

## "A CLINICAL EVALUATION OF THE EFFECT OF SWARNAMRUTHA PRASHANA ON RECURRENT UPPER RESPIRATORY TRACT INFECTIONS IN CHILDREN AGED 3 TO 6 YEARS"

Dr. Aakanksha<sup>\*1</sup>, Dr. Vijayalaxmi Mallannavar<sup>2</sup>

<sup>1</sup>P. G. Scholar, Department of Kaumarabhritya, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan 573201, Karnataka, India

<sup>2</sup>Associate Professor, Department of Kaumarabhritya, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan 573201, Karnataka, India

### ABOUT THE ARTICLE

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#### \*Corresponding Author:

#### Dr. Aakanksha

P. G. Scholar, Department of Kaumarabhritya,  
Sri Dharmasthala Manjunatheshwara College of  
Ayurveda & Hospital,  
Hassan 573201, Karnataka, India  
Email- [aakankshasuchi@gmail.com](mailto:aakankshasuchi@gmail.com)

### ABSTRACT

**Background-** A very common clinical conditions is upper respiratory tract infections which disturbs child daily activities. Upper respiratory tract is leading cause of childhood mortality and morbidity. The diseases of upper respiratory tract infections mainly involve fever, sore throat tonsillitis etc. Swarnamrutha prashana is a technique in administering gold to a child to promote its immunity and intellect so that it can grow healthy without any diseases. It has been further mentioned that if swarnamrutha prashana is taken daily for a month child will become extremely intelligent and does not suffer from frequent diseases. Considering these views the present study was planned. **Objectives-** To clinically evaluate the effectiveness of swarnamrutha prashana in recurrent upper respiratory tract infections in children between the age group of 3 to 6 years. **Methods-** Patients presenting with the classical features of upper respiratory infections between the age group of 3 to 6 years irrespective of sex were selected. In this clinical study patients were administered swarnamrutha capsules (One Soft Gel Capsule Containing 2mg Of Swarna bhasma) Is effective In Upper Respiratory Tract Infections In Children Between aged 3 TO 6 Years. **Results-** Statistically significant result were seen in subjective parameters such as Kasa, Galashotha, Sleep Disturbance, and Jwara and objective parameters such as Haemoglobin, ESR, total counts, Height, Weight at  $p < 0.001$ . During follow up period even though few children had recurrence of symptoms but intensity was reduced compared to that of before treatment. **Conclusion:** Swarnamrutha Prashana given for continuous one month found to be effective on recurrent upper respiratory tract infections.

**KEYWORDS:** Swarnamrutha Prashana, Immunity, Swarna Bhasma, Amrutadi Ghrita, Madhu

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### INTRODUCTION

Recurrent upper respiratory tract infections are the common problem among all groups. As classical claim is enhancement of immunity by continuous administration of swarnaprashana for 3 months (masath parama medhavi vyadhibhishca na drushyate....), the present study was planned to explore the same in 30 children of age group 3 to

6 years with upper respiratory tract infections in and around Hassan city. In present study registered children were administered with soft gel capsules of swarnamruthaprashana once daily in empty stomach (morning) for a period of 90 days after availing detailed history, clinical examinations and collection of before treatment blood samples as per case report format. After completing 90 days of intervention patients were followed for another 90 days without

intervention and on 180th day children were assessed for subjective and objective parameters.

While treating the upper respiratory tract infections, special attention should be given to the recurrence and duration of the illness, because the URTI are recurrent and hence disturbs the daily activities of the children. Following points need better consideration during the treatment fixation.

- 1) Repeated attack of disease when exposed to the nidana are the chief problem which manifest as various signs and symptoms.
- 2) Long standing and recurrence nature of the disease, puts the patient in immuno-compromised state.
- 3) Patient will be in a physically ill due to the symptoms like sneezing, fever, nasal congestion, galashotha heaviness in head, sleep disturbance etc, which ultimately cut short the working capacity of the children.

