SWARNAPRASHANA: A GIFT OF AYURVEDA FOR THE HEALTHY CHILDHOOD

Dr. Dattatrya G. Parde¹*, Dr. Laxmikant G. Thakare² and Dr. Vidya S. Ingole³

¹PG Scholar, Department of Kaumarbhritya, Bhausaheb Mulak Ayurved Mahavidyalay Nagpur, M.S. - 440009.
²PG Scholar, Department of Kaumarbhritya, Bhausaheb Mulak Ayurved Mahavidyalay Nagpur, M.S. - 440009.
³Hod & Professor Department of Kaumarbhritya Tantra, Bhausaheb Mulak Ayurved Mahavidyalay Nagpur M.S. - 440009.

ABSTRACT

Administration of treated gold in children is an exclusive preparation stated in Ayurveda as “Swarnaprashana” by Acharya Kashyapa thousands of years ago. He described unmistakably the administration of Swarna (gold) in children for the welfares of improving intelligence (Brain power), digestion and metabolism, somatic strength, insusceptibility, skin texture, potency (fertility), and life span. There are several preparations of gold and medicated preparations also described by many Acharya for persistent practice in children. The use of Swarnaprashana in children is mainly associated with two Ayurvedic contexts i.e. Lehana (supplementary feeds) and Jatakarma Samskara (newborn care). This review article is an effort to judgmentally evaluate the existing information, which might be supportive in clearance of the some misconceptions on the subject. The age and way of administration, advantages, disadvantages and dose as per many classical textbooks of Ayurveda are debated here along with the reports of associated scientific studies. This review suggests that the benefits of Swarnaprashana can be attained at various stages like as a general health promoter and in specific to improvement of intelligence, ingestion, metabolism, invulnerability, physical power, skin texture, or fertility. Ayurveda mentions only sanitized and treated form of gold for oral administration. The time at which Swarnaprashana must be administered and its period can be determined depending upon the wanted result for healthy childhood.
KEYWORDS: Jatakarma Samskara, Lehana, treated gold, Swarnaprashana, Hiranya, healthy childhood.

INTRODUCTION
The practice of metals and minerals was renowned to manhood from thousands of years ago. Gold is the most precious metal, which was used to prepare statuaries of Gods, ornaments, coins etc, in the whole universe. Gold is one of the most appreciated and prehistoric metal, which is used for the preventive and therapeutic purposes. With honors to its early information to Indians, an initial reference is found in the course of prehistoric period, stated as Hiranya (synonym with Swarna) in Vedic works. Manusmriti, the prehistoric Indian literature of morality, comments that a Dwija (brahmin) has to go through Samskara (purificatory ritual) like Jatakarma (procedures at birth) and Chudakarana (ceremony of tonsure) to get free from the impurities, which might be existing in the Bija (sperm and ovum) and also due to the stay inside the uterus as Garbha (fetus). Here, Jatakarma Samskara (newborn care) is stated as a decontamination process, in which in a little while after cutting the umbilical cord, the combination of gold, honey, and ghee is offered the newborn by chanting Mantra(spiritual hymns). In Ayurveda there were numbers of references about gold, that it have various types medicinal properties and uses at different contexts. Gold is the one of the most valuable Dhatu, among Sapta Loha(seven metals). It is characterized in Shuddha Loha(pure metal), which is supposed to be having preventive as well as curative qualities. Gold is directed to use internally beforehand conception because of its Rasayana (rejuvenator) and Vajikarana (aphrodisiac) properties so as to beget a healthy baby. Later conception, it is used in Pumsavana Karma (It is practice completed to achieve the wanted sex of the baby and for the proper intra-uterine growth and development of the fetus and for healthy child.) Later birth in Lehana (supplementary feeds) and Jatakarma Samskara gold has been supposed to have a most important part to play. As per the kid grows, gold is suggested to be given in single form or in medicated form for getting improved Agni (digestive power and metabolism), Bala (physical power and invulnerability), Medha (intellect), Varna (color and skin texture), Ayu (lifespan), etc., Gold is recommended in Arishta Lakshana (fatal signs),because of its protective as well as curative action. Such as Gold is the noble metal, which is having significant results in the human body starting before and after conception up to death. It is clearly stated in the manuscripts of Ayurveda that any form of gold must be used orally, only when it’s appropriate decontamination. If it not done properly, which might result in harms that may be life-threatening. Which type of gold
must be used, method of administration of various forms, theirs advantages and disadvantages also therapeutic indications as well contraindications are also noticeably enlightened in Ayurveda.\cite{3}

**MATERIALS AND METHODS**

The materials were collected the from classical manuscripts of Ayurveda as well as related magazines and research journals.

