

**KUSTHA-VACHA-SWARN YOG IN ENHANCEMENT OF
VYADHIKSHAMATVA IN CHILDREN- A REVIEW****¹*Dr. Reshu Garg and ²Prof. Mithilesh Verma**

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ABSTRACT

Childhood is the growing and developing stage of human life. Good health in childhood period would give strong foundation to the future build of life. The main aim of *Ayurveda* is to provide healthy life along with physical fundamental health, prevention of disease in healthy person and to cure the patients.^[1] *Ayurveda* is a science which is more concerned for better life by its preventive as well as supportive measures. In *Sushruta Samhita*, *swarnprashan* has been mentioned as a *swarna yoga* containing *swarnachurna*, *kustha*, *vacha* with the *anupana* of *ghrit* and *madhu* which is believed to improve *medha* (intellect), *bala* (strength) & *buddhi* (memory)^[2]

KEYWORDS: Childhood, *ayurveda*, *swarnprashan*, *Preventive health*.**INTRODUCTION**

As the term *Kaumarabhritya* suggests: Ayurvedic Pediatrics highlights the child rearing i.e. *Kaumara bharana* as the main aspect of this field.^[3]

कुमाराणां भृतिधारणं पोषणं च, तस्येदमिति कौमारभृत्यम् । (चक्रपाणि)

Children's physical and mental healths are important to allow them to think properly, develop socially and learn new skills. Children are following irregular life style, consuming unhealthy food and experiencing changing environment. It is most challenging for us how to retain and enhance the physical and mental health of children. For the successful survival of man in this

competitive world there is need for promotion of healthy life style and protection of communicable and non communicable disease by using swarn prashan and swarn yog like Kustha-vacha-swarn yog in children.

Functional ability of the immune system is individual specific. (*Acharya Charaka*)

“The concept of immunity provides complete tolerance towards diseases and is antagonistic to strength & virulence of disease” (*Acharya Chakrapani*)

व्याधिक्षमत्व व्याधिबलविरोधित्व व्याधिउत्पादक प्रतिबंधकत्व । (चक्र०)

The *vyadhikshamatva* depends on *ojas* or *bala* in the body.

Acharya Shushruta says, According to our scripture, *ojas* or *bala* is defined as the excellent essence of *dhatus* beginning with *rasa* and ending with *shukra*.^[4]

Ayurvedic texts have several references describing the use of *swarna bhasma* combined with *ghrit* & *madhu*, *Medhya* and *Rasayan* herbs enhance the immunity of an individual. *Acharya Kashyap* stated that healthy and unhealthy condition depends on the *lehan* and gives the first reference of *lehana karma* as a therapy of children (*lehanadhyaya* in *sutra-sthana*).^[5]

“सुखंदुखं हि बालानां दृश्यते लेहनाश्रयम् ।” (का०सू०)

MATERIAL AND METHODS

The available Classical literature of *lehan karma* has been collected from different *Ayurvedic* texts, Modern texts, reputed immunomodulator drugs from various journals, internet related information, research studies done in various institutions & other sources.

DISCUSSION

Despite of high advancements in immunization to boost up defense mechanism, the modern medical science is yet to reach a fool proof mechanism against virulent organism. Besides this certain vaccines are reported to have serious adverse reactions along with common side effects like inflammation at the site of injection, tiredness, drowsiness, joint pain and vomiting. It has been found that MMR vaccine doesn't confer permanent immunity and may cause seizure disorders, demyelination of nerve sheath, encephalitis, anaphylaxis, inflammatory bowel disease, autism etc. Rota virus vaccination increases the risk of intussusception.

On the contrary, the procedure of *Lehan karma* (i.e. strengthening the immunity) in childhood

itself is described in various *Ayurvedic* literatures.

Sushruta Samhita

Acharya Sushruta described four *swarna yogas* which provide humoral immunity & body resistance helpful in growth and development as well as enhancing the intelligence.