By considering all these factors this study gives a conclusion that the approach should be to

- 1) Promote the immunity of the patient and
- 2) Prevent the recurrence and reduce the duration of the illness
- 3) Improve the nutritional status of the children
- 4) Promote the physical and mental health of the patient.

## MATERIALS AND METHODS

Patients presenting with the classical features of upper respiratory infections between the age group of 3 to 6 years irrespective of sex were selected. In this clinical study patients were administered swarnamrutha capsules (One Soft Gel Capsule Containing 2mg Of Swarna bhasma) Is effective In Upper Respiratory Tract Infections In Children Between Age Group 3 TO 6 Years.

**Age:** The disease is extremely common, although prevalence depends critically up on the age, and geographical locations. Even though there is no much variation in the incidence of age in present clinical study, the minimum age of the patient registered for this study was 3 years and the maximum was 6 years. Out of which 76.67% of the patients were in the age group of 5-6 yrs. So this study coincides with the previous research data stating, "Peak age of distribution is in children and most patients develop symptoms by age 3-6 years".

**Sex:** In the present clinical study, it was observed that the incidence of sex has no much role and this data showing equal distribution among males and females proves the statement stating that; "the prevalence is approximately equal between men and women"

**Religion:** Maximum number of patients belonged to Hindu community. This might be due to Hindu's residing here are more in number. Hence, has no research significance.

**Diet:** Maximum number of patients (70%) had the habit of taking all kind of kaphaja items. This might be one of the reasons to produce upper respiratory tract infections in these patients. Hence, proving kaphaja and Guru Ahara is one of the Nidana to cause upper respiratory tract infections.

## Clinical features

### Kasa(cough)

It is observed that, Kasa was present in all patients (100%). In 53.3% it was moderate and in 20% it was severe. This indicates that kasa is one of the cardinal complaint in URTI in children.

In most of the patients kasa was seen when exposed to dust, mist, wind, and smoke. This is due to histamine release acting through reflex action of body to expel out the unnatural and irritating substances.

### Galashotha(Throat Congestion)

Galashotha was found in 90% of patients out of that 60% had pain while swallowing with congestion and 30% had throat pain with congestion. These types of congestion are seen in URTI in children, due to the response of seromucous glands to mast cells mediators.

### Sleep Disturbance

Sleep disturbance was found in 83.4% of patients out of that 46.7% had intermittent sleep disturbance and 36.7% sleep was always disturbed. The sleep disturbance might be because of cough, nasal blockage, pain and irritation in throat.

### Fever

Fever was found in 63.3% of patients out of that 10% was having high fever and 53.3% was having moderate fever. Fever can be considered as associated complaints commonly seen in URTI.

### Drug utilization

Swarnamrithaprashana is a modified form of Swarnaprashana. Swarnaprashana as described in Kashyapa Samhita consists of administration of Swarna with Madhu and Ghritha, Whereas in, Swarnamrithaprashana, amruthadi ghritha is used instead of plain ghritha. Ingredients of amruthadi ghritha are described earlier in drug review.

**Swarna (Gold):**

In present formulation of swarnamruthaprashana gold is used in the form of swarnabhasma which contains elemental gold in the form of nanoparticles. These nanoparticles of gold get absorbed into the circulation when given through oral route. Pharmacodynamic properties of Swarnabhasma include Madhura rasa, Madhura vipaka, Sheeta veerya, Laghu-Snigdha guna. Its having functions like Balya (Improves strength), Rasayana (Rejuvenative), Ojovardhaka (Improves immunity), vrushya Varnya (improves complexion), Deepana (improves digestion), Swasa-kasa hara (Helps in curing respiratory ailments), Brimhana (Increases body mass) and Sarva vishapaha (clears all toxins and allergies) iii. Swarna bhasma has proven nootropic activity at various levels of brain functions like intelligence, memory and concentration which is supported by recent studies

