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A COMPARATIVE STUDY ON THE EFFICACY OF *PALANDU TAILA* AND *ANU TAILA PRATIMARSHA NASYA* IN CHILDREN WITH *TAMAKA SHWASA*.

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ABSTRACT

Background- *Tamaka Shwasa* is a type of respiratory system disease explained in *Ayurveda* affecting the *Pranavaha Srotas* and characterized by *Tivra Vegam Shwasa* (Dyspnoea along with Tachypnoea), *Ghurghuraktwa* (wheeze) and other clinical features [1,2]. The disease, Bronchial Asthma in the contemporary system of medicine can be clinically correlated with *Tamaka Shwasa* as some of the clinical features such as dyspnea, cough and chest discomfort are similar in both the conditions. **Aim**- : Comparing the efficacy of *Pratimarsha Nasya* with *Palandu taila* and *Anu taila* in children with *Tamaka Shwas*. **Material and method**- In this Study, 30 patients will be divided randomly into 2 groups (15 in each). In Group AT(Experimental)- *Anu Taila Pratimarsha Nasya*, 1 drop in each Nostril once a day in the morning for 14 days and Group PT (Control)- *Palandu Taila Pratimarsha Nasya* , 1 drop in each Nostril once a day in the morning for 14 days. **Result**- Changes will be observed in subjective and objective outcomes. **Conclusion**-*Palandu Taila Pratimarsha Nasya* will be more effective than *Anu Taila Pratimarsha Nasya*

Keywords: Nil

Introduction

Tamaka Shwasa is a type of respiratory system disease explained in *Ayurveda* affecting the *Pranavaha Srotas* and characterized by *Tivra Vegam Shwasa* (Dyspnoea along with Tachypnoea), *Ghurghuraktwa* (wheeze) and other clinical features. The disease, Bronchial Asthma in the contemporary system of medicine can be clinically correlated with *Tamaka Shwasa* as some of the clinical features such as dyspnea, cough and chest discomfort are similar in both the conditions. Both the diseases go hand in hand in case of some of the etiological factors like exposure to smoke, dust, seasonal variation and exposure to cold. According to the Global Initiative for Asthma (GINA), Bronchial Asthma is defined as chronic inflammatory disorder of airways which is associated with airway hyper-responsiveness. It leads to recurrent episodes of wheezing, breathlessness, chest tightness and coughing, particularly at night or early morning. It may also lead to disrupted sleep due to cough and wheeze. There will be increased mucous production, which is thick, mucoid and difficult to expectorate. [3]In *Shwasa* , very hot breathing expells out after Expiration from lungs in children. [4] Many are the diseases which take away human life, there are none that terminate a patient`s life so rapidly as dyspnea and hiccup. [5] *Pratamaka* or febrile dyspnea which appears in a patients overcome with fever and fainting which is excited by misperistalsis, inhalation of dust, indigestion etc which is greatly aggravated during night and alleviated by cold medications. [6] Currently, the treatment for Bronchial Asthma is purely symptomatic such as use of Bronchodilators, anti-inflammatory drugs, steroids and so on which give temporary relief to patient. No any permanent or effective treatment has been found till date. This above kind of treatment may cause many kind of side effects. So there is need of special type of line of treatment which is described in Ayurveda Such as *Snehana, Swedana, Vaman, Virechana, Nasya* etc. *Anu taila* is a poly herbal oil which is indicated under *Dinacharya* for *Nasya* the benefits of which have been told as, in the treatment of disease related to the Head, Brain, Eyes, Face, Nose, Ear and Neck. *Anu Taila* which helps preventing diseases of upper parts of the body.

Tamaka Shwasa (Bronchial Asthma) is a disease present in children occurring due to predominance of *Vata-Kapha*. Asthma is most common chronic condition among children.[7] Clinically this is found similar to the features of Bronchial asthma which is a major global health problem, which can affect the population irrespective of age, sex, economical status, etc. About 300 million people worldwide suffering from asthma and the number has risen by around 50 % in the last decade. There are only a few studies fom India on epidemiology of asthma. Overall burden of asthma in India is estimated to be more than 15 million patients[8]. Five percent of children under 11 years have asthma in

India [9]. Asthma was diagnosed in 2.28, 1.69, 2.05 and 3.47 % respondents, respectively, at Chandigarh, Delhi, Kanpur and Bangalore with an overall prevalence of 2.38 %[10].