**SWARNAPRASHANA IN LEHANA**

The Lehana represents use of several herbal medications, ghee formulations, and gold only as complementary feeds in which detailed suggestions are listed. Swarnaprashana the term developed by Acharya Kashyapa for administration of gold. This universal formulation has been described where the gold have to be administered with water, honey, and ghee on a clean stone facing eastern direction and made the Shishu (infant)\cite{11} get the better of the alike. The specific advantages of the Swarnaprashana are as stated bellow:\cite{7}

1. Medha Agni Bala Vardhanam (improvement of intellect i.e. brain power, digestion, metabolism, invulnerability, and physical power)
2. Ayushyam (Enhancing lifespan)
3. Mangalam (fortunate)
4. Punyam (moral)
5. Vrushyam (aphrodisiac)
6. Varnyam (enhancement of color and skin texture)
7. Grahapaham (safeguard from evil spirits and microorganisms).

The exact advantages of Swarnaprashana according to the period of administration have been stated as follow

1. If it is administered for the period of 1 month, the child will become Parama Medhavi (highly intelligent) and Vyadhibhir Na Cha Drusyate (will not be exaggerated by any illness)
2. If it is administered for the period of 6 months, the child will become Srutadhara (will be capable to recall the things, which are just heard).\cite{7}

All the upstairs stated benefits are representing the improvement of all advantageous elements mandatory for appropriate growth and development of a child, which is considered to be fast in the period of Shaishavavastha (infancy).
SWARNAPRASHANA IN JATAKARMA SAMSKARA
Acharya Sushruta mentioned the administration of Swarna (Gold) with honey (Madhu) and ghee between the processes of Jatakarma Samskara, i.e. as a single dose at birth in the procedure of new born care. He delivered the justification behind this preparation that, there were no satisfactory secretion of breast milk for the first 4 days after delivery and so that to support the infant with esteem to preventive and nutritional aspects such rehearses are essential.[8] Acharya Vagbhata recommends to provide a mixture of herbal drugs in a specific designed spoon as that of the leaf of holy banyan tree, made up of gold to the infants to improve Medha (intellect).[9] The use of Swarna with other herbs is also recommended by Acharya Vagbhata in Jatakarma Samskara.[10]

ADMINISTRATION OF SWARNAPRASHANA
In Jatakarma Samskara, it is said that Swarna must be administered in a little while after birth, as one of the procedures in new born care. In Lehana it would be offered in Shishu. Acharya Sushruta recommends the administration of Swarna with other herbs alike Shankhapushpi (Convolvulus pluricaulis Choisy), Kushtha (Saussurea lapa Clarke), Vacha (Acorus calamus L.), etc., with honey and ghee for the period of one year.[12] The term Kumara is too used in the same backround which can symbolize the childrens age group in whom development of reproductive system is not yet complete.[13] With respects to above references, it is to be supposed that Swarna must be administered with honey and ghee.

Acharya Vagbhata stated particular mixtures of gold and herbal drugs as those who wish Ayu, Medha, Lakshmi (wealth), and Kama (sensual enjoyment) must consume it along with Shankhapushpi (Convolvulus pluricaulis Choisy), Vacha (Acorus calamus Linn.), Padma Kinjalka (stamen of Nelumbo nucifera Gaertn.), and Vidari (Pueraria tuberosa DC.) respectively.[10] A intimation for the administration of Swarna in newborn is also enlisted in the manuscript Rasaratna Samuchaya,[4] which is very comparable to above references. There is no reference of any specific day or time for Swarnaprashana in children.

