



“NATRUM SULPHURICUM IN HEREDITARY ASTHMA OF CHILDREN:

A case study and in-depth analysis”

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Abstract: Asthma is a major non-communicable disease (NCD), affecting both children and adults and is the most common chronic disease among children. Asthma affected an estimated 262 million people in 2019 (1) and caused 4,55,000 deaths. Homeopathy plays a major role in the management of asthma both in terms of acute exacerbation and chronic phases by reducing the recurrence of episodes in terms of its frequency, duration, and intensity. Prolonged use of homoeopathic medicines succeeded in reducing the drug dependence on inhalers and bronchodilators etc. Asthma, when hereditary, is one of the sycotic complaints of Hahnemann. Natrum Sulphuricum is a very excellent remedy when it comes to humid asthma, especially in children with a strong hereditary background it goes down to the bottom of the case and will cure the case.

Keywords – Asthma, children, hereditary, sycotic.

I. INTRODUCTION

The prevalence of asthma varies widely among countries/geographical regions and also within countries with different geographies and socioeconomic strata ^[10, 11].

Asthma is a common chronic respiratory disease that affects the airways in the lungs. It can lead to recurrent episodes of breathing difficulties, which can range from mild to severe. These episodes are often triggered by allergens, irritants, infections, or exercise. During an asthma attack, the airways become inflamed, narrowed, and produce excess mucus, making it difficult to breathe.

II. EPIDEMIOLOGY

The Indian Study on Epidemiology of Asthma, Respiratory Symptoms and Chronic Bronchitis in Adults (INSEARCH) estimated the national burden of asthma at 17.23 million with an overall prevalence of 2.05% ^[8]. The recent Global Burden of Disease (GBD, 1990–2019) estimated the total burden of asthma in India as 34.3 million, accounting for 13.09% of the global burden ^[9]. It also attributed that there were 13.2 per thousand deaths due to asthma in India ^[9]. Asthma accounted for 27.9% of disability-adjusted life years (DALYs) in the Indian population ^[9]. India has three times higher mortality and more than two times higher DALYs compared to the global proportion of asthma burden.^[7]

III. ETIOLOGY

Many factors have been linked to an increased risk of developing asthma, although it is often difficult to find a single, direct cause, it results from a combination of genetic and environmental factors. Common triggers and risk factors include:

- Genetics: Individuals with a family history of asthma are at a higher risk.
- Allergens: Exposure to allergens like pollen, dust mites, pet dander, and mold can trigger asthma symptoms.
- Irritants: Tobacco smoke, air pollution, strong odors, and workplace chemicals can exacerbate asthma.
- Respiratory Infections: Viral infections, especially in early childhood, can increase the risk of asthma.
- Obesity: Being overweight or obese can contribute to asthma.
- Stress: Emotional stress can sometimes worsen asthma symptoms.

IV. PATHOPHYSIOLOGY

The pathophysiology of asthma involves the infiltration of inflammatory cells, including neutrophils, eosinophils, and lymphocytes into the airway, activation of mast cells, and damage to the epithelial cells. These inflammatory responses lead to the classic features of airway swelling, increased mucus production, and bronchial muscle dysfunction, which produce airway flow limitation and asthma symptoms. Remodeling, a term used to describe persistent changes in the airway structure, can occur, ultimately leading to fibrosis, mucus hypersecretion, epithelial cell injury, smooth muscle hypertrophy, and angiogenesis.[2][3][4][5][6]

V. CLINICAL INDICATION

Asthma is characterized by a range of clinical indications, which may include:

- Wheezing: High-pitched whistling sounds when breathing.
- Coughing: Often worse at night or early in the morning.
- Shortness of Breath: Difficulty in breathing, particularly during physical activity.
- Chest Tightness: A feeling of pressure or constriction in the chest.
- Increased Mucus Production: Excessive mucus in the airways.

VI. INVESTIGATIONS

- Spirometry: A lung function test to measure how well the lungs can exhale air.
- Peak Flow Measurement: A device to monitor the peak expiratory flow rate.
- Allergy Testing: To identify specific allergens that may trigger asthma.
- Chest X-ray or CT scan: To rule out other lung conditions.
- Bronchial Provocation Testing: To assess airway responsiveness.

VII. MANAGEMENT

Conventional asthma management includes:

Bronchodilators: Short-acting beta-agonists (SABA) for quick relief and long-acting beta-agonists (LABA) for maintenance.

Inhaled Corticosteroids: To reduce airway inflammation.

Leukotriene Modifiers: Medications that inhibit the action of leukotrienes, which can trigger asthma.

Allergy Medications: Such as antihistamines for those with allergic triggers.

Lifestyle Modifications: Identifying and avoiding asthma triggers, maintaining a healthy lifestyle, and exercise as tolerated.

HOMOEOPATHIC MANAGEMENT

VIII. CASE PRESENTATION

A male child of 8 years old came with a complaint of breathlessness since he was 3 years old. He has been taking Pump and nasal drops for 4-5 Years, Twice/Daily ----- He cannot remain without that even for a day as breathlessness starts.

