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UNVEILING RARE HOMEOPATHIC REMEDIES FOR ALLERGIC RHINITIS: EXPLORING UNIQUE SOLUTIONS FOR CHALLENGING SYMPTOMS

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ABSTRACT

Allergic rhinitis (AR) is a common allergic condition characterized by symptoms such as nasal congestion, sneezing, itching, and rhinorrhea, resulting from IgE-mediated hypersensitivity reactions to environmental allergens. This review explores the etio-pathophysiology of AR, including the immune mechanisms involved in the allergic response and the distinction between the early and late phases of the reaction. Clinical features, prevalence, and diagnostic criteria of AR are discussed, highlighting the importance of a comprehensive evaluation for accurate diagnosis. Additionally, the role of homeopathy in treating AR is examined, emphasizing the use of lesser-known medicines tailored to individual symptom presentations. Despite their rarity in conventional practice, these medications have shown significant efficacy in managing allergic rhinitis symptoms. Overall, this review underscores the importance of personalized treatment approaches in addressing the diverse manifestations of allergic rhinitis.

KEYWORDS: allergic rhinitis, classification and etiopathophysiology of allergic rhinitis, symptoms, homoeopathy.

INTRODUCTION

Allergic rhinitis is characterized as a type 1 hypersensitivity reaction mediated by IgE antibodies, triggered by a range of environmental allergens that are inhaled. Allergic rhinitis (AR) is an atopic condition identified by either anterior or posterior transparent nasal discharge, nasal congestion or blockage, itching in the nasal area and sneezing persisting for over one hour on two or more consecutive days.[1,2]

Allergic rhinitis is classified according to.

- the duration of symptoms as either intermittent(seasonal) or persistent(perineal).
- the severity as either mild to moderate or severe.[3]

ETIO-PATHOPHYSIOLOGY

Allergic rhinitis occurs when the immune system responds to specific, non-infectious allergen, and treating it as a threat. These allergens can be Dust mites that live in carpets, drapes, bedding and furniture, Pollen from trees, grass and weeds, Pet dander (tiny flakes of dead skin cells), Mold spores or Cockroaches (their saliva and waste), But Similar symptoms may also arise from exposure to physical or chemical irritants, such as pungent odors, fumes including strong perfumes, tobacco smoke as well as environmental factors like cold air and dry atmosphere.[4,5,6]

Allergic rhinitis exclusively manifests in individuals with a genetic predisposition to allergies. Despite continuous exposure to environmental allergens, only those with an inherent susceptibility to sensitization experience the development of symptoms.[7]

Allergens that are inhaled adheres to nasal mucosa, and diffuse into nasal tissues. Subsequently, antigen-presenting cells (APCs) break down the antigens into antigenic peptides and move to lymph nodes to present these peptides to CD4+ T lymphocytes (T cells).[8] Now, the activation of CD4+ T lymphocytes involves the interaction of specific T-cell receptors on the cell surface with allergen MHC(major histocompatibility complex) class II complexes present on the antigen-presenting cells (APCs).[8,9] Dendritic Cells (DCs) and signals derived from antigen presentation play a crucial role in guiding the differentiation of naïve T helper cells into T_{h1} or T_{h2}. T_{h2} lymphocytes, once activated, stimulate the production

of specific cytokines that trigger the synthesis of IgE antibodies by B-cells.[8,10,11] Additionally, these cytokines promote the proliferation of eosinophils, mast cells, and neutrophils. The generated antigen-specific IgE then binds to high-affinity IgE receptors located on mast cells or basophils.[12]

The nasal allergic reaction is characterized by **early** and **late** phases.