DOSAGE OF SWARNAPRASHANA
The specific dosage of Swarnaprashana has not mentioned by Acharya Kashyapa. However, he has fixed the general dosage of children according to age in the same context from birth. The same can be followed to fix the dosage of Swarnaprashana. A few other presented references concerning per day dose of Swarna Bhasma from various manuscripts are as listed below:
1. 1/4th–1/8th Ratti (15–30 mg) Swarna Bhasma
2. 2 Gunja (250 mg)
3. 1 Gunja (125 mg)/As per age
4. 1 Harenu
5. 1/32 Ratti (3.9 mg)
6. 15.5–62.5 mg of Swarna Bhasma.

By taking these adult dosages as reference standards, dosage in children can be calculated.

FORMS OF SWARNA
The Classics manuscripts of Ayurveda mention specific forms of Swarna for oral administration such as Patala/Mandala (leaf/foil), Churna (powder), Bhasma (ash).

SAFETY MEASURES FOR SWARNAPRASHANA
Acharya were aware of all the serious adverse effects if gold is used in impure form which is marked from the justification of Shodhana (purification) of Swarna in particular. It is mentioned that if Swarna is administered without proper processing, it will abolish the happiness, potency, and strength of the children and it will lead to appearance of a group of diseases. Mental disturbances and also death, may cause due to use impure form Swarna.