**Madhu:**

Honey is produced from nectar of multiple flowers by honey bees. Honey is considered one among dietary agent since ancient era. Caloric value of honey is high and is good source of Vitamin B complex, Vitamin C, Elements like Calcium, Iron, Magnesium, Phosphorus, Potassium, Sodium and Zinc. iv The pharmacodynamics properties include Madhura-Kashaya Rasa, Laghu-Rooksha guna, Sheeta Veerya, Madhura Vipaka and Yogavahi. It is hailed for its yogavahi (vehicle which carries drug to the target site by its penetrative action) property. It is having functions like deepana, varnya, Swarya and prasadana. Recent researches also highlight the role of honey in inhibition of mast cell degranulation in the course of respiratory allergies. Continuous administration of honey, which contains different varieties of allergens in the form of pollens collected from different flowers, which provide tolerance towards these allergens and prevent immune hyper responsiveness on future encounters of aeroallergens. vi. Thus, honey may have a synergistic role along with Swarna bhasma role in reduction of recurrence of infection in present study.

**Amritadi Ghritha:**

Ghritha contains Madhura Rasa, Madhura Vipaka, Mrudu-Snigdha-Guru guna. It has functions like Vata-pittahara, Kapha Vardhaka (Prakrita kapha), Medhya, Swarya, Deepna, Oja-teja-bala and ayushya vridhikara, Vrushya, Vayastapana and Rakshoghna. Samskarasyanuvartana guna of ghritha helps in imbibing properties of other drugs used in the preparation of amritadi ghritha. vii. Ingredients of amritadi ghritha are known nootropic agents. viii. These when processed with ghee, it helps in better transport across biological membranes including blood brain barrier.

**RESULTS & DISCUSSION**

30 Patients of recurrent upper respiratory tract infections were administered with Swarnamrutha Prashana for 60 days. The effects on the various signs and symptoms of the patients are presented under the separate headings.

**Effect on Kasa**

There was a statistically significant difference in Kasa with Cochran's Test value 31.000 at P value 0.001. Post Hoc with Mc Nemars showed that there was Statistically Significant difference. It was observed that there was Statistically Significant difference in kasa before Treatment and After Treatment. On the basis of above results it shows that swarnamrutha Prashana has antibacterial properties because of that it helps in fighting with the foreign bodies and helps in reduction in symptoms of kasa.

**Effect on Galashotha**

There was a statistically significant difference in galashotha with Cochran's Test value 31.000 at P value 0.001. Post Hoc with Mc Nemars showed that there was Statistically Significant difference in Galashotha between before Treatment with no changes in 13 subjects. It was observed that there was Statistically Significant difference in Galashotha before Treatment and After Treatment. By administration of swarna prashana on daily basis it was observed that there was significant reduction in the frequency of attacks of infections, thus the mucosa of the throat was becoming healthy hence galashotha got reduced.

**Effect on Sleep Disturbances**

There was a statistically significant difference in Sleep disturbance with Cochran's Test value 31.000 at P value 0.001. Post Hoc with Mc Nemars showed that there was Statistically Significant difference in sleep disturbance before Treatment with no changes in 11 subjects. It was observed that there was Statistically Significant difference in sleep disturbance before Treatment and After Treatment. Probably because, the symptom like Kasa and Galashotha were reduced which helped in child having undisturbed sleep at night time. On the basis of above results it can be inferred that Swarnamrutha Prashana provided better relief in sleep disturbance.

**Effect on Fever**

There was a statistically significant difference in Sleep disturbance with Cochran's Test value 31.000 at P value 0.001. Post Hoc with Mc Nemars showed that there was Statistically Significant difference in sleep disturbance before Treatment with no changes in 9 subjects. It was observed that there was Statistically Significant difference in fever before Treatment and After Treatment

On the basis of above results it can be inferred that Swarnamrutha Prashana was effective in preventing the

recurrent attacks of URTI by its immunomodulatory action. Fever was one of the features in URTI thus may be helped in controlling fever.

### Discussion on Duration of Upper respiratory tract infections.

During BT to 1st visit it was found that 26 subjects had reduction in symptoms, While, no subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 4 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -5.099, p value =0.001.