The Management of which is carried out with usage of bronchodilators, leukotriene antagonist, mast cell stabilizer and corticosteroids. Long lasting usage of these drugs produces adverse effects and reduces the effectiveness of therapy. Under such circumstances, the management protocol mentioned in *Ayurveda* can be much better and effective.

The present study is intended to compare the effect of *Nasya* (Nasal instillation) in *Tamaka Shwasa* with *Palandu taila[11]* and *Anu taila*[12]. The procedure *Nasya* is one among the treatment modalities of *Tamakashwasa* as mentioned in the classics of *Ayurveda*. It is mentioned asone among the daily daily routine to be followed for better respiratory and oral health. Till date no studies have been carried out on *Palandu Taila* in *Tamakshwasa* which is cost effective and contain only *Palandu* (Allium cepa) which is an easily available drug even in household. The drug is having properties like *Kaphanissarak, Uttam vatahar, Alpa pittakar* as it is *Guru, Snigdha, & Teekshna.* This *Taila* is specifically indicated in *Shwasa roga* for *Nasya.* It is being compared with *Anu Taila* which is an oil indicated for *Nasya* in *Dinacharya*.

Material and Methods

It was a Randomized Prospective open labelled Comparative clinical study. Before graduation of study, it becomes approved by Institutional Ethics committee (MGACHRC/IEC/07/2020/52). Palandu taila prepared and examined in analytical lab of Dattatray Rasashala of MGAC&RC salod (H), Wardha. Total (33) thirty three sufferers conducting the inclusion standards had been enrolled from the OPD and IPD of Kaumarabhritya and also from specialised peripheral camps. Informed consent was taken from parents.

INCLUSION CRITERIA

1.Participants above 5 year of age to 12 year will be selected irrespective of gender, caste & socioeconomic status and religion.

2.Children suffering from *Tamaka Shwasa* in *Avegavastha.*

3.Children willing to participate in the study and whose parents give assent.

EXCLUSION CRITERIA:

1.Severe cases of Asthma with complications like suspected infection, large airway lesions,

heart disease, other pulmonary diseases etc.

2. Other systemic, endocrine, chronic, debilitating disorder associated with any degree of Asthma.

3. Patient with acute or severe exacerbation and Status Asthmaticus.

Ingredient of Palandu taila-

Si No.	Drug Name	Latin Name	Family Name	Part used
1.	*Palandu (Rakta)*	*Allium Cepa Linn.*	*Lilliaceae*	*Rhizome*

Properties of *Palandu* drug

Dravya	***Rasa***	***Virya***	***Vipaka***	***Karma***	***Guna***	***Doshghnata***
Palandu	*Madhur , Katu*	*Anushna*	*Madhura*	*Kaphanissarak ,Uttam Vatahar*	*Guru, snigdha, Teekshna*	*Vatahar, Alpa pittakar, kaphanissarak*

Administration of the Interventional drugs-

Group	*P*	*A*
Sample size	*15*	*15*
Intervention	*Palandu Taila Pratimarsha Nasya*	*Anu Taila Pratimarsha Nasya*
Dose	2 drops (in each nostril) at morning.	2 drops (in each nostril) at morning.
Duration	After every 7 days	After every 7 days
Follow Up	14 days	14 days

period		
Total duration	28 days	28 days

Criteria for selection of childrenDiagnostic Criteria-

- *Peenasa* (Coryza),
- *Ghurghurakatwa* (Wheezing)
- *Kasa* (Cough)
- *Kapha Nisthivana* (Expectoration)
- *Asino Labhate Saukhyam* (Relieving while sitting position),
- *Shwaskrichhrata* (Difficulty in Breathing) related to climate,
- *Nidra* (Sleep).

Objective Parameters:

- Adventitious Sound
- *CBC (Complete blood count)*
- A.E.C **(Absolute Eosinophil Count)**

Obeservation and Results-

This study of 'A comparative study on the efficacy of *Palandu Taila* and *Anu Taila Pratimarsha Nasya* in children with Tamaka Shwasa' was conducted in the department of Kaumarbhritya. Total 30 Patients were selected and randomly divided into two groups. Statistical analysis was done by using descriptive and inferential statistics using chisquare test, Student's paired and unpaired t test, Wilcoxon Signed Rank Test and Mann Whitney U test, Software used in the analysis were SPSS 27.0 version and GraphPad Prism 7.0 version $p<0.05$ is considered as level of significance.

