



Role of Homoeopathic Medicine on Eosinophilic Count in Chronic Allergic Rhinitis.

Dr. Satish Ramesh Rao Chavan

PG Student, Foster Development Homoeopathic Medical College Aurangabad, India

ABSTRACT

Eosinophilia is a condition in which the eosinophil count in the peripheral blood exceeds $5 \times 10^8/L$ ($500/\mu L$). Hypereosinophilia is an elevation in an individual's circulating blood eosinophil count above $1.5 \times 10^9/L$ (i.e. $1,500/\mu L$). The hypereosinophilic syndrome is a sustained elevation in this count above $1.5 \times 10^9/L$ (i.e. $1,500/\mu L$) that is also associated with evidence of eosinophil-based tissue injury. Allergic rhinitis, of which the seasonal type is called hay fever, is a type of inflammation in the nose that occurs when the immune system overreacts to allergens in the air. Signs and symptoms include a runny or stuffy nose, sneezing, red, itchy, and watery eyes, and swelling around the eyes. The fluid from the nose is usually clear. Symptom onset is often within minutes following allergen exposure, and can affect sleep and the ability to work or study. Some people may develop symptoms only during specific times of the year, often as a result of pollen exposure. Many people with allergic rhinitis also have asthma, allergic conjunctivitis, or atopic dermatitis.

Keywords: Chronic Allergic rhinitis (CAR), Allergic rhinitis (AR), Seasonal Allergic rhinitis (SAR), Perineal Allergic rhinitis (PAR), Eosinophilia, Homoeopathic Medicine,

Objectives

TO HIGHLIGHT THE HOMOEOPATHIC APPROACH IN THE MANAGEMENT OF EOSINOPHILIC COUNT IN CHRONIC ALLERGIC RHINITIS.

Materials and Methods

The study will be conducted at our college. The subjects for the study will be selected from the college OPD'S, IPD department, and regular camp visits of college. Patients of age group from all age groups, as per World Health Organization, of various socio-economic status & both sexes will be considered for study. 30 Cases presenting complaints with chronic allergic rhinitis will be selected for study

Inclusion Criteria: 30 well-diagnosed chronic allergic rhinitis, confirmed on the basis of clinical features, along with investigation will be randomly selected. Patients of various occupations and different socio-economic status will be included. The sample on both sexes of all age groups. Diagnostic criteria are mainly on clinical presentations & investigations.

Exclusion Criteria: Cases of both sexes above 70 years. Cases of gross pathology Patient having gastritis complications. Examples- Peptic ulcer, Stomach bleeding and Stomach cancer. Cases with other systemic disorders and complications. Patient with other Auto-immune and immune-compromised diseases will also be excluded.

Withdrawal Criteria: If a Patient is landed in life threatening condition. If Patient start immunosuppressive therapy. Cases which are on steroids more than 1 years. Patient is not maintaining proper follow up and any Obstacle in recovery which appear after commencement of study during process of treatment.

Introduction

Allergic rhinitis (AR) is one of the most prevalent medical conditions, a major chronic respiratory disease by its virtue. It has significant effects on quality of life and can have considerable socioeconomic effects on children and youngsters with respect to school performance and work. With Allergic rhinitis, quality of life can be considerably reduced, leading to impaired performance of daily activities, cognitive function and classroom productivity, and reduced psychosocial wellbeing. The basic pathophysiologic process includes contact of susceptible individual with the causative allergen, antigen-antibody reaction and development of hypersensitive or hyper reactive state. The routine modern treatment includes identification of offending allergen and its avoidance. But many a times this identification is not possible and here the homoeopathic medicines work better to treat hyper responsive state. But always the therapeutic applications don't work so the reportorial application is needed.

Allergic rhinitis is very common disease, estimated to effect up to 25% of adults and up to 40 % children in developed countries. As the disease progresses one gradually lands up in distressing condition like sinusitis or asthma. 40 % of patients suffering from Allergic rhinitis suffer from Asthma. So it becomes a prime concern to halt the disease at the primary level.

