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Suvarna Prashan A Comprehensive Classical Review of an Ancient.**Dr. Mayuri B. Kharat ¹, Dr. Pravat Kumar Dash ²**¹P.G. Scholar, Dept. of Kaumarabhritya, Yashwant Ayurvedic College, P.G.T. & R.C, Kodoli.²Professor & H.O.D., Dept. of Kaumarabhritya, Yashwant Ayurvedic College, P.G.T. & R.C, Kodoli.**ABSTRACT**

Suvarna Prashan (SP) is an ancient Ayurvedic neonatal and pediatric practice involving the oral administration of Suvarna Bhasma (processed gold) combined with honey, clarified butter (Ghrita), and neuro-protective herbal formulations. Described in classical Samhitas as Jatakarma Samskara (birth sacrament), it is claimed to enhance innate immunity, cognitive function, physical strength, and overall child development. A thorough review of primary classical Ayurvedic texts was conducted, including Kashyapa Samhita, Ashtanga Hridayam, Charaka Samhita, Sushruta Samhita, Sharangadhara Samhita, and Yogaratnakara. References pertaining to Suvarna Prashan, Lehana Karma, Suvarna Kalpa, and Jatakarma Samskara were identified, translated, and interpreted. Classical texts detail Suvarna Prashan's composition encompassing Suvarna Bhasma (nano-gold particles), Brahmi (*Bacopa monnieri*), Vacha (*Acorus calamus*), Shankhapushpi (*Convolvulus pluricaulis*), Ashwagandha (*Withania somnifera*), Yashtimadhuka (*Glycyrrhiza glabra*), Madhu, and Ghrita. Its Pushya Nakshatra timing and age-based dosing reflect a pharmacokinetic awareness consistent with modern drug therapy principles. Suvarna Prashan integrates mineral nano-pharmacology, herbal neuropharmacology, and immunology within a unified classical framework. Rigorous clinical trials and pharmaceutical standardization are warranted to establish it within evidence-based pediatric medicine.

Keywords: *Suvarna Prashan, Jatakarma, Suvarna Bhasma, Immunomodulation, Medhya Rasayana, Kaumarabhritya, Pediatric Ayurveda.*

INTRODUCTION

Childhood immunity and cognitive development are fundamental pillars of lifelong health. While modern preventive pediatrics relies on vaccination and nutritional supplementation, Ayurveda had established a systematic neonatal health promotion framework long before the formalization of immunology. Suvarna Prashan — the oral administration of processed gold (Suvarna) with medicated Ghrita, honey, and neuro-cognitive herbs — represents one of the most pharmacologically sophisticated practices within Ayurvedic Kaumarabhritya (pediatrics).[1]

The therapeutic significance of gold in medicine extends beyond Ayurveda. Chrysotherapy (gold-based anti-rheumatic treatment) was practiced in Western medicine, and modern nanomedicine has validated gold nanoparticles (AuNPs) for anti-inflammatory, immunomodulatory, antioxidant, and targeted drug-delivery applications. Suvarna Bhasma, produced through classical Shodhana-Marana procedures, consists of nano-crystalline gold particles analogous to modern AuNPs — providing a compelling scientific bridge between ancient pharmaceutical wisdom and contemporary nanomedicine.[10]

Despite widespread clinical use across India — particularly during Pushya Nakshatra camps organized by Ayurvedic institutions — a comprehensive classical review of Suvarna Prashan integrated with biomedical correlates remains limited. This article addresses this gap by systematically analyzing its classical foundations and translating them into the language of modern pediatric science.

AIMS AND OBJECTIVES

- To systematically compile and critically analyze the classical Ayurvedic references pertaining to Suvarna Prashan, exploring its pharmacological ingredients, method of preparation, procedural guidelines (Vidhi), indications, dose, timing, and the biomedical rationale embedded within classical descriptions.

