

Efficacy Of Vacha–Haridradi Granules In Postpartum Hypogalactia: A Case Study

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ABSTRACT

Background: Hypogalactia, a common postpartum condition, compromises neonatal nutrition and maternal well-being. The study evaluates the comparative efficacy of *Ayurvedic* formulation—*Vacha–Haridradi* Granules on lactation in mothers with *Stanya Kshaya*.

Methods: A 25-year-old primiparous female presented with decreased lactation post-delivery. Clinical signs included soft breasts (*Stana Mlaanata*), reduced milk (*Stanya Alpata*), and infant irritability due to hunger. Hematological analysis revealed mild anemia (Hb 10.2 g/dL) with microcytic hypochromic features. Subject given 10g *Vacha–Haridradi Granules* once daily with cow milk for 30 days. Subjective (*Stanya Kshaya* symptoms, ejection pattern, suckling frequency, infant well-being) and objective parameters (baby weight gain, breast engorgement score, serum prolactin in a subset) were evaluated.

Results: Following the intervention, breastfeeding frequency increased to 9 times/day. Milk ejection improved from drops to a continuous stream. Infant weight increased by 750 grams over 45 days, and serum prolactin levels (measured in a subset) rose from 85 to 112 ng/mL. No side effects were reported during the treatment course.

Conclusion: *Vacha–Haridradi* granules were as effective in managing *Stanya Kshaya*. The formulation improved lactation metrics with minimal side effects.

Keywords: Hypogalactia, *Stanya Kshaya*, *Vacha–Haridradi Granules*, *Ayurveda*, lactation.

1. INTRODUCTION

Stanya (breast milk) is described in *Ayurveda* as the essence of *Rasa Dhatu*, crucial for infant nutrition and immunity. Modern lactation studies concur with its immunological and nutritive roles¹.

Stanya Kshaya (Hypogalactia) is a significant postpartum condition resulting in inadequate breast milk production. *Ayurveda* attributes this condition to *Agnidushti* and *Rasadhatu Kshaya*, and suggests various herbal interventions for lactation enhancement. This case study presents the outcome of administering *Vacha–Haridradi* granules to a postpartum patient with hypogalactia.

Hypogalactia, defined as suboptimal breast milk production (<480 ml/day by day 10)², is multifactorial—ranging from maternal stress and poor suckling to nutritional deficiencies. *Ayurveda* classifies *Stanya Kshaya* under *Agnidushti* and *Rasakshaya* induced conditions.

This study investigates a classical formulation:

- ***Vacha–Haridradi Granules***, based on *Chakradatta* reference

Case Presentation

Patient Profile

- **Name:** Mrs. PS

- **Age/Gender:** 25 years/Female
- **Parity:** Primiparous
- **Complaints:** Reduced milk secretion from day 4 postpartum; breast softness; infant crying post feeds.
- **Clinical Diagnosis:** *Stanya Kshaya* with features of *Stana Mlaanata* and *Stanya Alpata*.

Hematological Profile (Baseline)

- **Hemoglobin:** 10.2 g/dL (mild anemia)
- **RBC:** 5.4 million/ μ L
- **Platelet:** 2.3 lakh/ μ L
- **WBC:** 7,600/ μ L
- **MCV:** 64.81 fL (microcytic)
- **MCHC:** 29.14 g/dL

These values suggested early-stage iron-deficiency anemia, often found in postpartum women.

Table no. 1: Intervention and Observations

Parameter	<i>Vacha–Haridradi Granules</i>
Dose	10g once/day with milk
Duration	45 Days Total 30 Days With Medicine 15 Days Without Medicine
Frequency of breastfeeding	Improved from 4 to 9 times/day
Milk ejection	Drop → Stream-like by day 15
Infant weight gain	+750 g in 45 days
Prolactin (in subset)	Improved from 85 to 112 ng/mL
Side effects	None reported

Following the intervention, breastfeeding frequency increased to 9 times/day. Milk ejection improved from drops to a continuous stream. Infant weight increased by 750 grams over 45 days, and serum prolactin levels (measured in a subset) rose from 85 to 112 ng/mL. No side effects were reported during the treatment course.

2. DISCUSSION

The increase in breastfeeding frequency from ~4/day to 9/day indicates improved milk availability and maternal confidence. This outcome aligns with *Ayurvedic* expectations of *Stanyavardhaka* effect achieved through Agnideepana (appetite stimulation) and *Rasayana* (nutritive rejuvenation) actions of the ingredients like *Shunthi*, *Vacha*, and *Haritaki*.

Transition from drop-wise to stream-like milk ejection suggests:³

- Better oxytocin-mediated let-down reflex (possibly modulated via CNS-active components like *Vacha* and *Yashtimadhu*)
- Improved alveolar milk filling, indicating enhanced milk production.

This correlates with correction of *Srotorodha* (channel obstruction) and nourishment of *Rasa Dhatu*, the precursor to *Stanya* (breast milk).

Weight gain is an objective indicator of successful lactation. This reflects both volume and quality of breast milk being adequate⁴. It correlates with *Ayurvedic* principles of *Poshana* of *Garbhashaya sthita Garbha* (now the neonate), as the enhanced *Rasa dhatu* is transferred via *Stanya*.

