

## **HOMEOPATHIC MANAGEMENT IN CASES OF BRONCHIAL ASTHMA**

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### **Abstract-**

Bronchial asthma is a chronic inflammatory disorder of the airways characterized by recurrent episodes of wheezing, breathlessness and coughing, often linked to airway hyperresponsiveness and variable airflow obstruction. This article reviews asthma's epidemiology, risk factors, clinical features, diagnostic methods, and classification based on severity. It highlights key management strategies including pharmacological treatment, trigger avoidance, and patient self-care, aligned with GINA guidelines. The role of Homoeopathy in individualized and miasmatic management is also discussed, offering a holistic approach to care.

### **Keywords –**

Bronchial Asthma, Airway Inflammation, GINA, Risk Factors, Asthma Management, Homoeopathy, Miasm.

### **Introduction-**

According to the Global Initiative for Asthma (GINA), asthma is a chronic inflammatory condition of the airways that involves multiple biological components. Airway hyperresponsiveness brought on by this persistent inflammation causes recurrent episodes of coughing, chest tightness, wheezing, and dyspnoea, particularly at night or in the early morning. Variable airflow blockage across the lung is usually associated with these episodes, and this obstruction can frequently be resolved either naturally or with therapy<sup>3</sup>.

### **Epidemiology –**

As per the latest Global Burden of Disease (GBD) report spanning from 1990 to 2019, the total incidence of asthma in India was approximated at 34.3 million cases, representing 13.09% of the worldwide burden. The report further revealed that asthma resulted in 13.2 fatalities per thousand individuals in India. Asthma was responsible for 27.9% of disability-adjusted life years (DALYs) within the Indian demographic. In summary, India demonstrated a mortality rate three times higher and more than double the DALYs in comparison to the global asthma burden proportion<sup>2</sup>. Asthma is widely acknowledged as one of the most common chronic ailments on a global scale, impacting an estimated 300 million people around the world. In developing nations, where the prevalence of asthma has historically been lower, a significant rise has been observed, correlated with increased urbanization<sup>4</sup>.

**Risk Factors and Precipitating (Trigger) Factors of Bronchial Asthma-**

Category	Risk/Trigger Factors
a. Endogenous Risk Factors <sup>4</sup>	Genetic predisposition, Atopy (genetic tendency for allergic diseases), Airway hyperresponsiveness, Gender, Ethnicity, Obesity, Early viral infections
b. Exogenous (Environmental) Risk Factors <sup>4</sup>	Indoor allergens, Outdoor allergens, Occupational sensitizers, Passive smoking, Respiratory infections, Dietary factors, Certain medications
c. Allergic Trigger Factors <sup>3</sup>	Indoor and outdoor moulds, Insects, Pollen, Animal dander, Food preservatives or colouring agents
d. Non-allergic Trigger Factors <sup>3</sup>	Irritants (e.g. deodorisers, paint, cleaning sprays), Chemicals, Air pollution, Recurrent viral infections, Exercise-induced hyperventilation, Gastroesophageal reflux, Cold air or changing weather, Psychological stress

An unhealthy lifestyle characterized by smoking habits, low levels of physical activity, excessive alcohol consumption, adherence to poor dietary patterns, sedentary behaviour, and reduced sleep duration is linked to an increased risk of asthma in adults. This risk is especially pronounced among socioeconomically disadvantaged populations, who are particularly susceptible to the adverse effects of such disrupted lifestyles <sup>5</sup>.

**Pathophysiology-**

Asthma is characterized by the constriction of airways resulting from inflammation of the mucosal lining and the contraction of bronchial smooth muscle. This inflammatory response produces thick secretions, which subsequently obstruct airflow. A significant physiological characteristic is bronchial hyperresponsiveness, which can be present even in the absence of symptoms. This condition can be triggered and exacerbates inflammation, representing an exaggerated response to various stimuli. The increase in airway resistance and secretions leads to hyperinflation, trapping air and heightening the effort required for respiration. Consequently, this may result in an imbalance in ventilation-perfusion and alterations in elastic recoil<sup>3</sup>.

**Pathogenesis-**

Asthma develops through a complex interaction between environmental influences and immune responses involving both airway epithelial cells and immune cells circulating in the body. In cases of allergic asthma, the immune system becomes sensitized to inhaled allergens. These allergens are captured by antigen-presenting cells like macrophages and dendritic cells, which then present them to T-lymphocytes. Under the influence of cytokines such as interleukin-4 (IL-4), these T-cells differentiate into T-helper type 2 (T<sub>H</sub>2) cells. A shift in immune response favoring T<sub>H</sub>2 over T-helper type 1 (T<sub>H</sub>1) cells is commonly associated with the development of allergic asthma. Conversely, in non-allergic asthma, allergen sensitivity

may not be a primary factor. Instead, individuals often react to a range of environmental or physiological stimuli, with various triggers capable of provoking exacerbations at different times <sup>3</sup>.

