



ANCIENT USE OF SWARNAPRASHANA AS AN IMMUNOMODULATORY EFFECT: AN EVIDENCE BASED OBSERVATIONAL STUDY IN CHILDREN

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ABSTRACT

Swarna has been utilized in many forms throughout history in differing doses, including raw gold, pure metal, gold foils, red colloidal solution, Swarna Patra, Swarna Parpati, and Bhasma, among others. *Swarnaprashana* is a technique in which Swarna and herbs are administered orally by Children in the shape of liquid, semi-solid, or paste form. *Swarnaprashana* is created by combining scientific inputs and references from Ayurvedic traditional literatures with *Swarnaprashana*. Madhu + Ghrita + Vacha Churna + Swarna Bhasma + Amrita Satva + Haritaki Churna + Brahmi Churna + Kustha are the constituents of *Swarnaprashana*. *Swarnaprashana* has been administered once in a month at Rajiv Gandhi Ayurvedic College and Hospital, Bhopal, MP, India as a public health initiative. The current study describes how *Swarnaprashana* has evolved over time to become the current form of *Swarnaprashana*.

INTRODUCTION

Since ancient times, gold has been frequently utilized in medical preparations because it is thought to be therapeutically beneficial.¹ The use of gold treating illnesses, either alone or in combination with other medicinal components, may be found in ancient Ayurvedic texts.² After correctly comprehending the possibilities of Swarna, the ancient world's health care system utilized it appropriately and efficiently. Swarna has been utilized to promote long life and fight the ageing process since then.³ Furthermore, it had aided in the development of children's strength and vitality. Swarna has been utilized in many forms throughout history in differing doses, including raw gold, pure metal, gold foils, red colloidal solution, Swarna Patra, Swarna Parpati, and Bhasma, among others.⁴

The Rasayan (Rejuvenation) characteristic of Bhasmas of metals (incinerated metal) promotes immunity and bodily firmness.⁵ Swarna Bhasma (incinerated gold) is a Kantikara (complexion) remedy that also boosts Medha (intelligence), Smriti, and Mati (attentiveness).⁶ Swarna Bhasma is used for bronchial asthma, worm infestation, rheumatoid arthritis, schizophrenia, anorexia, diabetes mellitus, ophthalmic disorders, tuberculosis, anemia, cough, memory, grief, fever, mental stress, dyspnea, debility, sterility, poisoning, muscular dystrophy, and nervous system diseases.⁷⁻⁸ Swarna Bhasma has been prescribed for use in children in a variety of forms, including honey, and ghee.⁹

Aim and Objective

To evaluate the effect of *Swarnaprashana* as an immunomodulatory Effect in Children.

Methodology

Swarnaprashana-related resources were gathered from a variety of sources, including periodicals, Ayurvedic and Contemporary Text Books, Reputable Newspaper Authoritative Websites, Authoritative Literature, Manuscripts, and the Sanskrit Dictionary, among others.

Swarnaprashana:

Swarnaprashana is a technique in which Swarna and herbs are administered orally by youngsters in the shape of liquid, semi-solid, or paste form.¹⁰ Swarna Bhasma is a key component of *Swarnaprashana*, a formula for newborns and children.¹¹ Swarna Prashana is a cultural ritual in India that is traditionally practised. *Swarnaprashana* is a one-of-a-kind technique described in Ayurvedic texts as part of the Jatakarma Samskara.¹² Among all the Acharyas who have properly articulated *Swarnaprashana*, Acharya Kashyapa's contribution is unique, as the administration of processed gold in children is stated thousands of years before. Prashana, its method, indications, contraindications, substances, and formulations are all explained in detail by Acharya Kashyapa.¹³ *Swarnaprashana* is created by triturating Swarna, honey, ghee, and water on a pre-washed and clean stone facing east and allowing the child to lick it.

