic diseases in children in Saudi Arabia have continued since 1987. As such, various regions of the kingdom including eastern, western, central regions and encompassing different climate and geographical zones have been studied. These studies were conducted using a self administered questionnaire (similar to ISAAC) as well us by diagnostic parameters on cross sectional population of school children. The data indicate that there is a high prevalence of allergic diseases in children in Saudi Arabia with regional diversity. A significant increase was also recorded within 18-year period, showing almost 100% in bronchial asthma.

Since aeroallergens are considered to be extremely important cause in $\lg E$ mediated hypersensitive ity reactions, particularly bronchial asthma and allergic rhinitis, diagnostic test profile of a region need to be based on the exposure possibility for accurate diagnosis and the treatment.

Aeroallergens and their fragments having aerodynamic size, ranging from 3 μm to 40 μm in diameter, can be easily inhaled through the nose and/or mouth during normal and fast breathing. The quality and the quantity of aeroallergens vary from place to place and region to region and fluctuate with geography, climate, temperature and humidity.

The common specific outdoor inhalants, normally with seasonal natures and manifestations may include a variety of pollen grains from grasses, trees and weeds as well as spores from fungi including ascomycetes and basidiomycetes fungi. The volumetrics concentration of grains and spores may show seasonal variations with concentration ranging from zero to hundreds or even thousands in cubic meter.

The potent specific indoor inhalant (domestic/insects and pets origin), generally with perennial nature and manifestations may include Der p and Der f (house dust mite allergens), Fel d (cat allergen), Per a and Bla g (cockcroach allergens), Can f (dog allergen), and Asp f (Aspergillus allergen) etc. and their contents can be considered in ng/g of dust. Some of the inhalant agents can cause occupational diseases as well.

More research work is needed to get into detailed Molecular allergology taken into consideration the importance of Genetics of allergic diseases in order to have precise diagnostic and therapeutic implementation of allergy management.