**Clinical Features of Bronchial Asthma <sup>4</sup>-**

Category	Feature
A. Common Symptoms	- Wheezing, shortness of breath, and persistent coughing
	- Symptoms tend to be more severe at night or early morning
	- Difficulty in achieving full lung expansion
	- Production of thick, sticky mucus that is difficult to expel
	- Increased respiratory rate with noticeable use of accessory muscles
B. Prodromal Symptoms	- Itching sensation beneath the chin
	- Discomfort or tightness between the shoulder blades
	- Sudden, unexplained anxiety or feeling of impending danger
C. Physical Signs	- Wheezing or rhonchi heard throughout the chest on auscultation
	- Signs of lung overexpansion (hyperinflation)
	- In children, a dry and non-productive cough may be the primary symptom

Bronchial asthma is frequently misidentified as a common cold or a lingering respiratory infection, especially when symptoms persist for more than 10 days. Individuals with mild intermittent asthma usually remain symptom-free between episodes. However, those with persistent asthma may experience continuous but fluctuating symptoms such as wheezing and shortness of breath, which can vary throughout the day or over longer periods. When asthma is not well controlled, it often leads to sleep disturbances due to nighttime coughing and wheezing. In some patients, chronic coughing may be the most prominent sign, which can delay diagnosis—this presentation is commonly referred to as *cough-variant asthma* <sup>1</sup>.

**Clinical Classification of Bronchial Asthma based on severity <sup>3</sup>-**

Classification	Daytime Symptoms	Night time Symptoms	Forced Expiratory Volume in 1 second (FEV <sub>1</sub> )	Peak Expiratory Flow (PEF) Variability
Mild Intermittent	Occur less than or up to 2 times per week	Less than or equal to 2 times per month	≥ 80% of predicted	< 20%
Mild Persistent	Occur 3–6 times per week	3–4 times per month	≥ 80% of predicted	20–30%
Moderate Persistent	Daily occurrence	At least once per week	> 60% to < 80% of predicted	> 30%
Severe Persistent	Continuous symptoms; activity is limited	Frequent	≤ 60% of predicted	> 30%

### Investigations <sup>4</sup>-

1. Lung Function Tests
2. Haematological Laboratory Tests
3. Chest Radiography
4. Skin Prick Allergen Tests
5. Provocation Tests.

### Diagnosis-

Asthma is primarily diagnosed through clinical evaluation, which includes a patient history, lung function testing, and other pertinent measures. This comprehensive approach aids in determining the presence of asthma, classifying it as high, middle, or low probability. The diagnosis approach may change for each patient and may need to be reassessed after commencing treatment <sup>1</sup>. A family history of allergic disorders such as eczema, urticaria, and rhinitis can help in the diagnosis of asthma. It is important to highlight, however, that not all occurrences of wheezing suggest asthma, despite the fact that a considerable proportion of wheezing cases are associated with asthma <sup>3</sup>.

### Differential Diagnosis <sup>4</sup>-

1. COPD.
2. Bronchiectasis.
3. Pulmonary Tuberculosis.
4. Upper airway obstruction by tumour or laryngeal oedema mimics severe type of asthma.
5. Endobronchial obstruction by foreign body.
6. Left ventricular failure.
7. Vocal cord dysfunction.

8. Eosinophilic pneumonias.
9. Bronchiolitis <sup>3</sup>.
10. Pulmonary Embolism <sup>3</sup>.
11. Bronchitis <sup>3</sup>.

## **Management of Bronchial Asthma-**

Management of bronchial asthma follows a goal-directed approach, aiming to control symptoms, enhance quality of life, and prevent complications.

### **A. Treatment Goals <sup>3</sup>:**

1. Prevent both bothersome and long-term asthma symptoms. Preserve normal lung function.
2. Enable patients to carry out daily physical activities without limitation.
3. Minimize the risk of acute flare-ups and reduce the need for hospitalizations.
4. Fulfill the expectations and concerns of both patients and their families regarding disease control.