MATERIAL AND METHOD

This is a classical literature-based review article. The following primary Ayurvedic texts were systematically reviewed for references to Suvarna Prashan, Lehana Karma, Suvarna Kalpa, and Jatakarma Samskara: Kashyapa Samhita (Lehadhyaya, Khilasthana), Ashtanga Hridayam (Uttara Tantra, Balarogadhikara) by Vagbhata, Charaka Samhita (Sharira Sthana, Chikitsa Sthana) by Agnivesha, Sushruta Samhita (Sharira Sthana) by Sushruta,

Sharangadhara Samhita, Yogaratnakara, Rasatarangini and Rasa Ratna Samuccaya. Relevant Shlokas (verses) were identified, transliterated, translated, and analyzed using contemporary concepts from immunology, neuropharmacology, nanomedicine, and chronobiology.

Classical References to Suvarna Prashan

Kashyapa Samhita — The Foundational Reference

The most comprehensive description of Suvarna Prashan is found in Kashyapa Samhita (Lehadhyaya, Khilasthana). Acharya Kashyapa — the father of Ayurvedic pediatrics — states:[1]

*"Suvarnam Madhusarpisham Lihyat Prashan Karma Cha |
Medhasvarnaayushah Pushtyai Balavarana Mangalam ||"*

— *Kashyapa Samhita, Lehadhyaya 18.1-2*

Translation: Gold administered by licking with honey and Ghrita promotes Medha (intellect), Varna (complexion), Aayusha (longevity), Pushti (nourishment), Bala (strength), Varana (immunity), and Mangala (auspiciousness). The text further documents dose-dependent outcomes: 30 days produces Parama Medhavi (highly intelligent) status and Vyadhibhih Na Cha Sprisanti (non-affliction by disease); 6 months produces Shruta Dhara (exceptional memory retention); continuous administration yields Rasayana (adaptogenic-rejuvenative) and longevity effects.

Ashtanga Hridayam — Vagbhata

*"Suvarnam Medhyam Aayushyam Mangalyam Balavaranam |
Paramojah Karasnigdhm Swarnabhasm Prayachhati ||"*

— *Ashtanga Hridayam, Uttara Tantra 1*

Vagbhata classifies Suvarna as Medhya, Aayushya, and Paramojahkara (supreme Ojas-promoter). In Ayurvedic physiology, Ojas — the ultimate refined metabolic product — parallels innate immune modulators including complement proteins, natural killer cell activity, and host defense mechanisms. The explicit mention of Suvarna Bhasma (gold ash) indicates classical awareness of a processed, bioavailable gold form.[2]

Charaka Samhita

Charaka describes the use of a Hiranmaya Patra (golden vessel) for Lehana administration during Jatakarma — gold vessels leach trace ionic gold into contact substances (especially in acidic honey), enriching the formulation with bioactive gold ions. Charaka

Samhita (Chikitsa Sthana 1) also enumerates the four Medhya Rasayanas — Mandukaparni (*Centella asiatica*), Yashtimadhuka (*Glycyrrhiza glabra*), Guduchi (*Tinospora cordifolia*), and Shankhapushpi (*Convolvulus pluricaulis*) — several of which are integral to contemporary Suvarna Prashan formulations.[3]

Sushruta Samhita

*"Jatakarma Vidhanena Suvarnam Madhu Sarpisham |
Lehayeth Brahmi Vaachaa cha Medhayaa Balavardhanam ||"*
— **Sushruta Samhita, Sharira Sthana 10**

Sushruta explicitly incorporates Brahmi (*Bacopa monnieri*) and Vacha (*Acorus calamus*) into the Jatakarma formulation — making this among the earliest documented multi-herb neuroprotective pediatric formulations in medical history. The combination reflects synergistic phytopharmacology where multiple bioactive compounds act on complementary neurochemical pathways.[4]

Yogaratanakara and Sharangadhara Samhita

Yogaratanakara emphasizes Pushya Nakshatra as the optimal administration timing. Sharangadhara Samhita provides pharmaceutical specifics on Suvarna Kalpa preparation, including Shodhana (purification) and Marana (incineration) procedures for Suvarna Bhasma, and Anupana (vehicle) modifications based on the child's Prakriti (constitutional type).[5,6]