He has clearly explained the administration of Swarna (gold) to children for Medhavardhana (improving

intellect), Agnivaradhana (improving digestion and metabolism), Balavardhana (improving immunity and physical strength), Ayushyam (promoting longevity), Mangalam (auspicious), Punyam (virtuous), Varnya (improving complexion), Vrishya (fertility), Grahapaham (promoting longevity), Mangalam (protection against infectious organisms). Swarnaprashana classically detailed benefits include Maasathparamamedhavi (if fed for one month, child will be extremely intelligent), Vyadhibhirna cha drishyate (child will not be attacked by any disease), and Shadbhirmasesruthadhara (if fed for six months, child will be able to retain whatever he hears).¹⁴ Swarna, according to Acharya Sushruta, must be administered combined with Madhu (honey) and Ghrita (ghee) in one of the Jathakarma samskara processes.¹⁵ It should be used after garbhambu vamaana but before abhyanga and snana, according to Acharya Sushruta. *Swarnaprashana*, he noted, aids a child's physical and mental growth, as well as encourages Bala and Budhi (memory).¹⁶

Swarnaprashana is a Jatakarma Samskara in which a newborn is compelled to lick a mixture of Madhu and Ghrita combined with Swarna fortified with sacred mantras three times a day in order to acquire medha (intellect), Ayu (long life), and bala (balance) (good strength).¹⁷ Swarna is stated with synonyms Hema, Kanchana, and Kanaka, along with herbal medicines combined with madhu and Ghrita, which when eaten for a year bestows good Vapu (body development), Medha (intelligence), Bala (strength), Varna (colour), and Subha (goodness).¹⁸

Transformation to Swarnaprashana: *Swarnaprashana* is created by combining scientific inputs and references from Ayurvedic traditional literatures with Swarnaprashana. This herbo-mineral elixir is a combination of herbs and minerals. i.e. Madhu + Ghrita + Vacha Churna + Swarna Bhasma + Amrita Satva + Haritaki Churna + Brahmi Churna + Kustha are the constituents of Swarnaprashana) is being prepared in the my Center¹⁹

On the day of Pushya Nakshatra, Swarna Bhasma and honey are added to this Ghrita and triturated. To keep the consistency of Swarnaprashana, the bowl is placed in warm water. Each kid receives four drops of this mixture (containing two milligrams of Swarna Bhasma).

Combination used for Preparation of Swarna Prashana

| Complained | Factor | Swarnaprasan combination |
|---|--------------|--|
| Low Birth weight Child, Premature, weak Immune system | Child growth | Madhu + Ghrita + Vacha + Swarna Bhasma + Laghumalini basant |
| Cough, cold low immunity, Sneezing, Weakness | Immunity | Madhu + Ghrita + Vacha + Swarna Bhasma + Guduchi satva + kumar kalyan rasa |

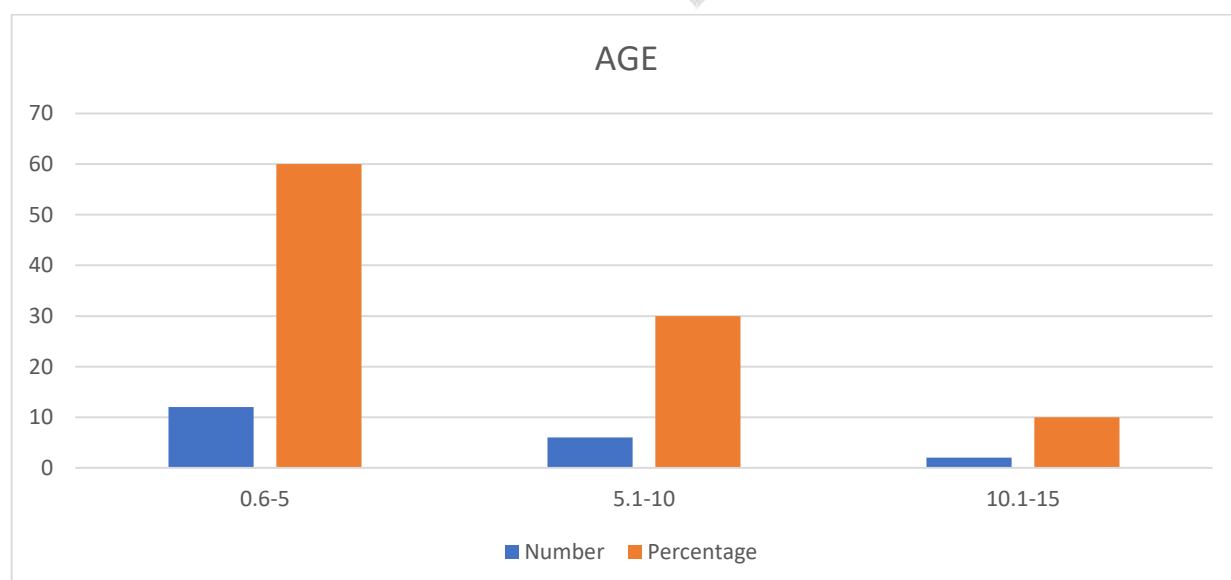
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| Height and Weight not increasing, Iron deficiency, calcium deficiency | Child growth | Madhu + Ghrita + Vacha + Swarna Bhasma + Tapyadi lauh, Laghumalini basant + Praval pisti |
| Less active, delayed speech, delayed mile stone | Delayed mile stone | Madhu + Ghrita + Vacha + Swarna bhasma + Mulethi + pippali |
| Physically low stream, walking difficulty, Autism type symptoms | Physical activeness | Madhu + Ghrita + Vacha + Swarna Bhasma + kukutang Twak+ Praval panchmrit + Guduchi satva+ mandoor bhasm |
| Weak memory power | Memory issues | Madhu + Ghrita + Vacha + Swarna Bhasma + Brahmi + mandoor Bhasma |

