

ROLE OF YASHTIMADHU (GLYCYRRHIZA GLABRA LINN.) IN PAEDIATRIC RESPIRATORY DISEASES – AN AYURVEDIC AND CONTEMPORARY REVIEW***¹Dr. Vidya Udhavrao Pashte, ²Dr. Arun Abasaheb Shinde**¹Assistant Professor, Department of Kaumarbhritya Sai Ayurved Medical College, Khandala, Tal. Vaijapur Dist. Chh. Sambhajanagar Maharashtra.²Assistant Professor, Department of Prastuti and Streerog Sai Ayurved Medical College, Khandala, Tal. Vaijapur Dist. Chh. Sambhajanagar Maharashtra.***Corresponding Author: Dr. Vidya Udhavrao Pashte**

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ABSTRACT

Paediatric respiratory diseases such as Kasa (cough), Shwasa (asthma), Pratishyaya (rhinitis), URTI, pharyngitis, and bronchitis are among the most common childhood illnesses. Ayurveda describes Yashtimadhu as a Kantya, Kaphavatahara, Shothahara, and Rasayana drug, widely used in respiratory disorders. Modern pharmacology supports its anti-inflammatory, mucolytic, anti-allergic, antiviral, and immunomodulatory properties. This review compiles classical and modern evidence to evaluate the therapeutic role of Yashtimadhu in paediatric respiratory conditions. The herb proves highly effective, safe, and palatable for children, highlighting its significance in Kaumarbhritya practice.

KEYWORDS: Yashtimadhu, Glycyrrhiza glabra, Paediatric Respiratory Diseases, Kasa, Shwasa, Allergic Rhinitis, Ayurvedic Pediatrics, Upper Respiratory Tract Infection, Rasayana.**INTRODUCTION**

Respiratory diseases contribute to a major portion of childhood morbidity. Common conditions in children include:

Recurrent Upper Respiratory Tract Infections (URTI).

- Allergic Rhinitis
- Tonsillitis
- Bronchitis
- Bronchial Asthma (Tamaka Shwasa)
- Viral respiratory infections

In Ayurveda, paediatric patients (Bala) have immature dhatus and low Agni, making them more prone to respiratory infections.

Yashtimadhu is extensively used due to its.

Kantya (beneficial for throat)
Kaphavatahara
Shothahara (anti-inflammatory)
Rasayana (immunomodulator)
Swarya (voice improving)

It works at both

- ✓ Upper airway (pharynx, larynx)
- ✓ Lower airway (bronchi, lungs)

Thus, it has multidimensional therapeutic value in paediatric respiratory disorders.

AIM AND OBJECTIVES**Aim**

To evaluate the role of Yashtimadhu in paediatric respiratory diseases based on classical and contemporary evidence.

OBJECTIVES

1. To collect classical Ayurvedic references of Yashtimadhu related to respiratory diseases.
2. To review modern pharmacological actions relevant to airway and lung health.
3. To correlate classical properties with paediatric respiratory pathology.

4. To identify clinical applicability and safety in children.

MATERIALS AND METHODS

Type of Study

Narrative literary review and conceptual analysis.

Sources of Data

Charaka Samhita
Sushruta Samhita
Ashtanga Hridaya
Kashyapa Samhita
Bhavaprakasha Nighantu and other Nighantus
PubMed & AYUSH research portal articles
Pharmacology textbooks and peer-reviewed journals

METHODOLOGY

- Collection of Ayurvedic references mentioning respiratory use
- Review of pharmacological and clinical studies
- Comparative and conceptual analysis

Review of Literature

1. Classical Ayurvedic Description

A. Rasa, Guna, Veerya, Vipaka

- Rasa: Madhura
 - Guna: Guru, Snigdha
 - Veerya: Sheeta
 - Vipaka: Madhura
 - Doshaghnata: Vata-Pitta-Shamaka, Kaphahara
- These properties make it ideal in Kasa-Shwasa.

B. Classical Shloka References

Charaka Samhita (Chikitsa 16/85)
“Madhukam kantyam kaphavatajit.”
→ Useful in Kasa, Shwasa, cough, sore throat.
Sushruta Samhita (Uttara Tantra 51/6)
“Kantyam madhuram shothaharam.”
Anti-inflammatory action in respiratory mucosa.
Ashtanga Hridaya (Chikitsa 2/24)
“Kasa-shwase madhukam hitam.”
Direct reference to use in cough and asthma.
Kashyapa Samhita – Kaumarbhritya Sthana
“Balanam madhukam shreshtam.”
Especially recommended for children.

