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THE SIGNIFICANT ROLE OF SWARNA PRASHANA ON PRE-SCHOOL GOING CHILDERN – A NARRATIVE REVIEW

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ABSTRACT

An even safer option for naturally boosting immunity is to use Ayurvedic remedies. An effective and safe ayurvedic combination for a child's proper growth and development is Swarna Prashan. Swarna Prashan is presenting Swarna as an oral vaccination for children, either by itself or in combination with liquid herbs. One of the samskaras in Ayurveda is Swarna Prashan. Swarna Prashan is introduced from early childhood to teenage years. In Ayurvedic pediatrics, swarna prashana is a metallic medicinal concoction that is commonly employed. Swarna prashan (gold nanoparticle), gou ghrita (cow ghee), madhu (honey), and other medhya dravyas (medication which boost intellectual, memory) are the major constituents of Swarna prashana. The Indian classical book states that because of Swarna prashana's infinite size, forms, charges, and surface activity, it has been suggested as a powerful medication for immunotherapies and vaccine creation. In this paper, we outline the conceivable mechanism by which Swarna Prashana contributes to the maturation of dendritic cells and the consequent activation of T cells. However, because it is a herbo-metallic compound, the traditional Ayurvedic literature vouch for its efficacy and safety.

KEYWORDS- Swarna Prashan**,** childhood, teenage, herbo-metallic compound, etc.

INTRODUCTION

Ayurvedic practices have been modernized and brought to a worldwide audience. Gold has been regarded as one of the most crucial components in preserving human health since antiquity. Acharya Kashyap introduces the word Swarnaprashna [1]. Numerous sources support the claim that the name "Swarnaparashna" refers to the administration of gold either by itself or in combination with other herbs in a Leha/Prashan form. One of the most significant public health programs run by ayurvedic institutes in several Indian states is called Swarna Prashan. For the sake of their children's health, parents must be made aware of the need of never missing a dosage. A significant shift in the health of children was noted as a result of the Swarnaprashna's extended offering.[2]

We might refer to it as a unique form of Ayurvedic immunity. Prophylaxis, or prevention, is an age-old, dependable, secure, and effective technique in Ayurveda. Based on its own theory and experience, the approach is completely distinct and emphasizes the control of immunity. In Ayurveda, Swarna Prashan is traditionally performed. With the advent of gold salts in liquid or semi-solid form, children as young as 16 years old can receive them to support their intellectual development and immunity [3]. An effective and safe ayurvedic combination for a child's proper growth and development is Swarna Prashan. Many nations use vaccinations that include mercury as a preservative called thimerosal [4]. This is detrimental to health; thus, it was necessary to genuinely search for safer and more advantageous methods. The basic idea of Ayurveda is immunization, or protecting the body from illness. Pandemics, climate change, and newly emerging illnesses are harming people of all ages in our day and age, but particularly youngsters whose bodies are still developing. The authors thought that review writing was necessary because they had seen many positive health effects on the youngsters in their neighbourhood.

MATERIAL AND METHODS

PLACE OF STUDY – in our Institute of central Library

SOURCE OF DATA – Different articles and Authentic Websites like- AYU, CCRAS, PUBMED, J-AIMS etc.

HISTORICAL CONTEXT

Ayurveda, the traditional Indian system of medicine, has been practiced for thousands of years. Swarna Prashana finds its roots in ancient Ayurvedic texts such as Kashyapa Samhita, which mentions the benefits of Swarna Prashana in strengthening immunity, improving intelligence, and promoting longevity.

INGREDIENTS OF SWARNA PRASHANA

Green stem Kashaya (water extract) from Guduchi (Tinospora cordifolia) (Thunb. Miers) was made and reduced to quarter. 50 ml of Ghee was added to 200 ml of Guduchi Kashaya, along with two grams of powder for each of the following: Brahmi (Bacopa monnieri (L.) Pennell), Vacha (Acorus calamus L.), Jatamamsi

(Nardostachysjatamansi (D. Don) DC.), Ashwagandha (Withaniasomnifera (L.) Dunal), Shankhapuspi (Convolvulouspluricaulis Choisy), Yastimadhu (Glycyrrhiza glabral.), Pippali (Piper longum L.) and Maricha (Piper nigrum L.), and 50 ml of processed ghee. The mixture was then cooked over low heat in accordance with the preparation of medicated ghee as described in Ayurvedic literature. Gold's toxicity is also addressed in several publications after the trolls of some intellectuals, but only in cases where improper processing has occurred [5].