Allergic rhinitis is a collection of symptoms, mostly in the nose and eyes, which occur when you breath in something you are allergic to, such as dust, dander, or pollen.

In another word this is an allergic inflammation of the nasal airways. It occurs when an allergen such as pollen or dust is inhaled by an individual with a sensitized immune system, and triggers antibody production. The specific antibody is immunoglobulin E (IgE) which binds to mast cells and basophils containing histamine. IgE bound to mast cells are stimulated by pollen and dust, causing the release of inflammatory mediators such as histamine (and other chemicals). This causes itching, swelling, and mucus production. Symptoms vary in severity between individuals.

Conventional treatment doesn't have a definite intervention in these cases & can only palliate the disease. Signs & symptoms are controlled till the patient is on treatment. The patient cannot take drugs lifelong & hence intervention by homeopathy leading to cure of disease to its full extent becomes necessary.

Although this is the most common clinical condition seen in homeopathic practice, there is no literature available, though it is a common condition, it is very difficult to cure.

Totality of symptoms is the unique feature of homeopathy and it constitutes the true and conceivable portrait of the disease, which helps in individualizing the patient as well.

Individualization is also the integral part of Homeopathic treatment. Some unique features, which characterize the individual, are taken into account, along with the disease features in the same individual. Individuals do not react identically to an antigen or allergen. Different people exhibit sensitivity to identical irritant in different ways like urticaria, hay fever and asthma etc.

The allopathic drugs, which are generally used to combat this allergic rhinitis are not only costly but at the same time produces some adverse effect in the patient. In cases of paediatric age group, it is a very important question. Sometimes the steroids are used to give a quick relief, which is not only injurious to health, but at the same time it leaves a permanent mark on the immunity of the kids. They suffer from immuno-modulation, which render their living hood permanently full of threats.

Conventional treatment doesn't have a definite intervention in these cases & can only palliate the disease. Signs & symptoms are controlled till the patient is on treatment. The patient cannot take drugs lifelong & hence intervention by homeopathy leading to cure of disease to its full extent becomes necessary. Although this is the most common clinical condition seen in homeopathic practice, there is no literature available, as to how to approach the case of allergic rhinitis. I also saw many patients of Allergic rhinitis ultimately landing into distressing Sinusitis or Bronchial Asthma. There is also this experience that although it is a common condition, it is very difficult to cure. This encouraged me to study topic in details

Etiology

Two prerequisites for the expression of AR are sensitivity to an allergen And its presence in the environment. AR is currently classified as Seasonal or perennial, terms that may soon be replaced by intermittent And persistent. Inhalant allergens are the main cause of AR irrespective Of classification. Seasonal (intermittent) AR (SAR) follows a well-defined Course of cyclical exacerbation, while perennial (persistent) AR (PAR) Causes year-round symptoms. Approximately 20% of cases are strictly Seasonal, 40% perennial, and 40% mixed (perennial with seasonal Exacerbations). In temperate climates, the airborne pollens responsible For SAR appear in distinct phases: trees pollinate in the spring, grasses In the early summer, and weeds in the late summer. Mold spores in temperate climates persist outdoors only in the summer, And in warm climates throughout the year. Symptoms of seasonal Allergies cease with the appearance of frost. Knowledge of the Occurrence of seasonal symptoms, regional patterns of pollination and Mold sporulation, and the patient's specific IgE is necessary to identify The cause of SAR. In contrast, PAR is most often associated with the Indoor allergens: animal danders, house dust mites, and molds. Cat and Dog allergies are of major importance in the United States. The allergens from the saliva and sebaceous secretions may remain airborne for prolonged periods. The ubiquitous major cat allergen, Fel d 1, is carried regularly on the owners' clothing into such "cat-free" settings as schools and hospitals.

Pathogenesis

Sensitization to allergens

Antigen presenting cells such as dendritits cells in the mucosal surface Process allergens and present some peptides from allergens on the Major Histocomatibility complex class II molecule. This MHC class II Molecule and antigen complex take a role as the ligand of T-cell and Antigen complex take a role as the ligand of T-cell receptors on Navin CD4+ T cell Activated Th2 cells to produce specific IgE and proliferation Of eosinophils mast cells and neutrophils produced antigen receptors on Specific IgE binds to high affinity IgE receptors on mast cells or Basophils.