K/c/o –Bronchial Asthma

8.1.Presenting complaint:

Complaint of breathlessness Starts with Cold, Sneezing- on exposure to dust, cold things, Running nose ---watery clear discharge initially, Later Nose block <night. Coughing, expectorant less.

Breathlessness < Night, Damp wet weather+++ , Cold weather++

8.2.Past history:

Recurrent coryza since childhood with every changing weather.

8.3.Family history:

Father: Bronchial Asthma

Paternal Uncle: Neurofibroma

Mother: Warts on Palm

Paternal Grand-mother-Bronchial Asthma

8.4.Personal history

- ✓ **Appetite**- 3 meals/ day
- ✓ **Thirst**- 1-2lit/day
- ✓ **Craves**- **COLD DRINKS+**, **ICE CREAM+**, Salty things
- ✓ **Aversion**- Nothing specific
- ✓ **Bowel**- Once/ day
- ✓ **Bladder**- 7-8 times/day
- ✓ **Sleep**- Good. Refreshing
- ✓ **Dreams**- Nil
- ✓ **Thermal**- Chilly patient

8.5.Physical examination

Anaemia- Nil

- ✓ **Cyanosis**- Nil
- ✓ **Jaundice**-Nil
- ✓ **Oedema**-Absent
- ✓ **Clubbing**- Nil
- ✓ **Lymphadenopathy**- Absent
- ✓ **Pulse**- 78/min
- ✓ **Body weight**- 45kg
- ✓ **R.R**-18/min
- ✓ **Temp**- 98.7

8.6. Systemic examination

Respiratory – Mild Crepitation on both sides

8.7. Provisional diagnosis -Bronchial Asthma

8.8. Analysis and Evaluation of the case

1. Breathlessness -PGCS- physical general - common symptom
2. Sneezing - PGCS - Physical general common symptom
3. Sneezing with runny nose- PGUC - Physical general uncommon symptom
4. Nose block - PGUC - Physical general common symptom
5. Cold drink, Ice cream Desire - PGUC - Physical general uncommon symptom
6. < Damp Wet, cold Weather, dust, night – PGCS -Physical general common modality Symptoms.

8.9. Totality of symptoms

1. BREATHLESSNESS<**DAMP WET WEATHER, COLD WEATHER**, night
2. Sneezing <morning , dust
3. Sneezing with a running nose
4. Nose block <night
5. Desires-**COLD DRINKS, ICE CREAM**, salty things, fried food.

| Remedy Name | Calc | Nat-m | Nat-s | Phos | Ars | Chin | Mez-v | Caust | Sul | Ag-a | Ip | Puls | Sopa | Lye |
|--|------|-------|-------|------|-----|------|-------|-------|-----|------|----|------|------|-----|
| Totality | 12 | 12 | 12 | 12 | 10 | 10 | 9 | 9 | 8 | 8 | 8 | 8 | 7 | 7 |
| Symptom Covered | 7 | 7 | 6 | 6 | 6 | 6 | 5 | 4 | 7 | 5 | 5 | 5 | 5 | 4 |
| [C] [Respiration]Asthmatic Children | 2 | 1 | 3 | 1 | 1 | 1 | 1 | | 1 | | 3 | 3 | 1 | 1 |
| [C] [Respiration]Asthmatic Weather Cold Wet | | | 2 | | | 1 | | | | | | | | |
| [C] [Respiration]Asthmatic Weather Wet Agg. | | | 2 | | | 2 | | | 1 | | 1 | | | |
| [C] [Nose]Sneezing Morning | 1 | 2 | | 1 | 1 | 1 | 2 | 3 | 1 | | | 2 | 3 | 1 |
| [C] [Nose]Sneezing Dust, from | | | | | | | | | | | | | | |
| [C] [Nose]Sneezing Coryza With | 1 | 2 | | | 2 | 1 | 2 | | | 1 | 2 | | | |
| [C] [Nose]Obstruction Night | 2 | 1 | 1 | 1 | 2 | | 3 | 2 | 1 | 1 | 1 | 1 | | 3 |
| [C] [Generalites]Food and drinks Cold Drinks, water.Desires. | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 |
| [C] [Generalites]Food and drinks Ice-cream.Desires | 2 | 1 | 1 | 3 | | | | | 2 | 1 | | | 1 | 1 |
| [C] [Generalites]Food and drinks Salt or salty food.Desires. | 2 | 3 | | 3 | | 2 | | 2 | 1 | 3 | | | 1 | |

Symptoms 10 Remedies 261

Prescription

Repertorial totality as well as Materia medica verifies NATRUM SULPH and hence prescribed the same
 Rx -NATRUM SULPH 30 3 DOSE OD FOR 3 DAYS
 SAC LAC 30 3PILLS BD FOR 1 MONTH

Follow up:

Conclusion:

The patient improved much. His episodes reduced, his appetite improved, and started to lose weight(gained due to steroids) after withdrawing all the supportive management including nebulization. According to Kent's Lesser Writings," Natrum Sulphuricum is one of the best remedies for those constitutional conditions in children that results in chest catarrhs and asthmatic complaints where there is hereditary tendency and worse during wet weather".

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