OBSERVATIONAL DATA

AGE

| Age (Year) | Number | Percentage |
|------------|--------|------------|
| 0.6-5 | 12 | 60 |
| 5.1-10 | 6 | 30 |
| 10.1-15 | 2 | 10 |

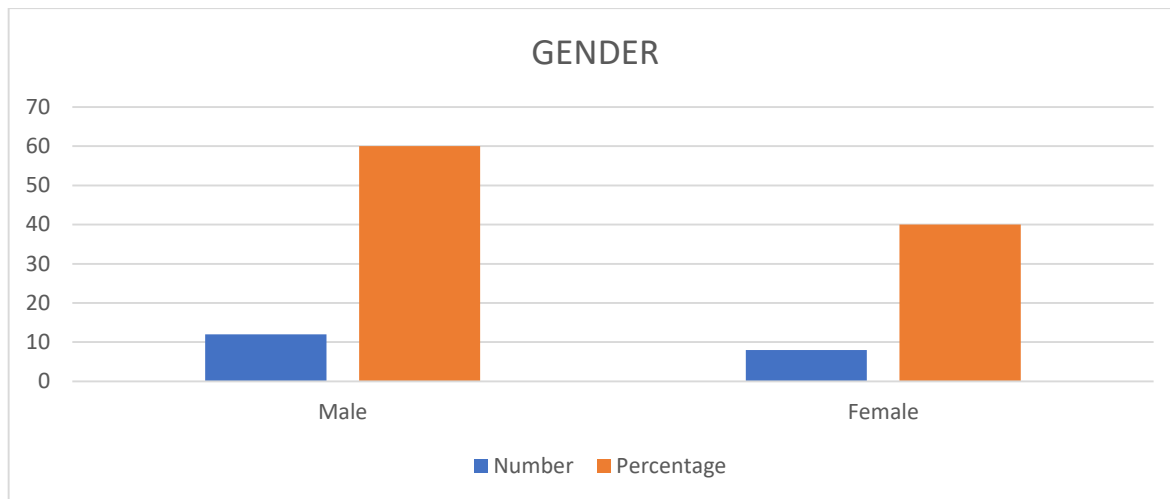
out of 20 patients, 12 patients were 60% were from 0.6-5-year age group, 30% from 5.1-10 year and 10% from 10.1-15-year age group.



