Allergic diseases Importance & prevalence

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Allergic inflammation is due to complex interplay between:

- Several inflammatory cells, mediators and Several key target cells
- Sensory nerves
- Endogenous anti-inflammatory mechanisms

Susceptibility to, and severity of allergic diseases have:

• Genetic basis

- Multiple genes + Environment
- Epigenetic process

ATOPIC MARCH



Prevalence of sensitization

- Prevalence of a positive response to any of the four common allergens ranged from 16.2% to 44% with a median prevalence of 33.1%
- High prevalence rates were in US, UK, Australia
- Low prevalence rates were in Spain, Italy, Iceland

Prevalence of Allergic Rhinitis has increased

In a prospective sub-study following 2018, German Children from age 3 to 11 years until age 15 to 18 years incidence of Allergic Rhinitis increased from an initial rate of 7% to 14%.



Prevalence of Allergic Rhinitis has increased

In a study of 467 children assessed at age 3 years and again at 13 years, the 12 month prevalence rose from 6% to 24% in Children without a family history of allergy, and from 13% to 44% in those with one allergic parent. Throughout the word, prevalence of Allergic Rhinitis has slightly escalated

- Currently approximately 10 to 30% of adults and 40% of children are affected
- ECRHS recorded a prevalence of 10 to 41% in adults with allergic rhinitis

Asthma and Rhinitis

- Approximately 40% of patients with Allergic Rhinitis have Asthma.
- More than 94% of patients with Asthma suffer with persistent nasal symptoms.



Approximately 334 million people worldwide have Asthma



Childhood Asthma

The third phase of the ISAAC study report finding for about 800,000, 13 to 14 year old children (97 county) and about 390,000, 6 to 7 year old children (61 country): The prevalence of

The prevalence of asthma symptoms was an approximately 20 fold



Prevalence of adult Asthma (ECRHS)

- More than 11% in Australia, New Zealand, US, UK, Ireland
- Less than 4% in Iceland, Germany, Italy and India

WHO survey interviewed (180,000 adult) 18~45 years of age:

Prevalence of diagnosed asthma ranged from 0.2% in China to 21% in Australia





ISAAC (3): Prevalence for 6~7 year old children was 0.9% in India to 22.5% in Ecuador



The worldwide Prevalence of Eczema in children 6 to 7 years of age

Has increased in most regions of the world, but has remained stable in Western, Northern and Eastern Europe.

Food Allergy

The estimated prevalence of food allergy among children is 4% to 8% in US, and more than 10% among 1 year old children in Australia

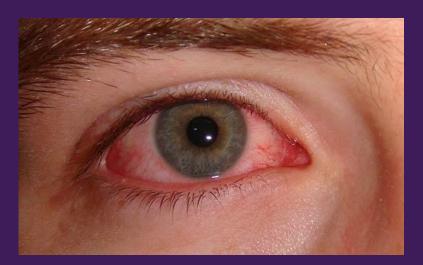


Urticaria

- One in five (1/5) persons will experience an episode of urticaria in their life time
- Chronic urticaria affects 1% of the general population

Allergic Conjunctivitis (ISAAC):

- 35% of families interviewed experience allergies
- 50% reported associated eye symptoms
- Up to 20% of population have allergic conjunctivitis



HIV

Investigator have postulated on:

- Increased incidence of Atopy in HIV-infected patients
- Drug hypersensitivity is common in them
- Allergic Rhinitis and sinusitis are common
- Increase rates of wheezing and bronchial hyper responsiveness

Contact Dermatitis

A recent cross-sectional study, patch testing of 3119 Europeans aged 18 to 74 year old reported that 27% had at least one contact

allergy (35.5% in women)