The **Early** phase reaction is categorized as a type-I Hypersensitivity reaction due to rapid response of mast cells towards the triggering allergens. In early phase, symptoms typically start almost immediately following exposure to the triggering allergen, reaching their peak within a few minutes, and gradually subsiding within one to several hours. Shortly after the exposure, the binding of IgE antibodies to allergens triggers mast cells to release inflammatory mediators like histamine, leukotrienes, prostaglandins, and cytokines. These molecules are accountable for symptoms such as *sneezing, itching, rhinorrhea*.[13,14]

Now, the **Late**-phase typically occur about 6 hours following exposure to allergens and gradually diminishes over time. It occurs due to an inflow of cytokines, including interleukins (IL)-4 and IL-13, originates from degranulation mast cells.[8] These cytokines trigger the activation of a variety of inflammatory cells such as T cells, basophils, neutrophils, monocytes and eosinophils into the nasal mucosa and thus causing breaking and restructuring of the normal nasal tissue leading to nasal oedema with nasal congestion.[15] During the late-phase reaction, there is a migration of eosinophils triggered by the release of cysteinyl leukotrienes that were initially released during the early-phase reaction. This mechanism is known as eosinophilic chemotaxis. Eosinophils are associated with advancement of allergic symptoms. Eosinophils release proinflammatory mediators, cationic proteins, eosinophil peroxidase, and more cysteinyl leukotrienes. These proinflammatory mediators destroys the nasal epithelium as well as nerve endings causing neurogenic inflammation and nonspecific-hyperresponsiveness.[16,17,18]

CLINICAL FEATURES OF ALLERGIC RHINITIS[19,20]

The symptoms of allergic rhinitis can vary in severity and may include.

1. Sneezing: Frequent bouts of sneezing, especially in response to exposure to allergens.
2. Nasal Congestion: Blockage or stuffiness in the nasal passages, leading to difficulty breathing through the nose.
3. Rhinorrhea: Excessive production of clear, watery nasal discharge.
4. Itching: Itching sensation in the nose, throat, eyes, or roof of the mouth.

6. Postnasal Drip: Dripping sensation at the back of the throat due to excess mucus production.
7. Watery Eyes: Redness, itching, and tearing of the eyes (allergic conjunctivitis).
9. Swollen Eyelids: Swelling or puffiness around the eyes due to allergic inflammation.
10. Fatigue: Feeling tired or lethargic, often due to poor sleep quality caused by nasal congestion and other symptoms.

These symptoms can significantly impact daily activities, sleep quality, and overall quality of life for individuals affected by allergic rhinitis.

PREVALENCE OF ALLERGIC RHINITIS

The prevalence of allergic rhinitis has seen a notable rise since the 1990s.[21,22] Allergic rhinitis (AR) is a prevalent condition impacting approximately 400 million individuals globally, posing a growing concern due to its escalating prevalence.[23] it is estimated to impact around 25% of children and up to 40% of adults. Interestingly, roughly 80% of allergic rhinitis symptoms manifest before the age of 20, reaching their peak between 20 and 40 years old before gradually diminishing.[24,25]

Allergic rhinitis (AR) can be categorized as either seasonal (intermittent) or perennial (chronic). Approximately 20% of cases are seasonal, 40% are perennial, and the remaining 40% exhibit features of both.[24]

DIAGNOSTIC CRITERIA[19,20]

The diagnosis of allergic rhinitis (AR) typically involves a combination of clinical history, physical examination, and sometimes allergy testing. Here are the diagnostic criteria commonly used for allergic rhinitis.

1. Clinical History: A detailed clinical history is crucial for diagnosing allergic rhinitis. Patients typically report recurrent or persistent symptoms such as sneezing, nasal congestion, rhinorrhea, and nasal itching, especially during specific seasons or after exposure to known allergens.
2. Physical Examination: A physical examination may reveal signs such as nasal congestion, pale or bluish discoloration of the nasal mucosa (pallor), nasal crease (line across the nose due to repeated rubbing), and allergic shiners (dark circles under the eyes).
3. Allergy Testing

- Skin Prick Test (SPT): Skin prick testing involves applying a small amount of allergen extract to the skin and then pricking or scratching the skin to allow the allergen to enter. A positive reaction, indicated by a wheal and flare response, suggests sensitization to that allergen.