### **B. Patient Self-Management:**

Effective asthma care involves encouraging patients to take an active role in managing their condition. Education plays a vital role in this process. Patients must understand the relationship between their symptoms and underlying airway inflammation. They should be trained to recognize warning signs—such as waking up at night due to breathing difficulty—and to know when to initiate or adjust treatment <sup>2</sup>.

### **C. Trigger Avoidance:**

Avoidance of known triggers is essential, especially for individuals with occupational asthma or atopic tendencies. Reducing exposure to indoor allergens, such as house dust mites, by using allergen-proof bedding and avoiding carpets, can help, though benefits vary. Smoking cessation is crucial, as tobacco smoke not only enhances allergic sensitization but also contributes to resistance against corticosteroid treatment <sup>1</sup>. Identifying and avoiding specific triggers—such as allergens, pollutants, and respiratory irritants—can significantly lower the frequency of asthma attacks and improve the quality of life in individuals with severe or hard-to-control asthma <sup>8</sup>.

Management of persistent asthma involves a combination of strategies aimed at both symptom control and long-term disease modification. Key steps include avoiding known environmental triggers, using short-acting beta-agonists for immediate symptom relief, and administering inhaled corticosteroids on a regular basis to control airway inflammation <sup>6</sup>. For individuals with moderate to severe asthma, additional medications such as long-acting bronchodilators and biologic therapies may be required to maintain optimal control <sup>6</sup>.

The **2016 Global Initiative for Asthma (GINA)** guidelines brought forth significant updates. These included a clearer definition of asthma, highlighting its variable clinical presentation and fluctuating expiratory airflow limitation. A strong emphasis was placed on accurate diagnosis to avoid both underdiagnosis and overtreatment. The report also introduced practical tools to assess symptom control and evaluate individual risk factors, thereby facilitating tailored asthma management. It recognized the central role of inhaled corticosteroids while also acknowledging the need to address common problems like improper inhaler use. Moreover, GINA outlined a continuous care model that spans from early intervention and self-management to more intensive primary or emergency care. Special attention was given to the differentiation and appropriate treatment of patients with overlapping features of asthma and chronic obstructive pulmonary disease (COPD) <sup>7</sup>.

### **Homoeopathic Management of Bronchial Asthma-**

Homeopathy plays a pivotal role in the management of asthma, effectively addressing both acute episodes and the chronic, symptom-free intervals while keeping a vigilant eye on the recurrence of episodes in terms of their frequency, duration, and intensity. Prolonged use of homeopathic remedies has shown remarkable success in diminishing dependence on inhalers and bronchodilators. Treatment strategies involve the careful selection of remedies based on keynote symptoms, the acute totality observed during attacks, constitutional prescribing, and, crucially, taking into account the manifestations displayed by patients during asthma episodes <sup>9</sup>. It is of utmost importance for a homoeopath to comprehend the underlying trigger factors, the exciting cause, along with the fundamental cause, as this knowledge aids in identifying the underlying chronic miasm; the psoric type of presentation is typically an acquired form of Bronchial Asthma, while asthma arising from genetic factors is classified under sycotic miasm <sup>10</sup>. The hypersensitivity of the tracheobronchial tree to allergens indicates psora as the root cause <sup>11</sup>. A pronounced family history of Bronchial Asthma points towards sycosis as the underlying miasm <sup>11</sup>. Furthermore, a family history of a syphilitic miasmatic state, characterized by latent symptoms of syphilitic miasm, coupled with the emergence of sycosis in the patient, suggests the presence of syco-syphilis miasm <sup>11</sup>. Numerous rubrics and remedies are catalogued under RESPIRATION-ASTHMATIC in the Repertory of Homoeopathic Materia Medica by Dr. J.T. Kent, which assists a homoeopath in grasping the comprehensive picture of the disease and in selecting the appropriate homoeopathic simillimum for the case <sup>12</sup>.

### **Conclusion-**

Bronchial asthma is a complex, chronic inflammatory disorder of the airways with substantial global health impact, particularly in rapidly urbanizing regions. Effective management necessitates a comprehensive understanding of its epidemiology, pathophysiology, risk factors, and clinical presentation. Adherence to evidence-based guidelines, such as those provided by GINA, enables targeted pharmacological treatment, trigger avoidance, and patient-centered self-management to achieve optimal control and reduce morbidity. Additionally, homeopathy offers a valuable complementary approach by addressing individual symptomatology and underlying chronic miasmatic influences, potentially decreasing reliance on conventional therapies. Future research should focus on integrative strategies combining conventional and homeopathic modalities to enhance patient outcomes and quality of life in asthma care.

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