GENDER:

| Gender | Number | Percentage |
|--------|--------|------------|
| Male | 12 | 60 |
| Female | 8 | 40 |

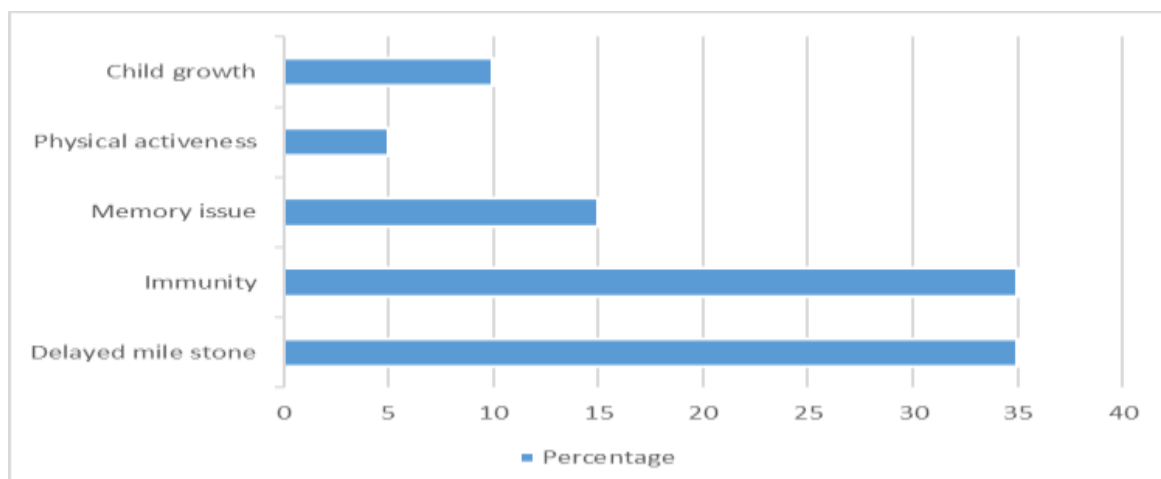
out of 20 patients, 12 patients (60%) were male and 6 were female (40%).



RESULT

DELAYED MILESTONE PATIENTS

| Problem | Number | Percentage |
|---------------------|--------|------------|
| Delayed mile stone | 7 | 35 |
| Immunity | 7 | 35 |
| Memory issue | 3 | 15 |
| Physical activeness | 1 | 5 |
| Child growth | 2 | 10 |

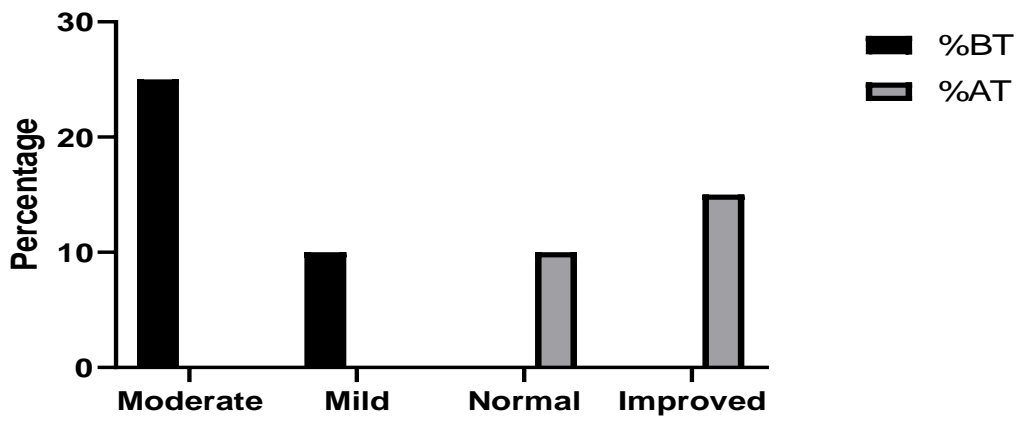


From the admitted patients, 10% were reported by growth related problem, 5% by lack of Physical activeness, 15% by memory related issues and 35% by Delayed mile stone and weak immunity. Although, before the treatment symptoms were mild and moderate, while after the Swarnaprasan combination with other drugs use showed improvement in symptoms, i.e., normal (complete diminution of symptoms) and improved (improvement in symptoms but not complete diminution of symptoms).

