

Efficacy Of Traditional Indian Herbal Plants In Asthma Prevention : A Mini Review

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Abstract

Asthma is a condition in which a person's airways become inflamed, constrict, and bulge, as well as create excessive mucus that makes breathing difficult. It is also called as bronchial asthma which can be mild or severe, causing difficulty with regular tasks. In Asthma, person can feel breathing problems, coughing, chest pain and wheezing which may flare up from time to time. It has been seen that 4.4 % pre schoolers and 6.4% of elementary school children are suffering from Asthma as per data given by Global Initiative for Asthma (GINA). It has been seen that Majorly girls are more prevalent for asthma. Asthma is commonly treated with rescue inhalers (salbutamol) to relieve symptoms and controller inhalers to prevent symptoms (steroids). In severe cases, longer-acting inhalers (formoterol, salmeterol, tiotropium) and inhalant steroids (formoterol, salmeterol, tiotropium) may be required. As Asthma cannot be cured but it can be managed by proper care and diet through herbs. Traditional herbal plants like ginkgo biloba (maidenhair tree), Night jasmine (Haarsringar), basil leaf (tulasi), Bay leaf (Tejpatta), and ginger (adrak) have a variety of health benefits. These plants have antibacterial, anti-oxidant, and anti-inflammatory properties, as well as the ability to relieve colds and coughs. Herbs are commonly used in ayurvedic medicine and home-based asthma prevention. Several studies have suggested that traditional herbal plants could be used in food and as asthma treatments. The purpose of this review is to concentrate on the use of traditional herbal plants in asthma prevention.

Keywords Bronchitis, Asthma, Herbs, Cough, Prevention

Introduction

Asthma is a chronic respiratory condition marked by inflammation and narrowing of the airways. Asthma is a disorder characterised by acute, entirely reversible airway inflammation that often occurs as a result of exposure to a stimulus. The pathological process starts with the inhalation of an irritant (e.g., cold air) or allergen (e.g., pollen), which causes airway irritation and increased mucus output due to

bronchial hypersensitivity. It can be Diagnosed with spirometry, exhaled nitric oxide test (Fenotest) and Allergic testing.

Prevalence of Asthma

According to the Indian Study on Epidemiology of Asthma, Respiratory Symptoms, and Chronic Bronchitis (INSEARCH), which included 85,105 men and 84,470 women from 12 urban and 11 rural sites across India, the prevalence of asthma in India is 2.05 percent among those aged >15 years, with a national burden of 18 million asthmatics.(1)According to the Global Initiative for Asthma (GINA) concept, asthma was found in 4.4 percent of preschoolers and 6.4 percent of elementary school children.

Asthma is a common disease that affects approximately 15% to 20% of people in developed countries and 2% to 4% of people in less developed countries. It is much more prevalent in girls. Regardless of lung function tests, up to 40% of children will develop a wheeze at some stage, which, if reversible with beta-2 agonists, is diagnosed as asthma (2,3)

Symptoms

As onset of symptoms like Shortness of breath, coughing, physical exertion, difficulty in breathing and wheezing describe various types of Asthma such as adult onset asthma, allergic asthma, asthma COPD induced, Exercise Induces Bronchoconstriction, Non- Allergic Asthma and lastly Occupational asthma(4). Asthma is linked to cigarette smoke and inhaled particulates, making it more prevalent in people who are exposed to these substances. With this, pattern of symptoms is also important to observed such as at night or day, during specific seasons, When exposed to a popular asthma trigger, while crying or laughing and during exercise. It normally appears in infancy and is linked to skin conditions like eczema and hay fever.




Herbal Prevention



Asthma has no cure, but symptoms can be managed with proper asthma care and management. It has been stated that around 11% Adults and 6% children who suffer from asthma choose herbal medicine which is considered as the third most common treatment option among Individual (5). The historical significance of Herbal medicines in the treatment of asthma is undeniable. Four of the five groups of asthma medications currently in use as cromones, methylxanthines, anticholinergics, and 2 agonists have their roots in herbal therapies from last 5000 years. (6)

Some Herbal plants that have various benefits in asthma are as follows Ginkgo biloba, Ginger, basil leave (Tulsi leave), Bay leave (Tejpatta), Night jasmine (Haarsingar) and many more.

Table:- Herbal Plants: Common Name and its Benefits

Name of plants	Common Name	Benefits	Image
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<p>Gingko Biloba</p>	<p>Maidenhairtree</p>	<ul style="list-style-type: none"> • It helps to increase blood flow. • It possesses anti-inflammatory and antioxidant properties that help to eliminate free radicals. • It helps to lower the symptoms of asthma(7) 	 <p>(12)</p>
<p>Night Jasmine</p>	<p>Haarsingar</p>	<ul style="list-style-type: none"> • it helps in dry cough. • It possesses anti-allergic, anti-viral and anti-bacterial properties (8) 	 <p>(13)</p>
<p>Basil leaf</p>	<p>Tulsi leaf</p>	<ul style="list-style-type: none"> • It combats cold, flu and herpes, anti-inflammatory. • it controls cold and cough. • Excellent mouth freshener • Improves body defense mechanism to fight viral (9) 	 <p>(14)</p>

<p>Bay leave</p>	<p>Tejpatta</p>	<ul style="list-style-type: none"> • Improves respiratory system. • helps in reducing stress and anxiety. • Rich source of Vitamin C (10) 	 <p>(15)</p>
<p>Ginger</p>	<p>Adrak</p>	<ul style="list-style-type: none"> • anti- oxidant, anti inflammatory • it cause bronchodilation in asthmatic patients. (11) 	 <p>(16)</p>

Recipe From Herbal Plants to cure cough:

- Make the powder of bay leaves (Tejpatta leaves) firstly, then take regular with ginger juice which is very beneficial in asthma as Bay leaves are rich in vitamin C and iron whereas ginger consists antioxidant properties.
- Taking 3-4 teaspoons of ginger juice with honey on an empty stomach in the morning provides great relief .
- Chewing 2-3 black peppercorns with basil leaves (Tulsi leaves) as black peppercorns have compound piperine that have anti inflammatory and antioxidant property.
- Taking basil and ginger juice in equal quantity with honey provides relief.
- Eating the bark of HaarSingar with betel leaves provides relief in asthma.
- Take lemon juice with ginger also provides relief.
- Licking lemon juice mixed with honey provides relief in asthma and cough.
- When an asthma attack occurs, keeping a little alum (fatakdi in Hindi) on the tongue and licking gives instant relief.
- The patient's chest gets a lot of relief from hot water fomentation.
- Drinking warm water provides relief during breathing.

- Rubbing rock salt (sendanamak / pakistaninamak) and ghee of native cow on the chest provides relief.

Conclusion

Asthma is a chronic respiratory condition that inflames the airways. Asthma is marked by various symptoms such as cold, cough, difficulty in breathing e.tc. There are various types of asthma such as allergic asthma, Non- Allergic Asthma, Exercise Induces Bronchoconstriction, adult onset asthma and Occupational asthma. Asthma can be managed by proper diet and care. It can also be treated by various ways such as Herbal medicines that includes ginkgo biloba, bay leave, ginger, basil leave and Night jasmine. They all possess anti- inflammatory properties, anti- oxidant, anti-viral and anti-allergic. These herbs also helps to reduce anxiety, stress and in dry cough.

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