सौवर्णं सुकृतं चूर्णं कुष्ठं मधु घृतं वचा ।
 मत्स्याक्षक शंखपुष्पी मधु सर्पि सकांचनम् ॥
 अर्कपुष्पी मधु घृतं चूर्णितं कनकं वचा ।
 हेमचूर्णानि कैडर्यं श्वेतादूर्वा घृतं मधु ॥
 चत्वारोऽभिहिता प्राशा श्लोकार्धेषु चतुर्ष्वपि ।
 कुमारानां वपुर्मधा बल बुद्धि विवर्धना ॥ (सु० शा० 10/45)

These are

1. *Swarna bhasma with Kustha, Vacha choorna, Madhu & Ghrit.*
2. *Swarna bhasma with Brahmi, Shankhpushpi choorna, Madhu & Ghrit*
3. *Swarna bhasma with Arkapushpi, Vacha choorna, Madhu & Ghrit.*
4. *Swarna bhasma with Kaidarya, Shweta durva choorna, Madhu & Ghrit.*

Kashyap Samhita

द्रव्याणां लेहनीयानां विधिश्चैव उपदेक्ष्यते ।
 विघृश्य धौते दृषदि प्राङ्मुखी लघुनाम्बुना ॥
 आमथ्य मधुसर्पिभ्यां लेहयेत कनकं शिशुम् ।
 सुवर्णप्राशनं मेधा अग्नि बलवर्धनं ॥
 आयुष्यं मंगलं पुण्यं वृष्यं वर्ण्यं ग्रहापहम् ॥
 मासात्परममेधावी व्याधिभिच घृष्यते ।
 षडभिर्मासेः श्रुतधरः सुवर्ण प्राशनात्तमेवेत् ॥ (का.सू.)

Acc to *Kashyap* the method of *swarna prashan* preparation is as follows: pediatrician should sit facing the *poorva disha*, take *swarna* and rub it against the hard surface with water and then mix with *madhu*, *ghrita* and given for licking. Benefits of *swarnaprashan* are *Medha*, *Bala*, *Ayushyavardhana*, *Mangalyam*, *Punya*, *Vrishyam*, and *Varnyamgrahapaham* further he mentioned that if it is administered for one month the child becomes *Param Medhavi* and obtained immunity to protect from diseases.

Administration of *swarn prashan* is done for 6 months in a child to make him *Shrutadhara* (optimum recalling power).

Astang Hridaya

Acharya Vagbhata also described four Swarna yoga and mentioned its administration for one year to provide medha (intellect), bala (physical and mental power) and varna (glow of skin) vridhi.

DRUG REVIEW

1- SWARNA BHASMA

➤ Characteristics of swarna bhasma on ayurvedic parameters^[6] are following –

Ras- madhura, tikta, kashaya.

Gun- guru, snigdha, picchila.

Virya- sheeta

Vipaka- madhura^[7]

Karma^[6,8] - Hridya, kantiprad, balya, sanshrita, guru, lekhan, buddhimedhasmitikara, vranaghna, vagyishuddhikar, Rasayana, Sarvadoshhar.

Matra- 1/8 - 1/4 ratti^[6]

Anupana^[9] – madhu, marichchurna & ghrita, trikatu churna & ghrita.

Apathya^[6] – Bilvaphala (bel)

➤ MODERN PARAMETERS

Composition^[10] of Swarnabhasma is as follows

Gold	96.76%	Potash	0.16%
Silica	1.14%	Sodium chloride	0.078%
Iron	0.14%	Sulphate	0.15%
Lime	0.546%	Moisture	0.24%
Copper trace, Magnesia trace, Phosphate	0.78%		

▪ RESEARCH WORK ON SWARNA BHASMA

- Researches show that gold particles having antioxidant property and T - lymphocyte activator property.^[11]
- Nano particles can also be absorbed through sublingual route directly into bloodstream.^[12]
- In certain researches it has been found that swarnabhasma possesses free radical scavenging activity, analgesic activity and antistress effect.^[13]