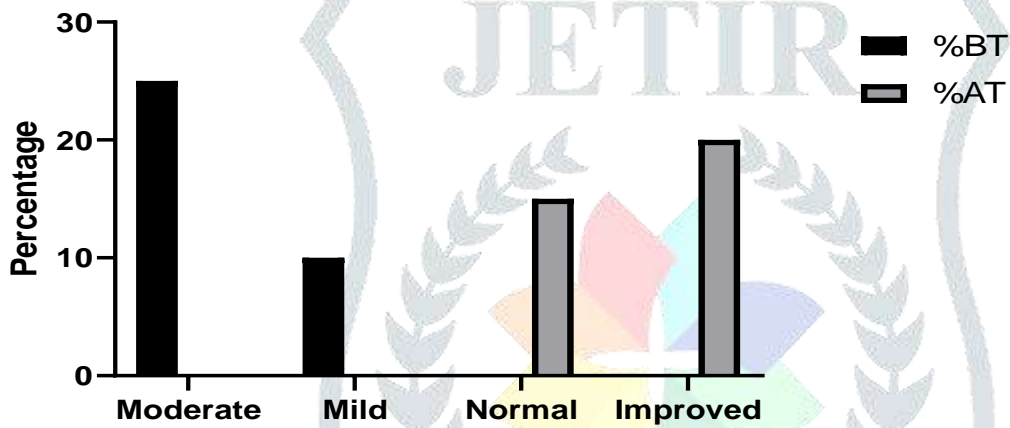
| Problem | BT | Number | %BT | AT | Number | %AT | Chi-square p-value |
|----------------------------|----------|--------|-----|----------|--------|-----|--------------------|
| Delayed mile stone | Moderate | 5 | 25 | Normal | 2 | 10 | <0.0001 |
| | Mild | 2 | 10 | Improved | 5 | 25 | |
| Immunity | Moderate | 5 | 25 | Normal | 3 | 15 | <0.0001 |
| | Mild | 2 | 10 | Improved | 4 | 20 | |
| Memory issues | Moderate | 1 | 5 | Normal | 2 | 10 | <0.0001 |
| | Mild | 2 | 10 | Improved | 1 | 5 | |
| Child growth | Moderate | 2 | 10 | Improved | 2 | 10 | <0.0001 |
| Physical activeness | Moderate | 1 | 5 | Improved | 1 | 5 | 0.0016 |

After Swarnaprasan combination administration a significant ($p < 0.05$) improvement reported in delayed mile stone (10% normal and 25% improved), immunity (15% normal and 20% improved), memory issues (10% normal and 5% improved), child growth (10% improved) and physical activeness (5% improved).