- Out of 30 patients, all 30 patients (100 %) were Hindu and none of them was of having other religion. Micturition habits of children in both the groups were regular.
- Out of 30 patients, 8.66 patients(50%) were in the age group P of 5-11 yrs. and 8.80 patients (50%) were in the age group A of 5-12yrs.
- Shows gender wise distribution of patients in both the groups. In Group P, male to female ratio was 8:7 and in Group A, it was 7:8 There are 15 participants in each group with non significant mean difference in male female gender ratio.

- According to the socio economic status(SES) of the patients out of 30 patients, maximum 10 patients (66.67%) were in the middle class and 05 patients (33.33 %) were in the lower class in Group P and maximum 12 patients (80%) were in the middle class and 3 patients (3 %) were in the lower class in Group A.
- The distribution of appetite in both groups Out of 15 patients in each, 6 (40%) children had good appetite and 9 (60%) children had poor appetite in Group P and 6 (40%) children had good appetite and 9 (60%) children had poor appetite in Group A.
- According to the habitat of the patients In Group P patients 11 (73.33 %) were in the urban habitat and 4 patients (26.67 %) were in the rural habitat. Similarly, In Group A 11 patients (73.33 %) were in the urban habitat and 4 patients(26.67 %) were in the rural habitat

- According to the hygine of the patients in Group P, 11 patients (73.33 %) were having poor hygiene and 4 patients (26.67 %) were having good hygiene and in Group A , maximum 10 patients (66.67 %) were having poor hygiene and 5 patients (33.33 %) were having good hygiene.

- The table shows distribution ratio according to type of diet (veg to mixed) of patients in both the groups was same 5:10.
- Distribution of patients according to their bowel habits in both the groups shows that in group P, regular to irregular bowel habits ratio is 7:8. In Group P, regular to irregular bowel habits ratio was same 7 : 8.

Comparison of Kasa score in two group at day 0th, day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1.40±0.50	1±0	0.66±0.48	0.20±0.41
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	3.05	4.78	11.22
p-value	-	0.009,S	0.0001,S	0.0001,S
Group A	1.53±0.51	1±0	0.73±0.45	0.33±0.48
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	4.00	7.48	11.22
p-value	-	0.001	0.0001,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.47	1	0.69	0.41
p-value	0.53,NS	1.00,NS	0.77,NS	0.53,NS

Comparison of Kaphanishthivana score in two groups at day 0th,day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1±0	1±0	0.60±0.50	0.40±0.50
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	-	3.05	4.58
p-value	-	-	0.009,S	0.0001,S
Group A	1±0	1±0	0.60±0.50	0.40±0.50
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	-	3.05	4.58
p-value	-	-	0.009,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.00	0.00	0.00	0.00
p-value	1.00,NS	1.00,NS	1.00,NS	1.00,NS

Comparison of Ghurghurkatwa score in two group at day 0th, day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1±0	0.86±0.35	0.73±0.45	0.26±0.45
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	1.46	2.25	6.20
p-value	-	0.16,NS	0.041,S	0.0001,S
Group A	1±0	1±0	0.66±0.48	0.33±0.48
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	-	2.64	5.29
p-value	-	-	0.019,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.00	1.43	0.39	0.39
p-value	1.00,NS	0.15,NS	0.69,NS	0.69,NS

Comparison of Pinasa score in two group at day 0th, day 7th, day 14th and day 28th

	Day 0	Day 7	Day 14	Day 28
Group P	1.40±0.50	1±0.37	0.33±0.48	0.13±0.35
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	3.05	9.02	10.71
p-value	-	0.009,S	0.0001,S	0.0001,S
Group A	1.20±0.41	0.80±0.41	0.20±0.41	0±0
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	3.05	7.24	11.22
p-value	-	0.009,S	0.0001,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	1.17	1.34	0.81	1.43
p-value	0.24,NS	0.17,NS	0.41,NS	0.15,NS