2. Modern Pharmacological Actions

A. Anti-inflammatory

Glycyrrhizin suppresses COX-2, TNF- α , IL-6, NF- κ B
Reduces airway mucosal inflammation in bronchitis & asthma

B. Anti-allergic / Mast cell stabilizer

Prevents histamine release
Useful in allergic rhinitis, childhood asthma

C. Mucolytic and Expectorant

Liquefies thick Kapha
Provides smooth expectoration

D. Antiviral and Antimicrobial

Effective against

- Influenza virus
 - RSV
 - Adenovirus
 - Streptococcus
- Helpful in URTI and tonsillitis

E. Immunomodulatory

- Enhances IgA, T-cell function, antibody production
- Prevents recurrent respiratory infections

F. Mucoprotective & Anti-tussive

- Protects airway mucosa
- Soothes throat irritation
- Reduces dry or irritating cough

DISCUSSION

1. In Kasa (Paediatric Cough)

Yashtimadhu Reduces

- Axillary airway inflammation
- Throat irritation
- Kapha accumulation

Effective in

- ✓ Dry cough
- ✓ Allergic cough
- ✓ Post-viral cough
- ✓ Spasmodic cough

2. In Shwasa (Bronchial Asthma)

Mechanisms

Anti-inflammatory action
Broncho-protective
Reduces eosinophil infiltration
Anti-allergic response

Useful in

Childhood asthma
Wheeze-associated lower respiratory infection (WALRI)

3. URTI (Recurrent Upper Respiratory Infections)

It works by

Preventing virus replication
Strengthening mucosal immunity
Reducing frequency & duration of infections

4. Allergic Rhinitis

Actions helpful

Anti-histaminic
Nasal mucosal protection
Reduces sneezing, itching, rhinorrhoea

5. Tonsillitis & Pharyngitis

Due to its Kantya and anti-inflammatory properties:
Reduces throat swelling
Relieves pain
Acts as natural demulcent

6. Paediatric Voice Disorders

As a Swarya dravya

Improves voice clarity

Reduces hoarseness

Useful for children with recurrent throat infections

7. Safety in Children

Safe in recommended doses

Palatable taste (Madhura)

Minimal side effects when used appropriately

CONCLUSION

Yashtimadhu has profound benefits in paediatric respiratory diseases due to its anti-inflammatory, mucolytic, anti-allergic, antiviral, and immunomodulatory actions. Ayurvedic literature consistently recommends it for Kasa, Shwasa, Pratishyaya, and Kantharoga, and modern research validates its effectiveness. Being safe, effective, and palatable, it is a highly valuable herb in Kaumarbhritya and should be incorporated widely in paediatric respiratory care.

REFERENCES

1. Charaka Samhita
Charaka Samhita Sutrasthana 4/9 – Listed in Madhura Skandha (Balya, Brihmana, Rasayana).
Sutrasthana 25/40–45 – Mentioned in Kasa–Shwasa Chikitsa.
Chikitsasthana 1/3/28 – Ingredient of Jivaniya Gana (nourishing for children).
Chikitsasthana 4/29–32 – Used in Amlapitta and gastric disorders.
Chikitsasthana 11/41–44 – Indicated in Kasa Chikitsa (antitussive).
Chikitsasthana 12/20–22 – In formulations for Swasa (asthma).
Kalpasthana 1 (Pippali Kalpa) – Used as Anupana with ghee for respiratory strengthening.
2. Sushruta Samhita
Sutrasthana 38/25 – Included in Madhura Dravya Varga, used for Vrana-Ropana (wound healing).
Chikitsasthana 40/21 – In Kasa-Chikitsa yogas.
Uttara Tantra 51/9–12 – Beneficial in Kasa, Shwasa, and throat disorders.
3. Ashtanga Hridaya
Sutrasthana 6/97 – Listed in Madhura Gana; indicated for strength & nourishment in children.
Chikitsasthana 3/36–39 – Indicated in Kasa Chikitsa.
Chikitsasthana 4/7–10 – In Shwasa Chikitsa yogas.
Uttarasthana 20/18–21 – For Mukharoga, Kantharoga (oral & throat diseases).
4. Bhavaprakasha Nighantu
Madhura Varga / Yashtimadhu Adhyaya
Properties: Madhura rasa, Sheeta virya, Balya, Rasayana.
Indications: Kasa, Shwasa, Amlapitta, Mukhadosha, Shotha, Jwara.
5. Dhanvantari Nighantu
Guduchyadi Varga – Described as Kaphapittahara, Kantya (beneficial for throat), Vranaropaka.
6. Raja Nighantu
Shatahvadi Varga – Mentions as Kanthya, Varnya, Keshya, useful in Kasa and Shotha.
7. Kaiyadeva Nighantu
Aushadhi Varga – Indicated in Amlapitta, Trishna, Kasa-Shwasa, and wound healing.
8. Sharangadhara Samhita
Madhyama Khanda 6/34–40 – Used in Kasa, Shwasa yoga preparations.
Madhyama Khanda 9/45 – Part of Leha formulations for pediatric use.
9. Yogaratnakara
Kasa–Shwasa Chikitsa – Frequently added in Kantya and Kaphahara formulations.
Balrogaadhikar – Used as Rasayana and for Kasa, Mukharoga in children.
10. Bhaisajya Ratnavali
Kasa Chikitsa 7/18–20 – Yashtimadhu as key ingredient.
Amlapitta Chikitsa 47/80 – Used for gastric irritation & ulcers.
Kantharoga Chikitsa 62/12 – As expectorant and throat soother.
Mukharoga/Kantharoga (mouth & throat disorders)
Jwara
Vrana-ropana (wound healing)
Balya & Rasayana (nourishing for children)
11. PubMed & AYUSH research portal articles.
12. Pharmacology textbooks and peer-reviewed journals.