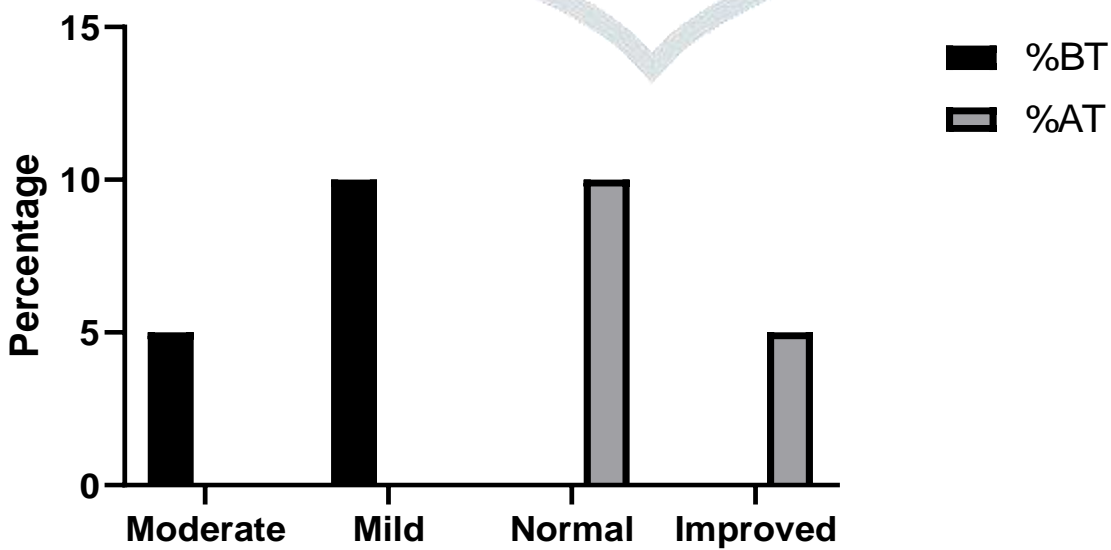
Delayed mile stone



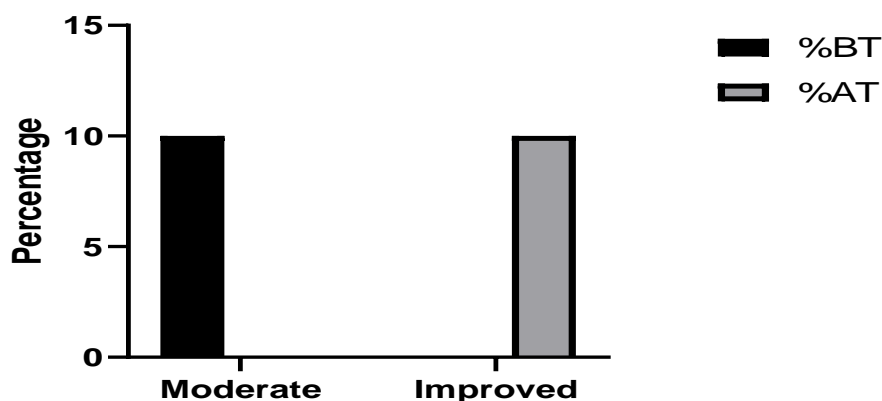
Immunity



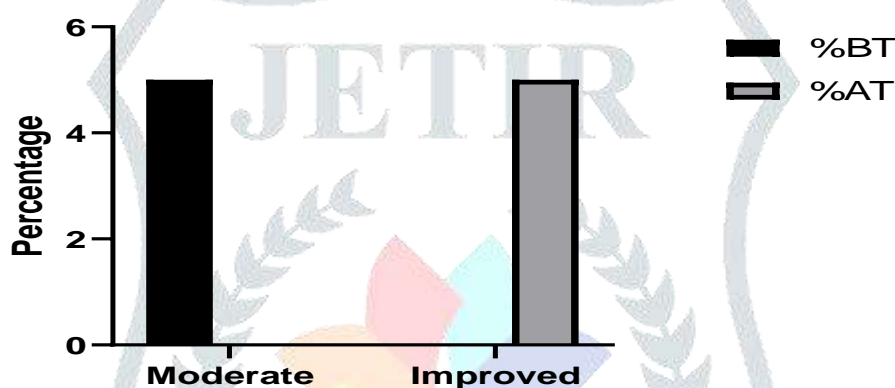
Memory issues



Child growth



Physical activeness



DISCUSSION:

Swarnaprashana is a Balya, Rasayana, Medhya, and Tridosahara herbo-mineral preparation containing extracts of plants in Ghrita medium. Swarna Bhasma, the main component in *Swarnaprashana*, boosts immunity by stimulating phagocytosis.²⁰ Swarna Bhasma has been used for rejuvenation and immunomodulation in various chronic illnesses in both Ayurveda and medical science.²¹ Rejuvenating and antioxidant effects have been attributed to traditional gold formulations.²² Brahmi and Vacha have been shown to help with memory and focus problems.²³ Immunomodulatory characteristics are present in the Vacha used here.²⁴ The Vacha utilized in this study has immunomodulatory properties. Yastimadhu also has immunomodulatory properties and improves medication delivery system permeability.²⁵ Guduchi has anti-inflammatory and immunostimulant properties.²⁶ Pippali has a revitalizing effect on the lungs and boosts bioavailability.²⁷⁻²⁸

CONCLUSION:

Swarnaprashana can be safely given to babies and children up to the age of 16 for their physical, mental, and cognitive well-being. *Swarnaprashana* immunomodulatory effect should be supported by a comprehensive controlled clinical study including biomarkers. Clinical trials using immunological profile

determination might pave the path for widespread usage in the National Health Program to benefit children. Finally, by creating an integrated and multi-sectorial strategy for population-based Preventive and Immunomodulatory treatments in this study, Ayurveda can enhance people's quality of life through health promotion methods.

Conflict of Interest: Nil.

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