PROCEDURE TO GIVE THE SWARNA PRASHANA

An effective and safe ayurvedic combination for a child's proper growth and development is Swarna Prashan. In certain research, parents are encouraged to feed their child 1 milliliter each day on an empty stomach for 30 days. Body weight, head circumference, chest circumference, and, if necessary, a chest x-ray is all monitored, and all data is documented on their treatment card. Research carried out in Bangalore in 2012 by Rao N Prasanna et al. [6] Swarna Prashan has been given to children in the 0–16 age group as part of a multicentric public health campaign, and regular height, weight, and chest measurements have been taken. The majority of research recommend Swarna Prashan as a daily or monthly dose, based on the age range of the children, in Pushya Nakshatra. It was noted throughout the assessment that giving Swarna Prashan on Pushya Nakshatra (once a month) did not provide significant health benefits, according to an experienced Vaidya. Giving Swarna Prashan (Suvarna Bhasma) for three months at a dose of less than 0.2 mg each is the most efficient method. Swarna Prashan can be taken for ten to twelve days each month if this is not possible. Repeating these 6–12 cycles will yield the greatest health advantages. Some publications indicate Swarna Prashanin in liquid drop form, and Swarna Bindu is the vaccination form. Every research experiment uses a new recipe but the same components. For example, this ghrita is triturated once a month on Pushya Nakshatra day using 1.2 grams of Swarna Bhasma and 50 milliliters of honey. When administering this medicine to youngsters, it is advised to administer 4 drops orally, each containing 2 mg of Swarna Bhasma. 50 ml of refined ghee called Murchita Ghrita and one Swarna Prashan, two grams each, are needed for an Ayurvedic dish that must be prepared over low heat.

SIGNIFICANT BENEFITS TO CHILDREN

A Traditional approach to healthcare, Swarna Prashan treats the patient as a whole rather than simply their symptoms. If the baby is nourished for a month, he will be very intelligent and free from any illnesses. A youngster will be able to remember whatever he hears if fed for six months [7]. In the Swarna Prashan clinic experiment, parents of children older than three shown a good level of reaction towards improving their children's overall health [8], particularly in relation to common viral illnesses. Toddlers who received six doses of Swaranamrit Prashan saw both improved growth and developmental improvements. Due to its similarity to

IgA in terms of antibody formation, Swarna prashna has demonstrated efficacy in treating TB infections and malnutrition [9]. Both the peritoneal macrophage count and the macrophages' phagocytic index rose dramatically after using Swarna Bhasma. IgG is the foundation of the majority of our body's antibody-based defences against pathogen invasion [10]. When treating TB, the regular dose of rifampicin can be lowered by introducing Swarna Prashana. Swarna Prashan enhances children's growth and development and helps them build immunity. Since several research have also indicated sampling for SGOT, SGPT, and creatinine clearance, no hazardous impact has been noted in any of the investigations. Swarna Prashan has the potential to reduce the incidence of common bacterial and viral illnesses in children.

If this vaccine is administered to children in a timely manner, it may help to reduce antimicrobial medication resistance, which is a significant problem in paediatric health. If malnutrition is included in children's normal vaccinations, problems with it can be reduced. Although the process of developing immunity is gradual, it has enhanced children's and future adults' quality of life. the giving of Swarna (gold) to kids [11,12] in order to:

Proponents of Swarna Prashana claim a wide range of benefits, including:

- **Boosted Immunity:** Regular administration is said to enhance the immune system, making children less susceptible to common illnesses.
- **Improved Digestion:** The combination of gold, honey, and ghee is believed to support digestive health.
- **Enhanced Cognitive Function:** It is thought to improve memory, concentration, and overall brain function.
- **Physical Growth and Development:** Swarna Prashana is also believed to support physical development and strength.
- **Detoxification:** The practice is said to help in the detoxification of the body, removing impurities and enhancing health.