Pharmacological Profile of Key Ingredients

Table no. 1: Key ingredients of Suvarna Prashan and their pharmacological properties

Ingredient	Botanical Name	Classical Karma	Biomedical Activity
<i>Suvarna Bhasma</i>	<i>Gold (nano-crystalline)</i>	Medhya, Rasayana, Ojaskara, Tridoshahara	NF-κB inhibition, ROS scavenging, macrophage/T-cell modulation
<i>Brahmi</i>	<i>Bacopa monnieri</i>	Medhya, Smriti-wardhana, Unmada-nashana	AChE inhibition, hippocampal neurogenesis, antioxidant neuroprotection
<i>Vacha</i>	<i>Acorus calamus</i>	Medhya, Vak-shuddhi, Unmada-nashana	GABAergic, cholinergic, dopaminergic neuromodulation
<i>Shankhapushpi</i>	<i>Convolvulus pluricaulis</i>	Medhya, Smriti-wardhana, Nidrajanana	Anxiolytic, antidepressant, thyroid-modulating, memory-enhancing
<i>Ashwagandha</i>	<i>Withania somnifera</i>	Balya, Rasayana, Vata-shamana	Adaptogenic, Th1/Th2 modulation, cortisol reduction, NK cell

			activation
<i>Yashtimadhuka</i>	<i>Glycyrrhiza glabra</i>	Medhya, Rasayana, Vishghna	Anti-inflammatory, immunomodulatory, mucosal protective
<i>Madhu</i>	<i>Honey</i>	Yogavahi, Sandhaniya, Anupana	Mucoadhesive drug delivery, anti-biofilm, pH 3.5–4.5 enhances AuNP bioavailability
<i>Ghrita</i>	<i>Clarified butter</i>	Medhya, Snigdha, Smritivardhaka	Lipid-based drug delivery (LBDDS), butyrate-mediated gut and neural protection

Suvarna Bhasma (Nano-Gold)

Prepared through repeated Shodhana-Marana cycles, Suvarna Bhasma yields nano-crystalline gold particles (15–50 nm), confirmed by XRD, TEM, and EDS analysis.[10,14] Classical attributes — Sukshma (sub-particulate), Sheeta Veerya (anti-inflammatory), Tridosahara, Medhya, Rasayana, Ojaskara — correspond to documented AuNP activities: NF- κ B signaling inhibition (anti-inflammatory), ROS scavenging (antioxidant), and macrophage/T-cell modulation (immunomodulatory).

Madhu and Ghrita as Yogavahi Vehicles

The combination of Madhu and Ghrita as Anupana reflects a deliberate pharmacokinetic choice. Madhu's Yogavahi (intelligent carrier) property parallels modern mucoadhesive drug delivery — its low pH (3.5–4.5) stabilizes Suvarna Bhasma nanoparticles and enhances mucosal permeation.[3] Ghrita functions as a classical lipid-based drug delivery system (LBDDS), enhancing lymphatic absorption of lipophilic phytoconstituents and supporting myelin development and gut microbiome integrity.

Procedural Guidelines (Vidhi) and Scientific Basis

Timing — Pushya Nakshatra and Brahma Muhurta: Administration during Brahma Muhurta (04:30–06:00 AM) aligns with peak HPA axis activity, circadian cortisol surge, and NK cell/dendritic cell trafficking — consistent with chronopharmacology principles.[13]

Dose (Matra): Age-appropriate dosing from ~15–30 mg (1/4 Ratti) in neonates to ~60–125 mg (1 Ratti) in older children — within safety thresholds for gold nanoparticle administration (0.1–1 mg/kg body weight) validated in contemporary nanomedicine research.[10]

Route — Jihva Lehana (Lingual Administration): Placement on the tongue facilitates sublingual and buccal absorption, bypassing first-pass hepatic metabolism. This route is particularly advantageous for nano-sized Suvarna Bhasma particles, enabling transcellular and paracellular mucosal penetration.