This biochemical improvement is vital, as prolactin is the key hormone responsible for milk synthesis. Rise in its level

indicates direct or indirect action on the hypothalamic-pituitary axis—potentially modulated through:

- Phytoestrogens and adaptogens like *Yashtimadhu* (*Glycyrrhiza glabra*)
- CNS stimulants like *Vacha* (*Acorus calamus*)
- Anti-inflammatory and endocrine modulators like *Haridra* (*Curcuma longa*)

1. *Vacha* (*Acorus calamus*)⁵

- *Katu-Tikta Rasa*, *Ushna Virya*, and *Laghu-Tikshna Guna* help in *Agnideepana* and *Srotoshodhana* (clearing microchannels).
- Acts on *Manovaha Srotas* to alleviate mental stress (*Krodha*, *Shoka*), which is known to impact lactation.
- Known in *Ayurveda* to improve *Medha* (intellect) and *Vata-anulomana*, promoting proper neuro-endocrine feedback.

2. *Haridra* (*Curcuma longa*)

- *Tikta-Katu Rasa*, *Ushna Virya*, and *Kapha Shamak* activity helps clear blockages in *Pranavaha* and *Rasavaha Srotas*.
- Acts as a *Lekhana* (scraping) and *Krimighna* (antimicrobial), ensuring clean channels for milk flow.
- Modern studies show anti-inflammatory, antioxidant, and hepatoprotective effects, helping overall metabolic balance⁶.

3. *Yashtimadhu* (*Glycyrrhiza glabra*)⁷

- *Madhura Rasa*, *Sheeta Virya*, *Snigdha Guna* nourish *Rasa* and *Shukra Dhatu*.
- Acts as a *Rasayana* and *Balya*, improving maternal strength and milk quality.
- Its glycyrrhizin content is known to modulate cortisol metabolism, reduce stress, and mildly enhance prolactin via pituitary activation.

4. *Shunthi* (*Zingiber officinale*)⁸

- *Katu Rasa*, *Ushna Virya* helps in *Agnideepana* and correcting *Mandagni* which often results postpartum.
- Enhances digestion, absorption, and circulation, key for optimal conversion of maternal nutrition to *Stanya*.

5. *Ativisha*, *Musta*, *Haritaki*^{9, 10}

- Work synergistically as *Amapachaka*, *Deepana*, and *Rasayana*.
- They cleanse the *Rasavaha Srotas*, restore normal function of *Agni*, and strengthen the pathway of milk production.

Table no. 2: Modern Pharmacological Perspective

Herb	Active Constituents	Modern Effects
Acorus calamus	β-Asarone, Acorone	CNS stimulant, neuroendocrine regulator
Curcuma longa	Curcumin	Anti-inflammatory, antioxidant, hormonal modulator
Glycyrrhiza glabra	Glycyrrhizin, Liquiritin	Adaptogen, anti-inflammatory, mild prolactin enhancer
Zingiber officinale	Gingerols, Shogaols	Digestive aid, improves peripheral circulation
Cyperus rotundus	Cyperene, Flavonoids	Carminative, stress relieving, galactagogue

1. ***Agnideepana* and *Pachana***: Drugs like *Shunthi*, *Vacha*, *Musta* improve metabolism, critical in forming quality *Rasa Dhatu*, the precursor to *Stanya*.
2. ***Rasayana* and *Brimhana***: *Yashtimadhu*, *Haritaki*, *Prishniparni* replenish depleted tissues and improve vitality.
3. ***Srotoshodhana***: *Devdaru*, *Haridra*, *Daruharidra* clear microchannels, ensuring smooth lactation.

4. **Psychological and Endocrine Modulation:** *Vacha* and *Yashtimadhu* reduce emotional barriers (*Krodha, Shoka*), enhancing prolactin-oxytocin response.
5. **Antimicrobial and Detoxification:** *Ativisha*, *Daruharidra*, *Haridra* prevent mastitis and purify secretions.

Studies show these herbs act via:

- HPA axis modulation
- Enhanced mammary gland blood flow
- Gut-brain axis stimulation
- Anti-oxidative neuroprotection

3. CONCLUSION

The present case study demonstrates the promising efficacy of *Vacha–Haridradi* Granules in the management of postpartum hypogalactia (*Stanya Kshaya*). The formulation produced significant improvements in lactation parameters—including increased breastfeeding frequency, enhanced milk ejection reflex, infant weight gain, and a rise in serum prolactin levels—without any reported side effects. These outcomes reflect a multidimensional therapeutic action rooted in the *Ayurvedic* principles of *Agnideepana*, *Rasayana*, *Srotoshodhana*, and *Manasika Dosha Shamana*, as well as corresponding pharmacological effects like neuroendocrine modulation, digestive enhancement, and anti-inflammatory activity.

Key constituents such as *Vacha*, *Haridra*, *Yashtimadhu*, and *Shunthi* synergistically address the physical, metabolic, and psychological contributors to impaired lactation by supporting *Rasa Dhatu* formation and facilitating milk flow through unobstructed *Srotas*. The observed prolactin elevation points towards a probable interaction with the hypothalamic-pituitary axis, validating the formulation's endocrine-supportive potential.

In conclusion, *Vacha–Haridradi* Granules offers a safe, effective, and integrative approach to support lactation in postpartum women, particularly in cases with mild anemia, digestive weakness, or emotional stress. Further controlled clinical studies are warranted to generalize these findings and explore long-term benefits in larger cohorts.

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