Comparison of Asino labhate Saukhyam score in two groups at day 0th, day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	2.40±0.50	1.40±0.50	1±0.37	0.33±0.48
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	-	10.69	11.37
p-value	-	-	0.0001,S	0.0001,S
Group A	2.20±0.41	1.20±0.41	0.73±0.59	0.26±0.45
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	-	11	16.35
p-value	-	-	0.0001,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.24	0.24	0.13	0.69
p-value	0.36,NS	0.36,NS	0.25,NS	0.77,NS

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1±0	0.73±0.45	0.33±0.48	0.13±0.35
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	2.25	5.29	9.53
p-value	-	0.041,S	0.0001,S	0.0001,S
Group A	1±0	0.60±0.50	0.13±0.35	0.06±0.25

Comparison of Shwashkrichhata score in two groups at day 0th, day 7th day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1±0	0.73±0.45	0.33±0.48	0.13±0.35
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	2.25	5.29	9.53
p-value	-	0.041,S	0.0001,S	0.0001,S
Group A	1±0	0.60±0.50	0.13±0.35	0.06±0.25
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	3.05	9.53	14
p-value	-	0.009,S	0.0001,S	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.00	0.76	1.27	0.59
p-value	1.00,NS	0.44,NS	0.20,NS	0.55,NS

Comparison of Nidra Score in two group at day 0th, day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	1±0	0.33±0.48	0±0	0±0
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	5.29	-	-
p-value	-	0.0001,S	-	-
Group A	1±0	0.20±0.41	0±0	0±0
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	7.48	-	-
p-value	-	0.0001,S	-	-
Comparison between two groups(Mann Whitney U Test)				
z-value	0.00	0.81	0.00	0.00
p-value	1.00,NS	0.41,NS	1.00,NS	1.00,NS

Comparison of Adventitious Sound Score in two group at day 0th day 7th, day 14th and day 28th

	Day 0th	Day 7th	Day 14th	Day 28th
Group P	2±0	1.26±0.45	0.80±0.41	0.33±0.48
Comparison with day 0(Wilcoxon Signed Rank Test)				

z-value	-	6.20	11.22	13.22
p-value	-	0.0001,S	0.0001,S	0.0001,S
Group A	2±0	1.20±0.41	1±0	0.53±0.51
Comparison with day 0(Wilcoxon Signed Rank Test)				
z-value	-	7.48	-	11
p-value	-	0.0001,S	-	0.0001,S
Comparison between two groups(Mann Whitney U Test)				
z-value	0.00	0.42	1.79	1.08
p-value	1.00,NS	0.67,NS	0.07,NS	0.27,NS

Comparison of TLC Score in two groups at day 0, and day 14

Group	Day 0th	Day 14th	Mean Difference	Student's Paired t test (t-value)
Group P	10793.33±3012.22	8806.66±2015.10	1986.66±1319.55	5.83 P=0.0001,S
Group A	10133.33±2755.68	7640±1327.08	2493.33±2432.36	3.97 P=0.001,S
Comparison of mean difference in two groups(Student's unpaired t test)→			t-value	p-value
			0.70	0.48,NS

Comparison of AEC Score in two groups at day 0th, and day 14th

Group	Day 0th	Day 14th	Mean Difference	Student's Paired t test (t-value)
Group P	319.53±91.53	235.73±83.94	83.80±38.68	8.39

				P=0.0001,S
Group A	247.20±118.09	193.46±66.80	53.73±73.30	2.83 P=0.013,S
Comparison of mean difference in two groups(Student's unpaired t test)→			t-value	p-value
			1.40	0.17,NS

Percentage of relief after treatment in group P

Relief criteria	No. of symptoms	Percentage of symptoms
Excellent (>70%)	13	86.67
Moderate (30%-70%)	2	13.33
Poor (<30%)	0	0
Total	15	100

Percentage of relief after treatment in group P

Relief criteria	No. of symptoms	Percentage of symptoms
Excellent (>70%)	13	86.67
Moderate (30%-70%)	2	13.33
Poor (<30%)	0	0
Total	15	100

Percentage of relief after treatment in Total patients-

Relief criteria	No. of symptoms	Percentage of symptoms
Excellent (>70%)	25	83.33
Moderate (30%-70%)	5	16.67
Poor (<30%)	0	0
Total	30	100

DISCUSSION-

The purpose of the discussion is to clarify the interpretations, opinions and explanation of the findings and to suggest for the future research. This chapter deals with the discussion on the selection of the study, major observations and results of the present study along with the probable action of the drug in Tamaka Shwasa.