- Allergen-specific IgE Testing: Blood tests, such as enzyme-linked immunosorbent assay (ELISA) or radioallergosorbent test (RAST), measure allergen-specific IgE antibodies in the blood. Elevated levels of allergen-specific IgE indicate sensitization to specific allergens.

4. Response to Allergy Treatment: Improvement in symptoms with appropriate allergy treatment, such as intranasal corticosteroids or antihistamines, can support the diagnosis of allergic rhinitis.

HOMOEOPATHIC TREATMENT[26,27]

some lesser-known medicine for allergic rhinitis are as follows:

- ***Ambrosia Artemisiaefolia***: Watery coryza; sneezing; watery discharge. Stuffed up feeling of nose and head. Irritation of trachea and bronchial tubes, with asthmatic attacks. Wheezy cough.
- ***Ailanthus***: Nostrils congested. Nose dry, secretion suppressed. Coryza, with rawness in nostrils, sneezing. Loss of smell. Thin copious bloody ichorous nasal discharge. Itching and uneasy feeling around the nose.
- ***Balsamum Peruvianum***: Profuse, thick discharge. Eczema, with ulceration. Chronic, fetid, nasal catarrh.
- ***Eucalyptus Globulus***: Stuffed-up sensation; thin, watery coryza; nose does not stop running; tightness across bridge. Chronic catarrhal, purulent and fetid discharge. Ethmoid and frontal sinus involved (sinusitis).
- ***Elaps Corallinus***: Chronic nasal catarrh, with fetid odor and greenish crusts. Ozćna; yellowish-green discharge. Mucous membrane wrinkled; nostrils plugged up with dry mucus. Pains from nose to ears on swallowing. Nostrils stopped up. Nasal bleeding. Pain at root of nose. Eruption around the nose.
- ***Justicia Adhatoda***: Lachrymation with coryza, profuse, fluent with constant sneezing; loss of smell and taste; coryza with cough.
- ***Naphthalinum***: Coryza, thin, excoriating discharge, much sneezing. Hay fever. Irritation of nose. Rubs his nose to remove the irritation. Attacks of sneezing.

- ***Quillaya Saponaria***: Produces and cures symptoms of acute catarrh, sneezing and sore throat. Most effective in the beginning of coryza, checking its further development. Colds with sore throat; heat and dryness of throat. Cough with difficult expectoration.
- ***Sinapis Nigra*:** Mucus from posterior nares feels cold. Scanty, acrid discharge. Stoppage of left nostril all day, or in afternoon and evening. Dry, hot, with lachrymation, sneezing; hacking cough; better lying down. Nostrils alternately stopped. Dryness of anterior nares.
- ***Trifolium Pratense***: Coryza like that which precedes hay-fever; thin mucus, with much irritation. Hoarse and choking; chills with cough at night. Cough on coming into the open air. Hay-fever. worse at night.
- ***Wyethia helenioides***: This remedy is derived from the Poison Ivy plant and is used for allergic rhinitis with intense itching and irritation in the throat and palate. There may be a sensation of a lump or a splinter in the throat.
- ***Galphimia glauca***: Galphimia is indicated for allergic rhinitis with intense itching and burning in the eyes, along with profuse nasal discharge and sneezing. Symptoms worsen in the evening and in warm weather.

DISCUSSION AND CONCLUSION

In homeopathy, medications are typically prescribed based on the comprehensive assessment of the patient's symptoms. However, there are instances where the symptoms of Allergic Rhinitis present uniquely with limited details, making it challenging to match with conventional remedies. In such cases, less commonly utilized medicines can play a crucial role in treatment. These medications are categorized as rare due to their infrequent use in routine clinical settings, yet they have been thoroughly tested and proven effective specifically for cases of allergic rhinitis.

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