Early and late reactions

Allergic rhinitis patient are exposed to allergens allergic reaction Develop in 2 different patterns according to time sequence. One is the Early reaction, in which sneezing and rhinorrhea develops in 30 min and Disappears. The other is the late reaction, which shows nasal Obstruction approximately 6 hrs

after exposure to allergens and Subsides slowly. The early reaction is the response of mast cells to Offending allergens .Stimulated mast cells induce nasal symptoms by Secreting chemical mediators such as histamine ,prostaglandins and Leucktrenes .In contrast to early reaction eosinophil chemotaxis is the Main mechanism in the late reaction which is caused by chemical Mediators produced in the early reaction several inflammatory cells,Eosinophils ,mast cells and T cells migrate to nasal mucosa, break up And remodel normal nasal tissue and these processes result in nasal Obstruction which is the main symptom of allergic rhinitis patients.

Neurogenic inflammation

When respiratory epithelium is destroyed and nerve endings are Exposed by cytotoxic protein from eosinophils , sensory nerve fibers are Excited by nonspecific stimuli and stimulate both sensory afferent and Surrounding efferent fibers, so called retrograde axonal reflex. This Makes the sensory nerve fibers secrete neuropeptides such as Substance P and neurokinin A, which induce contraction of smooth muscles, mucous secretion of goblet cells and plasma exudation from capillariens. This process is called neurogenic inflammation. Non-Specific hyperresponsiveness Non-specific hyperresponsiveness is one of the clinical characteristics of allergic inflammation. Due to eosinophilic infiltration and destruction of nasal mucosa, the mucosa becomes hyperactive to normal stimuli and causes nasal symptoms such as sneezing, rhinorrhea, nasal itching and obstruction. This is a non-immune reaction that is not related to IgE. Hypersensitivity to non-specific stimuli such as tobacco, cold and dry air as well as specific allergens increases in allergic rhinitis patients.

