

## A REVIEW ON ASTHMA: CAUSES & TREATMENTS

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### ABSTRACT

Asthma is a disease that is related to lung. Under asthma condition, people show wheezing breathlessness, tiredness. it caused due to bronchial contraction. some internal and external factor affect asthma. it is non transmissible disease. Many risks factor like smoking, pollutant, depression, allergy affect the asthma disorder. allopathic and ayurvedic drug are used for treatment for asthma it is also called bronchial asthma. medicine based on inhaled and breathing. most common factor is tobacco by reducing the tobacco asthma can be controlled. Lifestyle is great factor to control asthma.

**KEYWORDS:** Asthma, Serious non communicable disease (NCD), Chronic disease.

### INTRODUCTION

Asthma is a most common disease; it can be increasing day by day. It affects our lungs. It causes again and again episode of wheezing, breathlessness, chest tightness and night-time or early morning coughing disease. It can be controlled by some medicine those are avoiding asthma. It must also remove the trigger in your all around that can make asthma worse. The CDC's National Asthma Control Program is dedicated to helping Americans with asthma improve their health and quality of life. The program funds government, school programs, and nongovernmental organizations to help improve asthma monitoring, educate healthcare professionals, educate asthmatics and their families, and educate the public about asthma. Asthma is a serious non communicable disease (NCD) that affects both children and adults.<sup>[1]</sup>

- Inflammation and narrowing of the small airways in the lungs cause asthma symptoms, which may include a combination of coughing, wheezing, shortness of breath and chest tightness.
- Approximately 262 million people were affected by asthma in 2019 and 461 000 people died.
- Asthma is the most common chronic disease in children.
- Inhaled medicines can help control asthma symptoms and help people with asthma lead normal, active lives.
- Avoiding asthma triggers can also help reduce asthma symptoms.
- Most asthma-related deaths occur in low- and middle-income countries where inadequate diagnosis and treatment is difficult.

- WHO is committed to improving the diagnosis, treatment and monitoring of asthma, thereby reducing the global burden of NCDs and making progress towards universal health coverage.<sup>[2,3]</sup>

### Causes or Common threat factors

Common threat factors responsible for both development and deterioration of the lungs. Conditions and psoriasis include smoking, rotundity and low physical exertion, adulterants. Infection, exposure to allergens, malnutrition, metabolic pattern, connective towel. Diseases, depression, and use of certain medicines.

1. **Smoking:** Smoking studies have shown that patients with psoriasis are more active and passive smokers than the general population.<sup>[4]</sup> Smoking has been shown to be significantly correlated with the frequency and severity of psoriatic lesions.<sup>[5]</sup> At the same time, smoking is considered the most important cause of chronic obstructive pulmonary disease.<sup>[6]</sup> Other lung diseases associated with smoking include asthma and idiopathic pulmonary fibrosis.<sup>[7,8]</sup> Therefore, smoking may be a factor explaining the increased prevalence of lung disease in patients with psoriasis.
2. **Obesity:** Obesity and physical inactivity Obesity and physical inactivity have been identified as risk factors for the onset and severity of psoriasis, and a higher prevalence of obesity has been demonstrated in patients with psoriasis.<sup>[9,10]</sup> Obesity is a major risk factor for respiratory diseases such as asthma, pulmonary hypertension and sleep apnea.<sup>[11,12]</sup> It has also been associated with chronic obstructive pulmonary disease.<sup>[13]</sup> Thus, obesity may explain the higher prevalence of lung disease in psoriasis.

- 3. Pollutant:** Cadmium, an element found in batteries and dental fillings used in the television and aviation industries, has been proposed as an air pollutant associated with the development of psoriasis. Patients with psoriasis had higher blood levels of cadmium.<sup>[14]</sup> At the same time, high levels of cadmium in the blood are associated with chronic obstructive pulmonary disease in men, including those who never smoke. Thus, cadmium (and other air pollutants) can equally affect the development of psoriasis and lung disease in the same person.
- 4. Infection:** Infections can play an important role in the development of psoriasis and lung disease. The altered lower respiratory tract microbiome, which may increase the risk of psoriasis, interacts with the mucosal innate immune system and is associated with the development of asthma.<sup>[15,16]</sup> In addition, human immunodeficiency virus (HIV) is known to be a risk factor associated with psoriasis and lung diseases such as asthma, chronic obstructive pulmonary disease, and pulmonary arterial hypertension.<sup>[17,18,19]</sup> HIV infection can contribute to the development or worsening of psoriasis and lung disease.
- 5. Allergy:** Allergens in psoriasis have been shown to be slightly hypersensitive to certain inhaled food and contact allergens such as birch, mug wort, thyme and rye pollen, house dust mites and molds.<sup>[20]</sup> The intensity of the hypersensitivity reaction correlated with PASI.<sup>[21]</sup> Allergy sensitivity also plays an important role in the onset, severity, and treatment of asthma. Recent studies have shown that allergy to house dust mites, animal dander, cockroaches, or mold are risk factors for asthma.<sup>[22]</sup>
- 6. Depression:** Depressive psoriasis is a chronic inflammatory skin disease that limits work and social opportunities and affects family life, leisure time, and sexuality. These restrictions may be a source of stress, which is known to cause psoriasis.<sup>[23]</sup> On the other hand, depression is a common and chronic comorbidity in patients with interstitial lung disease.<sup>[24]</sup>

## Treatments

**Table 1: Treatment based on ayurvedic drug.**

Name of the herbal drug.	Mechanism
Clerodendrum stratum Spreng. family (Lamiaceae)	H1 receptor <sup>[25]</sup> H2 receptor <sup>[26]</sup>
Curcuma longa L. family (Zingiberaceae)	H1 receptor <sup>[27]</sup>
Stramonium datura Noronha. family (Solanaceae)	Parasympatholytic <sup>[28]</sup>

**Table 2: Treatment based on allopathic.**

Drugs	Mechanism
Salbutamol <sup>[29]</sup>	Adrenergic agonist beta 2 receptor
Ipratropium <sup>[30,31]</sup>	Parasympatholytic

## CONCLUSION

It has been concluded that asthma is a most ordinary infection; it watches out for increase bit by bit. It impacts our lungs. It causes again and again episode of wheezing, windedness, chest coziness and evening or early daytime hacking contamination. It will in general be obliged by some medicine those are avoiding asthma. It ought to moreover take out the trigger in your all around that can intensify asthma. The CDC's National Asthma Control Program is focused on helping Americans with asthma work on their prosperity and individual fulfillment. Many drug are screened in market for treatment for asthma and more are to be explored for further tackle the nemesis of asthma disease.

**Conflict of Interest;** The authors declare that the review was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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