During 2nd visit to 3rd visit it was found that 16 subjects had reduction in symptoms, While, no subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 14 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -3.099, p value =0.001.

During 2nd visit to 3rd visit it was found that 16 subjects had reduction in symptoms, While no subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 14 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -3.099, p value =0.001.

So it proves that swarnamrutha prashana has ability to treat different infections and allergy by improving immunity of the body. Madhu present in the swarnamrutha prashana helps in decreasing the duration of URT infections.

### Discussion on Frequency of Upper respiratory tract infections

During last 3 months to 1st visit it was found that 23 subjects had reduction in symptoms, While 2 subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 5 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -4.200, p value =0.001.

During 2nd visit to 3rd visit it was found that 20 subjects had reduction in symptoms, While 4 subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 6 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -3.347, p value =0.001.

During 4th visit to 5th visit it was found that 17 subjects had reduction in symptoms, While 4 subject had aggravation in symptoms which was evened by n value for positive rank at 1, In 13 subjects no Improvement or no further aggravation in their symptoms found. which was statistically significant with z value = -3.945, p value =0.001.

So continuous administration dose of swarnamrutha prashana helps in reduction to frequent allergic attacks

because it has a property of rasayana and ojavardhaka which helped children increasing their immunity by which frequency of URTI decreased.

### Discussion on Hematological parameters

The mean value of Haemoglobin was 11.7235 before treatment which increased to 12.0071 with mean difference -0.28353 which is statistically significant with  $t = -5.264$ ,  $p < 0.001$  probably because Swarnamrita Prashana showed improvement in deha, agni and satva bala which leads to better nourishment in the child. Better nourishment in turn could have resulted in Dhātu poshana. Hence it can be understood how Swarnamrita Prashana helped in improving Rakta dhātu which in this case is indicated through haemoglobin.

Total count:

The mean value of total white blood cells count was 8267.6471 before treatment which reduced to 7891.1765 with mean difference 376.47059 which is statistically significant with  $t = 3.765$ ,  $p = 0.001$ . When a child is afflicted with infection total count increases and when infection subsides it reduces. It is well documented through various researches that ingredients of Swarnamrita Prashana has immune-modulatory effect. Hence, resulting in reduction of increased total count.

Differential count:

The mean value of neutrophils was 51.3529 before treatment which increased to 56.00 with mean difference -4.64706 which statistically significant with  $t = -8.030$ ,  $p < 0.001$ . The mean value of lymphocytes was 43.3529 before treatment which reduced to 41.4118 with mean difference 1.94118 which is statistically significant with  $t = 2.981$ ,  $p < 0.05$ . The mean value of eosinophil was 3.5294 before treatment which reduced to 1.7059 with mean difference 1.82353 which is statistically significant with  $t = 8.095$ ,  $p < 0.001$ . The mean value of Monocyte was 1.2647 before treatment which reduced to 1.0294 with mean difference 0.23529 which is statistically significant with  $t = 2.478$ ,  $p < 0.05$ . Swarnamrita Prashana had statistically significant result not only on total counts but also on differential counts probably because the immune-modulatory action of Swarnamrutha Prashana.

ESR:

The mean value of ESR was 7.5882 before treatment which reduced to 2.5588 with mean difference 5.02941 which is statistically significant with  $t = 7.763$ ,  $p < 0.001$ .

When a child is afflicted with infection ESR increases and when infection subsides it reduces. It is well documented through various researches that ingredients of Swarnamrutha

Prashana has immune-modulatory effect. Hence, resulting in reduction of increased ESR.