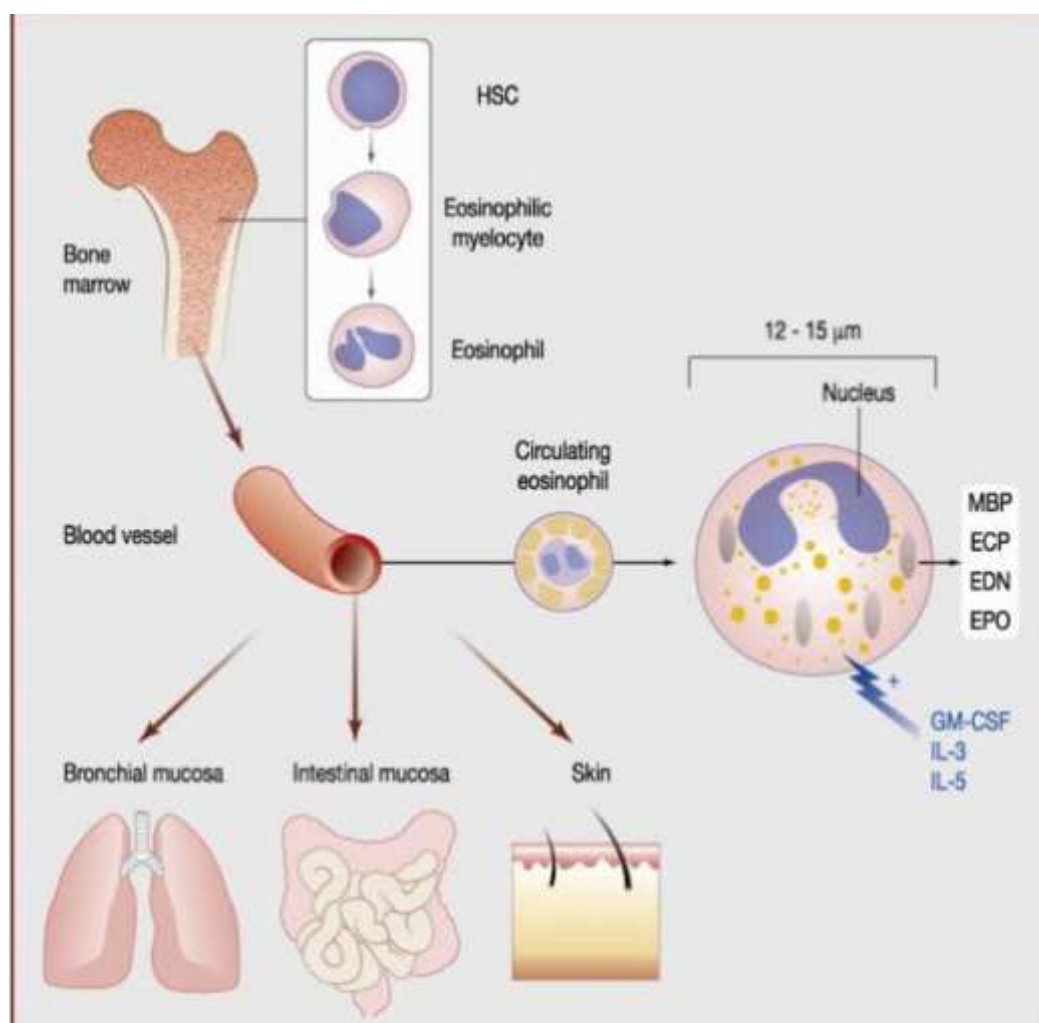


Fig. Pathophysiology of Eosinophilia

Diagnosis

Allergic diseases arise from the acute or chronic exposure Of a sensitized individual to a specific allergen by inhalation, ingestion, Contact, or injection. Symptoms most often involve the nose, eyes, Lungs, skin, or gastrointestinal tract either individually or in combination. A carefully obtained history, including environmental exposures, and the Appropriate laboratory tests or allergen challenges are critical for an Accurate diagnosis.Eosinophils play a critical role in the pathogenesis of allergic airway Inflammation. However, the relative importance of eosinophil activation And pathogenicity in driving the progression of disease severity of Allergic rhinitis (AR) remains to be defined. We aimed to assess the Relation of activated and pathogenic eosinophils with disease severity of Patients with AR. Peripheral blood and nasal samples were collected From patients with mild and moderate-severe house dust

mite AR And healthy control subjects recruited prospectively. Expressions of Activation and pathogenic markers on eosinophils in the blood and nose Were analyzed by flow cytometry. The eosinophilic cation protein- (ECP-) releasing potential and the pro-Th2 function of blood eosinophils were Compared between the mild and moderate-severe patients and healthy Controls. Our results showed that the numbers of activated (CD44+ and CD69+) and pathogenic (CD101+CD274+) eosinophils in the blood and nose as well as blood eosinophil progenitors were increased in moderate-severe AR compared with the mild patients and healthy controls. In addition, the levels of activated and pathogenic eosinophils in the blood were positively correlated with the total nasal symptom score and serum ECP and eosinophil peroxidase (EPX) levels in patients with AR. Furthermore, the blood eosinophils obtained from the moderate-severe patients exhibited a higher potential of releasing ECP and EPX induced by CCL11 and of promoting Th2 responses than those from the mild patients and healthy controls. In conclusion, patients with moderate-severe AR are characterized by elevated levels of activated and pathogenic eosinophils, which are associated with higher production of ECP, EPX, and IL-4 in the peripheral blood.

Selecting Homeopathic Medicine

In homeopathy, selection of medicine is based on certain principles. Few of the basic principles are summarized as under: Consider the whole body as one unit Modern medical system considers And treats the human body in parts not as a whole and has a specialist For every organ whereas the fact is that human body always works as One integrated unit while performing any function. Since none of the vital Organs functions independently, an individual must be considered as a Whole for correct treatment. That is in fact the philosophy and Methodology of homeopathy, which is more logical and realistic.