DISCUSSION
The term Swarnaprashana is stated by Acharya Kashyapa. In view of many references it can be stated that the term Swarnaprashana indicates the administration of gold alone or along with other herbs in a Leha/Prasha form. He explained Swarnaprashana in the context of Lehana. Lehana has been point out for those infants who are healthy, but have improper breastfeeding and are having minor functional illness of metabolism. It is contraindicated in seriously unhealthy infants and also on daily basis. Swarnaprashana can be used in all infants as it provide proper level of nourishment, metabolism, help to attend desired growth and development, physical power, and insusceptibility. It is the only type of gold formulation designated with its specific advantages according to the period of administration. Although Lehana is contraindicated on a daily basis, Swarnaprashana alone can be constantly used for a period of 1 or 6 months to get its specific benefits in children as stated by Acharya. Further research studies could reestablish the above said benefits of Swarnaprashana with respect to its duration. In Lehadhyaya of Kashyapa Samhitha, Firstly stated the formulation of Swarnaprashana. By taking consideration the indications which are mentioned in Lehanadhya, We can say that Shaishava Avastha is the correct period for Lehana. Acharya
Kashyapa might have been understood the role of gold, as it is a physiologically important element for proper nutrition. So that he to include the gold as an important metal to be used in therapeutics. This exact remark may also be due to some particular action of gold in that age group of children, which is observed in the following studies. In a study, trace elements including gold were measured in human placenta and newborn liver at birth.\(^{[17]}\) A trace elements like zinc, copper and gold were measured in the hair of newborn infants.\(^{[18]}\) In a pharmaco-clinical study on neonates Madhu-Ghrita-Swarna-Vacha combination showed a significant effect of humoral anti-body formation and it acted on immunological system, which was evident by triggering the response of immunological system by a rise in the total proteins and serum IgG levels.\(^{[19]}\) Fundamentally, childhood is the period of growth spurts, which is considered up to 16 years of age, as per Ayurvedic classics. Acharya Charaka comments a period “Vivardhamana Dhatu Avastha” from 16 to 30 years of age in which growth and development is observed. According to him, this period comes under Balyavastha (childhood).\(^{[20]}\) Use of gold is recommended in new born care (Jatakarma Samskara), up to one year of age and in Kumara (infants). This wide range of age is recommended for use of gold always arise queries concerning the mentioned benefits of Swarnaprashana in children. It can be believed that the benefits of Swarnaprashana can be accomplished from infancy to adulthood with a wide range of actions influencing the growth and development of a child. The age at which it can be used should be dependent upon the estimated effect in the body. In view of all the above mentioned references it can be stated that the action of this noble metal might be at multiple levels like as a general health promoter or in specific to enhancement of intelligence, metabolism, immunity, physical strength, fertility, complexion, etc. As a general tonic, it can be administered in any age group. For the benefit as an immuno-modulator, it can be administered in children in early ages as this period until one year is considered to be the most vulnerable time for infections due to immature immune system. It can be even administered in case of immunodeficiency states provided that there is no serious illness associated with. The action of gold in the immune system can be justified from the following study reports. Pharmacological studies showed specific and nonspecific immune responses, which were modified in a positive manner in Swarna Bhasma-treated mice. It also had a stimulatory effect on peritoneal macrophages, which may be helpful to fight against infections.\(^{[21,22]}\) In adolescence, there is the presence of secondary sexual characters, which signify the development of the reproductive system. This could be the right period to get the benefit of Swarnaprashana as a fertility enhancer. In a study measuring trace elements in endometrium and decidua, looking for cyclic variations, including those during pregnancy,
gold was found in human endometrium and decidua. The recounted levels of gold were slightly lower around mid-cycle than at other stages of the cycle.\cite{23} In male reproductive system, gold was measured in semen and reported that it is the richest source of gold reported in biological materials.\cite{24} Another study suggests a significant stimulatory effect of gold chloride on female reproductive activity in immature rats.\cite{25} To get benefited as an enhancer of intelligence, Swarnaprashana can be given from birth and specifically for a period of 1 or 6 months continuously as mentioned in the classic. In a study colloidal gold was found to improve cognitive functioning, which was measured by IQ scores.\cite{26} As there are various of forms of Swarna stated, selection of the appropriate form is a major inconvenience. Acharya Kashyapa has stated that the Kanaka\cite{7} (a synonym of gold) can be used along with water, honey, and ghee. The idea behind this may be that as per the availability at that time in its pure form, gold could be administered directly and by rubbing on a stone micro particles of gold might be procured readily. Later, other forms of Swarna were stated specifically Bhasma which may be due to the development of pharmaceutical methods in Ayurveda like Rasasastra (metallurgy) as a separate branch of Ayurveda. Any form of gold, which is having better bioavailability should be the first choice for oral administration. The bioavailability of all the forms of gold is yet not established. A few related study reports are cited below. Swarna Bhasma is said to have nanoparticles of gold which comprises gold-containing particles that are globular and have an average size of 56–57 nm.\cite{27} In blood compatibility study, it was found that Swarna Bhasma contained gold nanoparticles with crystallite size 28–35 nm and was 90% pure gold.\cite{28} Another study found that colloidal gold uptake in gastrointestinal tract is dependent on particle size that is, smaller particles cross the gastrointestinal tract more readily.\cite{29} It is very obvious in children that even slight negligence in the administered drug can cause serious adverse effects due to their highly sensitive body systems, which are still under rapid growth and development. Acharya had a very lucid idea regarding the significance of refinement of Swarna before internal administration. This is the reason that they have specifically pointed out the adverse effects of gold if administered without proper processing. Depending upon the form to be used, suitable processing should be adopted; that is, proper purification has to be performed if pure gold has to be administered and if Bhasma after proper purification and incineration. The particles of Swarna Bhasma were reported as non-cytotoxic.\cite{28} In a study of chronic toxicity of Swarnabindu prashana no cytotoxicity was observed.\cite{30} There is no any specific day or time for administration of Swarnaprashana. Acharya Kashyapa mentions east direction to which one should face, while preparing Swarnaprashana. In the context of Rasayana\cite{5} and
Pumsavana Karma,[6] Acharya Susrutha and Charaka, respectively mention the usage of Swarna on Pushya Nakshatra (a star in Hindu calendar). The current popular practice of Swarnaprasna on only the day of Pushya Nakshatra may be due to the belief that it is an auspicious star to administer any medication due to its nourishing effect.[31] However, such administration once in a month in every age group of children without proper dosage fixation may not yield any benefit as mentioned in classics. Scientific studies in this direction may be helpful to make this practice unambiguous.

CONCLUSION

Swarnaprasna does not suggest use of particular form of gold on a particular day or time. Relatively it is the administration of pure gold alone or various forms of gold along with various medicinal herbs stated in ayurvedic text, where this specific word merely means the administration of gold. The selection of the form of gold must be depends upon the factors such as better bioavailability, no adverse effects, easier in preparation, and administration, which should be standardized by scientific studies. Indefinite usage in terms of dose, duration, and condition will absolutely produce adverse effects in the body, specifically in children. The benefits of Swarnaprasana in children as told by Acharya Kashyapa and others are to be studied with the help of various experimental models and also at clinical levels so as to reconstructed the unaccepted facts due to lack of scientific support. The benefits of Swarnaprasana in children are multidimensional. Enthusiastically, Swarnaprasana can be stated as a gift of Ayurveda for the healthy childhood.

REFERENCES