### Effect of Swarnamrutha Prashana on Anthropometry

Effect during treatment: The mean value of Height was 116.91 before treatment which increased to 117.95 with mean difference -1.04 which is statistically significant with  $t = -7.343$ ,  $p < 0.001$  whereas, the mean value of Weight was 20.87 before treatment which increased to 21.40 with mean difference -0.52 which is statistically significant with  $t = -6.509$ ,  $p < 0.001$  probably because during treatment Swarnamrutha Prashana reduced the symptoms and child's Agni, Kshudha were improved which in turn led to proper diet intake. Also there was improvement in diet habit, Sleep pattern and Koshtha which led to Samyak Dhatu Poshana in the children. This led to Uttarottar Dhatu Vrudhi which was shown in increase in weight and height.

### Discussion on satva bala

Out of 32 subjects of study group 12 children were having poor satvabala and 14 children having moderate satvabala before treatment. After intervention there was improvement seen in 96.67% improved and 3.33% with moderate satvabala respectively. results of SPECIFIC the group through WILCOXON SIGN RANKED test mean ranks of Study group showed the value -1.342. This difference was statistically significant with  $p$  value  $< 0.001$  /  $< 0.05$ . This difference of improvement in study group suggests the improvement in satvabala of children due to Swarnamrutha Prashana.

### Discussion on agni bala

Out of 32 children of study group 56.67% is having poor agnibala and had reduced appetite. After intervention Appetite was improved in 93.33% children. On results of specific the group through wilcoxon test mean rank Study group showed in mean is 6.50. This difference was statistically significant with  $p$  value  $< 0.001$ . This difference of improvement in study group suggests the agnivardhana action of Swarnamrutha Prashana.

### Discussion on deha bala

Out of 32 children of study group 26 had history of recurrent infections like URTI (Cough, Cold, etc.), GE (Vomiting, diarrhoea, etc.) 1 to 2 times every month, these symptoms and 50% was having poor dehabala. After intervention dehabala improved by 96.67%. On results of SPECIFIC groupS through WILCOXON SIGN RANK test mean rank was 2.00. This difference was statistically significant with  $p$  value  $< 0.001$ . This difference of improvement in study group suggests the action of Swarnamrutha Prashana in reducing the recurrence of infections by improving immunity.

### CONCLUSION

The trial drug Swarnamrutha Prashana Capsule is effective in treating the recurrent infections in children along with improving Vyadhi Kshamatva and thereby helpful in preventing its recurrence. The overall effect was statistically highly significant. The following additional conclusions can be drawn based on the observations of present study, that the Swarnamrutha Prashana Kasahara was statistically significant.

- It is better effective in reducing the duration and frequency of attacks.
- It helped in general health which was depicted by height and weight of children.
- It also helped on objective parameters like increase in Hb%, TLC% and ESR.

The following are the possible considerations for future studies of similar kind.

- Study is limited to single geographical area so the study could not be generalized for the whole population
- It can be done on large samples.
- More biochemical parameters such as immune-profile could be more Elaborative.

### REFERENCES

1. Sharma P V. Susruta Samhita (Text with English Translation Dalhana's Commentary along with Critical Notes) Vol 2. Varanasi: Chaukhamba Visvabharati; Edition reprint 2013, Nidana Sthana, page no. 114.
2. Prof Murthy K R S. Vagbhata's Astanga Hrdayam Vol 3. Varanasi: Chaukhamba Krishnadas Academy; Edition sixth reprint 2012, Uttara Sthana, page no. 195.
3. Tewari P V. Kasyapa Samhita or Vrddhajivakiya Tantra. Varanasi: Chaukhamba Visvabharati; Edition reprint 2020, Sutra Sthanam, page no. 53.
4. Prof Murthy K R S. Vagbhata's Astanga Hrdayam Vol 3. Varanasi: Chaukhamba Krishnadas Academy; Edition sixth reprint 2012, Uttara Sthana, page no. 195.
5. Murthy K R S. Vagbhata's Astanga Hrdayam Vol 1. Varanasi: Chaukhamba Krishnadas Academy; Edition sixth reprint 2012, Sutra Sthana.
6. Dhingra. Textbook of diseases of ear nose and throat; 2nd Edition, B.I Churchill Living at

stone publication; New Delhi chapter no - 42;2:  
215.