Observations in the study:

Total 33 participants were registered as per the inclusion and exclusion criteria out of which 30 completed the course with no reported adverse drug reaction (ADR). The drop out of 03 participants was due to their personal problems and issues in transportation facilities. No other specific reason was reported for discontinuing the course of the trial. All the participants were assessed on various parameters fixed for the effect of the therapy. Subjective and Objective parameters were assessed on the basis of gradation score. To combat the practical issues in assessment in children, the parameters Ghurghurakatwa and Kapha-nishtivana were graded as only present and absent with the scores of 1 and 0 respectively. The subjective parameters which could be assessed in children were only selected in the study. Before and after Treatment, results were analyzed statistically and theefficacy was compared between the groups.

As per the demographic data maximum numbers of participants were from age group 5-12 years. Age is often considered as a risk factor for Bronchial Asthma because it is unclear if malnutritional status leads to Bronchial Asthma or if the age reflects the sum of cumulative response throughout the life. Ageing of the airway and parenchyma may lead to structural changes associated with Childhood Asthma. Out of 30 participants, males were 08 in Group P and 07 in Group A whereas, females were 07 in Group P and 08 in Group A.

The ratio of males and females is seen equal which was just a serendipity(co-incidence) rather than any logic behind this observation.

In the previous of the studies most studies have reported that prevalence and mortality rate of Bronchial Asthma are greater in urban area rather than rural area because of the reflecting change and patterns of the environment and climate in developing and developed countries. All this is worsening due to one major cause i.e. pollution in urban area which is affecting a big threat in global warming. In the present study, the site was a rural area and the population was also from the mostly rural area. The prevalence of Bronchial Asthma even in rural area suggests that environmental pollution might have started influencing even the rural areas. The nearby industries might be contributing to the disease in children. Burning wood, cow dung, crop residues and coal in open fire is typically found in the location of the study which might have also contributed to this observation.

On the basis of religion, nothing specific can be predicted from the observation in the present study, as the demographic area might have played the major role in it. With respect to the status of education, all the participants were school going children and there is no such fact which relates prevalence of Bronchial Asthma in school going children.

Discussion on observations-

1. **Gender**- Tamaka shwasa is not a gender bias disease and observation of the study showed that males as well as affected ratio is more equal. The percentage of males affected by Tamaka shwasa in groups P and A were 53.33% and 46.67% respectively. The percentage of females affected in groups A and B were 46.67% and 53.33% respectively. As there is randomization so we received such variations between both the groups related to gender thus it depicts that gender has no association with Tamaka shwasa.

2. **Habitat**- The study showed equal involvement of children from urban and rural area. This may be because the selection of the patients was done from urban and rural areas. It has been observed that in group P 4 patients (26.67%) were from rural and 11 patients (73.33%) were from urban areas. In group A, there were 11 patients (73.33%) from rural and 4 patients (26.67%) were from urban areas. Therefore, habitat has no relation to the prevalence of Tamaka shwasa.

3. **Religion**- Regarding religion, total 100% of patients enrolled were from Hindu category. The found observation may be due to the area where study was conducted which is having maximum number of Hindus so one can opine that religion is not having a specific impact on stuttering.

4. **Economic status**- In this present study, maximum number of children were belonging from middle class i.e. 66.67% from group P and 80.0% from group A. Whereas less number of poor patients were enrolled in the study i.e. 33.33% from group P and 20.0% from group A. Less % of patients from poor category people shows negligence towards condition like stuttering and having poor awareness for the impact and complications if kept untreated.
5. **Appetite**- Out of 15 patients in group P, 9 patients were having poor appetite and 6 patients were having good, Out of 15 patients in group A, 9 patients were having poor appetite and 6 patients were having good.
6. **Diet**- Group P and A showed that there was majority of patients who were consuming mixed diet i.e. 10 (66.67%) in group P and 10 (66.7%) in group A. Childhood period is of Kapha predominant where again influence of mixed and vegetarian diet helps for easy accumulation and aggravation of Kapha which again restrict Vata by forming Avarana and leads to Tamaka shwasa. Thus, it can be opinioned that only diet is not the alone factor responsible for Kapha and Vata aggravation.