2- *KUSTHA* - (*Costus root*)

कुष्ठं रोगाह्यं वाप्यं पारिभय्यं तथोत्पलम् ।

कुष्ठमुष्णं कटु स्वादु शुक्रलं तिक्तकं लघु ।।

हन्ति वा तस्त्र वीसर्प कास कुष्ठ मरुत कफान् ।। (भा.प्र.)^[14]

▪ Research work

- Oil possess strong carminative, antiseptic and disinfecting properties^[15]
- Hypotensive, spasmolytic & bronchodilatory effects^[16]
- anthelmintic activity and antifungal activities^[17]
- lipid lowering property^[18]
- effective in the management of Madhumeha^[19]
- aphrodisiac agent^[20]

3- *VACHA* - (*Sweet flag*)^[21]

वचोग्रन्धा कटुका तिक्तोष्णा वान्ति वह्नि हृत् ।

विबन्धाध्मान शूलघ्नी शकृन्मूत्र विशोधिनी ।।

अपस्मार कफोन्माद भूतजन्तवनिलान्दरेत् ।। (भा.प्र.)

▪ Research Work

- Volatile oil from roots inhibited the growth of *M.tuberculosis* in a concentration of 10mcg/ml, also inhibited the growth of gram-negative organisms in a concentration of 0.4-0.6 mcg/ml^[22]
- Antispasmodic action^[23]
- Anxiety reduction^[24]
- Hypotensive action^[25]
- Suppress inflammation, potent analgesic at a dose of 5 mg/kg^[26]
- Antifungal activity^[27]

DRUG	<i>KUSTHA</i>	<i>VACHA</i>
Botanical name	Saussuria lappa	Acorus calamus
Family	Asteraceae	Araceae
Guna	Laghu, Ruksa, Tiksna	Laghu, Tiksna
Ras	Katu, Tikta, Madhura	Katu, Tikta
Vipak	Katu	Katu
Virya	Usna	Usna
Prabhav	Vrsya	Medhya

<i>Part used</i>	Root	Rhizome
<i>Karma</i>	<i>Kapha-vatahara, Lekhaniya, Vrsya</i>	<i>Kapha-vatahara, Lekhaniya, Medhya</i>

4- MADHU

➤ AYURVEDIC PARAMETERS

According to *Sushruta samhita* general properties of *Madhu* are-

Madhu (honey) is sweet (in primary taste) and astringent in secondary taste, dry cold kindles digestion, good for complexion and voice, light, bestows softness to body, scarificant, good for heart, aphrodisiac, unite fractures, clean and heal wounds, constipating, good for vision, clean the eyes, enters into minute channels, mitigates *pitta*, *kapha* and *medas*, cure diabetes, hiccup, dyspnea, cough, diarrhea, vomiting, thirst, worms and poison. Bestows happiness and mitigates all the three *doshas*. It mitigates *Kapha* due to easy digestibility, *Vata* and *Pitta* due to sliminess, sweetness and astringency.

➤ MODERN PARAMETERS

Honey is the collection of nectar & pollen grains by bees. When honey is administered in low dose it gradually develops resistance for allergens in child. Honey mainly consists of sugar and water. It has high level of monosaccharide, fructose and glucose, vitamins and several minerals like iron, calcium, phosphate, potassium, magnesium.

Honey is characteristically acidic with pH 3.2 to 4.5, which is low enough to be inhibitory to several bacterial pathogens. Hydrogen peroxide is the major contributor to the antimicrobial properties of honey.