Classical Indications and Biomedical Correlates

Table no. 2: Classical therapeutic claims of Suvarna Prashan and biomedical correlates

Classical Term	Classical Meaning	Biomedical Correlate
<i>Medha-var dhana</i>	Intellect and cognitive enhancement	Neuroplasticity, AChE inhibition, hippocampal neurogenesis
<i>Varana / Bala-var dhana</i>	Strengthening body's protective shield	Innate immune stimulation, NK cell activation, cytokine modulation
<i>Aayushya</i>	Longevity promotion	Antioxidant protection, telomere preservation, mitochondrial support
<i>Agnivar dhana</i>	Enhancement of digestive fire	Gut microbiome diversity, digestive enzyme stimulation
<i>Varna-prasadana</i>	Improved complexion	ROS reduction, anti-inflammatory, improved microcirculation
<i>Vyaadhihi Na Sprisanti</i>	Non-affliction by disease	Broad-spectrum immunomodulation, mucosal immunity enhancement
<i>Shruta Dhara</i>	Retention of all heard	Working memory, long-term potentiation in hippocampal circuits
<i>Prajasthapana</i>	Promotion of healthy progeny	Neuroendocrine development, reproductive system maturation

DISCUSSION

The classical description of Suvarna Prashan reveals a pharmacologically coherent, multi-target therapeutic system developed centuries before modern immunology and neuroscience. Its core component — Suvarna Bhasma — exhibits properties strikingly analogous to gold nanoparticles: nano-crystalline particles (10–50 nm) with surface plasmon resonance properties, enhanced endocytic cellular uptake, macrophage polarization modulation, and documented ability to cross the blood-brain barrier.[14,15]

The herbal ensemble — Brahmi, Vacha, Shankhapushpi, Ashwagandha, and Yashtimadhuka — operates across complementary neurochemical systems: cholinergic (Brahmi, Vacha), GABAergic (Vacha, Shankhapushpi), serotonergic (Shankhapushpi), and HPA-axis modulation (Ashwagandha).[11,12] Their co-administration with nano-gold, which

enhances CNS permeation, likely produces synergistic neuromodulatory outcomes not achievable by individual components alone — a principle now recognized in modern polypharmacology.

The Madhu-Ghrita vehicle system reflects an intuitive mastery of biopharmacokinetics. Honey's acidic environment stabilizes nanoparticles against aggregation and enhances mucosal permeation, while Ghrita's lipid matrix functions as a classical LBDDS, facilitating lymphatic absorption and systemic bioavailability of lipophilic constituents.[3] The dose-response relationship documented by Kashyapa Samhita — with distinct outcomes at 30 days, 6 months, and continuous administration — aligns with pharmacokinetic principles of drug accumulation and steady-state tissue concentration.[1]

The chronobiological dimension of Suvarna Prashan — Pushya Nakshatra and Brahma Muhurta timing — finds support in modern chronopharmacology evidence that drug absorption, metabolism, and immune receptor sensitivity vary significantly with circadian phase.[13] The classical insistence on early morning administration represents empirically observed optimization of drug-host interaction embedded within ritual prescription.

CONCLUSION

Suvarna Prashan is a classical Ayurvedic pediatric practice of profound scientific depth. Its convergence of mineral nano-pharmacology, herbal neuropharmacology, lipid-based drug delivery, and chronobiology within a unified formulation reflects the sophisticated empirical knowledge of ancient Ayurvedic scholars. Classical references from Kashyapa Samhita, Ashtanga Hridayam, Charaka Samhita, Sushruta Samhita, and supplementary texts collectively validate its multi-dimensional therapeutic scope encompassing immunity, cognition, growth, and longevity.

Future research should prioritize standardized randomized controlled trials evaluating immunity markers (IgG, IgA, NK cell activity), cognitive outcomes, and safety profiles. Pharmaceutical standardization of Suvarna Bhasma — including particle size

characterization, elemental purity, and biological activity assays — is a prerequisite for translating this classical practice into globally recognized evidence-based pediatric medicine.

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