Therapeutic Medicine for Allergic Rhinitis

Arsenic album:-

Always takes cold in the nose and sneezes from every change in the Weather. Thin watery discharge from the nose, excoriating the upper lip, While the nose is stuffed up all the time: violent spasmodic sneezing Itching, burning and watering of the eyes: chilly with burning relieved by Heat. Restless, anxious, Thirsty.

Sulphur:-

Very good medicine for allergic rhinitis after failure of Ant. Tart., Ipecac.Or Phosphorus Cough > evening when lying down, with itching in the Bronchi, with retching and not > by expectoration of greenish lumps of Sweetish taste or flat and salty; hot flushes; cold feet or hot palms and Soles of feet. Sulphur corresponds well to inveterate cases of Allergic Rhinitis, and brilliant results are here obtained. Its catarrh of the bronchial Mucous membranes is accompanied with loud rales, a persistent, Profuse, thick, muco-purulent expectoration and attended by suffocative Attacks.

Pulsatilla:-

Catarrh, loss of smell, Coryza is better going out in the open. Abundant Yellow mucus in the morning, pressing pain at the root of the nose. Easy And copious expectoration of thick, yellow sputa. At night and in bed Discharge dry, violent, spasmodic so that he has to sit up, with Vomiturition and vomiting; tongue heavily coated; breath offensive; Countenance pale, alternating with redness; fluent coryza, with loss of Smell and taste; tickling in suprasternal fossa; > in cold air, < in warm Room

Silicea:

Frothy nasal discharges nose bleed perforation of the septum, Dry hard Crust from bleeding when loosened. Sneezing in the morning itching at The tip of the nose. Obstinate cold with ear affection loss of smell.

Nux Vomica:-

Gets the Nose stuffed after exposed to dry cold atmosphere worse in Warm room. The coryza is fluent during the daytime but nose is stuffed Up at night and outdoors or it alternates between nostrils although there Is discharge, nose feels stuffed up.

Results

After prescription of the homoeopathic medicine according to the totality of the symptoms and by individualization of the patient with the help of reporterization the Eosinophil count decreased with homoeopathic intervention and patient get cured from allergic rhinitis.

Conclusion

The routine modern treatment includes identification of offending allergen and its avoidance. But many a times this identification is not possible. the homoeopathic medicines work better to treat hyper responsive state. With the help of Totality of symptoms, which helps in individualizing the patient as well Individualization. Some unique features, which characterize the individual, are taken into account, along with the disease features in the same

individual. Individuals do not react identically to an antigen or allergen. Different people exhibit sensitivity to identical irritant in different ways like urticaria, hay fever and asthma etc.

But with the help of individualization and totality of the symptoms and according to the reporterization with homoeopathic intervention symptoms of allergic rhinitis cured.

References

1. Davidson's Principle & Practice of medicine-21th- Edition.
2. Harrisons Principle of internal medicine-1st. Volume, 15th edition.
3. A.P.I. Text book of medicine, 15th edition.
4. Practical medicine, P.J. Mehta, 16th edition.
5. Hutchinson's clinical methods.19th. edition.
6. A Text Book of Pathology By Harsh Mohan 4th Edition
7. Community medicine, Park & Park 20th. Edition.
8. Lecture on homoeopathic philosophy by Dr. J.T. Kent.
9. Genius of homoeopathy by Dr.Close stuart.
10. Organon of medicine by Dr. B.K. Sarkar.
11. Chronic disease their peculiar nature & their homoeopathic cure- Dr. Hahnemann.
12. Genius of homoeopathy lecture & essays on homoeopathic philosophy by Dr. Close, stuart.
13. Key note of characteristic of materia medica with nosods-H.C.Allen.
14. Boerickes materia medica & clinical repertory.
15. Biostatics and Research Methodology.1st ed, New central book agency (p) Ltd. 2013 Page no.21, 28,138,146. Ganbawale Rahul
16. Homoeopath & Radar 10 Computerized repertory.
17. www.google.com