5- GHRIT

➤ AYURVEDIC PARAMETERS

According to *Sushruta samhita* general properties of *ghrit* are-

It is sweet, mild in action, soft, cold in potency, not increasing moisture in the tissues, lubricating, relieves upward movement in the alimentary tract, insanity, epilepsy, colic, fever and distension of abdomen, mitigates *vata* and *pitta*, kindles digestive fire, increases memory, wisdom, intelligence, complexion, voice, beauty, softness of the body, vitality, vigor, strength and span of life, it is aphrodisiac, good for vision, wards off sins and destroy poison and demons.

Ghrith is regarded as the best of all unctuous articles which imbibes the quality of drugs. (*Acharaya Charaka*)

➤ MODERN PARAMETERS

It is rich in antioxidants and act as an aid in absorption of vitamin and minerals from the food, serving to strengthen the immune system.

TOXICITY OF MATERIALS USED IF ANY

No such serious toxic effect noted in any drug by previous researchers.

➤ SWARNA BHASMA

1. Study of Dr. Vinarma Sharma - titled show that "toxicity study of *suwarn binduprashana* in albino rats" [Results- No sign of toxicity in albino rats.]
2. Acute oral administration (continuous for 8 weeks on albino mice; 10mg/20gm b.w. /day) of *swarnabhasma* had not reported any toxic effects as assessed by liver function tests and histological investigations.

[Mitra A, Chakraborty S, Auddy B et al. evaluation of chemical constituents and free radical scavenging activity of *swarnabhasma* (gold ash), an ayurvedic drug. J ethnopharmacol. 2002;80:147-53.]{PubMed}

➤ KUSTHA

K. Madhuri, K. Elango, S. Ponnusankar—Department of Pharmacy Practice, JSS College Of Pharmacy, Tamil Nadu.

Saussurea lappa (Kuth root): review of its traditional uses, phytochemistry and pharmacology.

[Result- *Saussurea lappa* plant is safe and very effective especially when used in traditional dosage on several indications].

➤ VACHA

Savitha D Bhatt, B K Ashok, Rabinarayana Acharya, B Ravishankar: Institute for Post Graduate Teaching & Research In Ayurveda (IGPT & RA), Gujarat Ayurveda University, Jamnagar in 2011

A Comparative acute toxicity evaluation of raw & classically processed rhizomes of *Vacha* (*Acorus calamus*)

[Result –Both raw & classically processed *Vacha* samples at a dose of 2gm/kg body weight did not produce any mortality and other toxic effects during entire duration of study & all the animals survived till 14 days of observation period.]

➤ **MADHU & GHRIT**- No toxicity reported so far.

CONCLUSION

In the current scenario, we are witnessing new infectious diseases are emerging every now and then, it is necessary to strengthen the first line of defense in children so that they can fight with infections more efficiently. So as per the need of present time if we find out something really fruitful from the treasures of Ayurveda that can enhance immunity in children without causing any kind of serious adverse effects. It would be a boon in the field of preventive pediatrics.

To improve bala (immunity and physical strength), medha (intellect), agni (digestion metabolism), ayu (life span) and to prevent child from various ailments, Acharya Kashyapa has mentioned important role of swarnaprashan under lehana. Lehan karma is a procedure in which medicines are given to the child in semisolid form which is easily lickable. Since leha are made with madhur dravya like honey, which is very palatable for children. Swarnaprashan is also a lehan karma which is a traditional method of enhancing vyadhikshmatva (immunity). In this gold is given in combination with *madhu*, ghrita and other formulation with herbs to the child soon after birth. It helps in boosting up the intellectual power, physical strength and immunity in the body to fight against diseases. Although swarna is not an essential component of body it still acts as immunomodulator. Various researches on gold have proved its role as immunomodulator, antioxidant etc. Honey, which is an important ingredient of swarnaprashan, is made up of various pollen grains which act as an antigen. By its antigenic activity, it stimulates the immune system. The combination of equal ghee & madhu is mentioned as a viruddha ahara in Ayurveda. It may be possible that viruddha ahar stimulates the formation of antibody.

Which prevent the occurrence of disease.

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