SCIENTIFIC PERSPECTIVE

The scientific community has shown interest in Swarna Prashana, but there is a need for more rigorous, peer-reviewed research to substantiate its claimed benefits. While gold has been historically used in various cultures for its medicinal properties, modern science requires evidence-based studies to validate these traditional practices.

SAFETY AND CONCERNS

- **Quality Control**: Ensuring the quality and purity of Swarna bhasma is crucial, as impurities can lead to adverse effects.
- **Dosage:** Appropriate dosage must be adhered to, as excessive gold intake can be toxic.

- **Regulation:** The lack of standardized regulation in the production and administration of Swarna Prashana poses a risk.

MODE OF ACTION OF SWARNA PRASHANA

The smaller gold particles known as Swarna Prashana may vary greatly in terms of their sizes, shapes, charges, and biomolecular compositions [13]. Ghee and honey's molecular components provide these particles their great stability, low toxicity, and immunogenicity conjugation [14]. Sugars, amino acids, proteins, lipids, vitamins, and other elements are included in the molecular ingredients [15]. These substances also aid in the capping of the gold particles in swarna prashan, which shows multivalent contacts between the particle and the membrane receptor of dendritic cells, one kind of antigen-presenting cell (APC) [16, 17]. One effective tactic for advancing immunotherapies and vaccine development is thought to be targeting these dendritic cells [18].

Consequently, the following is a likely method for how swarna prashana interacts with dendritic cells: receptor-mediated endocytosis, pinocytosis, and phagocytosis are among the strategies that dendritic cells choose to internalize swarna prashana particles [1, 4, 5, 20]. The swarna prashana particles in the cytosol will be taken up and internalized by immature dendritic cells. Consequently, immature dendritic cells differentiate into mature dendritic cells, resulting in the expression of CD83 and CD86 as well as morphological alterations in the dendritic cells during maturation.

Based on the antigen presented through the MHC complex, the internalized particles, or antigens, are processed in the cytoplasm and start the T cell response [19]. Interestingly, dendritic cells experience intercellular trafficking as a result of swarna prashana particles because of their mosaic properties in terms of size, shape, charge, and composition. As a result, dendritic cells efficiently present the T cells with many antigens [20]. Soluble cytokines such as IL-7, IL-6, IL-10, IL-12, IL-23, TNF, and IFN are thought to be necessary for activated dendritic cells and T cells to display an immunogenic response. The creation of preventative and therapeutic vaccines is one possible use of Swarna Prashana in immunomodulation [21].

The most promising particles are those made of gold, which have no negative impact on live cells. It is thought that gold has no negative effects when used in ayurvedic, herbal, and herbo-mineral preparations to treat degenerative and chronic illnesses [22]. Utilization in the vaccinated organism, high loading efficiency for the target chemical, improved capacity to pass various physiological barriers, and minimal systemic adverse effects are the benefits of biodegradable gold particles. As corpuscular carriers, biodegradable and gold nanoparticles most likely have comparable immunological effects. Gold nanoparticles are being employed in the creation of next-generation vaccines due to recent studies showing their minimal toxicity [23]. Further clinical trials are necessary to determine the relationship between swarna prashana particles and human functions, as there is currently no comprehensive research on animals or cell line models available.

CONCLUSION

Swarna Prashan can improve children's quality of life, which will benefit future generations. Consequently, society needs an immune modulatory agent to be available. Following a verified comprehensive review and clinical studies, Swarna Prashan can be included to the regular vaccination schedule. It fortifies the body's immune system and shields babies against recurrent infections. Science is required to enhance the existing immunization schedule with Swarnaprashna in children, since recent immunization data indicates that immunizations and immunization schedules are insufficient to combat the infections. It is economical, kid-friendly, and accessible to people from all socioeconomic backgrounds. All youngsters under the age of sixteen should take Swarna Prashan to support their intelligence and immunity. The government should consider implementing the numerous authors' recommendations for this vaccination schedule plan, as it would not only reduce childhood illness burden but also free up funds and resources that would otherwise be used for disease treatment to improve health care services. The burden of issues related to paediatric health can be lessened.

CONFLICT OF INTEREST- NIL

SOURCE OF SUPPORT -NONE

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