7. **Bowel habits-** The present study showed most of the patients were having regular bowel habits i.e. 7 patients (46.67%) from group P and 7 patients (46.67%) A respectively. This shows that there is no co-relation of bowel with Tamaka shwasa.
8. **Micturation-** The present study showed All the patients were having regular micturation habits i.e. 15 patients (100%) from group P and 15 patients (100%) A respectively. This shows that there is no co-relation of micturation with Tamaka shwasa.

Result of the study:

In the present study, All parameters showed insignificant results on inter group comparison. The insignificant effect on comparison over Peenasa, Ghurghurakatwa, Kapha Nishtivana, Asinolabhate saukhyam and Shwasakrichhrata and Nidra shows that both the groups were equally effective in the management of Tamaka Shwasa. The insignificant difference between the groups may also be due to the less sample size in the present study. As the level of increase was within the normal limits no specific effect of the drug can be ascertained from the values. Larger sample studies might earn better conclusions. Although there was insignificant difference between the effect of both the groups, the changes in the values of Lymphocytes was within the normal limits. The same was seen in the values of Basophils and Monocytes also. Although there was reduction the in the values of Eosinophils and Absolute Eosinophil Count in both the groups, the difference was not significant in the study. Larger sample evaluation might give precise results. No Adverse Drug Reaction (ADR) reported during the follow up period reveals that the drugs did not cause any untoward effect in the participants.

Probable mode of action-

In the literature of Ayurveda, the main causes of TamakaShwasa are the vitiation of Vata and Kaphadosha including the formation of Ama in which the drugs having the properties of Deepana, Pachana, Vatanulomana, Shwasahara, Kasahara and tridoshahara can break the Samprapti of Tamaka Shwasa.

Tamaka Shwasa has the pathological state of Vata and Kapha Dosha in dominance. Paediatric age group has been explained in Ayurved classics as a period where there is physiological dominance of Kapha Dosha. The Palandu Taila is explained in Shwasachikitsa of Ashtang hridaya Chi.4/47. Palandu Taila acts as Kaphanissarak, Uttam Vatahar[13].

In this study, two formulations of interventions which are indicated in the management of Tamaka Shwasa have been compared in the different set of participants. Both groups were administered Pratimarsha Nasya of Palandu taila and Anu taila in Group P and Group A respectively. By virtue of its effect, Pratimarsha nasya might have helped in the normal movement of Vata and Kapha vilayana which was extended. This formulation also facilitated the normal downward movement of Vata with respect to respiration which reduced the gravity of dyspnea and difficulty in sleep. The reduction of excess quantity of sputum brought about by the drugs used helped in listening the adventitious sound on auscultation of chest.

CONCLUSION

- In the present study Tamaka Shwasa was correlated to Childhood Asthma or Bronchial Asthma in children.
- Out of 33 participants, only 30 completed the trial who received Palandu taila pratimarsha nasya in Group P and PAnu taila pratimarsha nasya in group A in which subjects were divided randomly.
- Quality Control Proforma of the trial drug was obtained before the trial which showed no any obvious microbial contamination.
- The trial drug was found to be acidic in nature.
- In the clinical study, all the participants were school- going children in both the groups.
- Children from middle and lower socio- economic status were more in the study having low weight according to their age and lean built.
- Consumption of Ruksha Aahara, packet foods and Agnimandya were the major etiological factors observed in the study.
- The results of the study revealed that the effect of the both groups i.e Group P and Group

A was non significant in the Assessment.

- The comparative result of both the groups in Subjective parameters whereas in other parameters showed insignificant difference between the groups. The parameters such as Peenasa, Ghurghurkatwa, Kaphanishtivana, Asinolabhatesaukhyam and Shwasakrichrrata showed reduction individually.

Although there was insignificant difference between the effect of both the groups, the changes in the values of Lymphocytes was within the normal limits. The same was seen in the values of Basophils and Monocytes also. Although there was reduction the in the values of Eosinophils and Absolute Eosinophil Count in both the groups, the difference was not significant in the study. Larger sample evaluation might give precise results. No Adverse Drug Reaction (ADR) reported during the follow up period reveals that the drugs did not cause any untoward effect in the participants.

The Pratimarsha nasya was well tolerated by all the participants without any obvious Adverse Drug Reaction (ADR) during the treatment and even in the followup period.

Hence, it can be concluded that Palandu Taila Pratimarsha Nasya can be effectively used in children suffering from Tamaka Shwasa for a period of 14 days.

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