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CLINICAL EFFICACY OF VASADI KWATH AND NITYAVIRECHAN KARMA IN THE MANAGEMENT OF TAMAK SWAS w.s.r to BRONCHIAL ASTHMA: A COMPARATIVE STUDY

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ABSTRACT

This comparative clinical study investigates the efficacy of Vasadi Kwath and Nitya Virechan Karma in managing Tamak Swasa, a condition analogous to bronchial asthma. Tamak Swasa, characterized by chronic respiratory distress and dyspnea, involves the vitiation of Vata and Kapha doshas. The study included 30 patients, divided into two groups: Group A received Vasadi Kwath, while Group B underwent Nitya Virechan Karma. Both treatments showed statistically significant improvements in symptoms. Group A exhibited a 41.3% overall improvement, and Group B demonstrated a 41.15% overall improvement. These results indicate that both Vasadi Kwath and Nitya Virechan Karma are effective in alleviating the symptoms of Tamak Swasa. Integrating these Ayurvedic therapies may provide a holistic approach to managing bronchial asthma, potentially reducing reliance on conventional pharmacological treatments and their associated side effects. Further studies with larger sample sizes and longer follow-up periods are recommended to confirm these findings and explore the long-term benefits of these Ayurvedic interventions.

KEYWORDS: Ayurveda Tamak Swasa, Virechan, Vasadi kwath.

INTRODUCTION

Tamaka Shwasa is one of 5 types of swasa where dyspnoea is predominant symptom.[1] But still we can correlate it with Bronchial Asthma, because out of the remaining four, three are

incurable and the fourth one is Kshudra Shwasa developed due excessive labor or taking excessive Ruksh Ahara and which is easily curable. Acharya Charaka described that Tamak Shvasa is Yappya type of disease in which patient has to depend upon medicines for the relief.[2] Asthma is one of the most common chronic diseases globally and currently affects ~300 million people worldwide, with ~250,000 deaths annually. The prevalence of asthma has risen in affluent countries over the last 30 years but now appears to have stabilized, with ~10–12% of adults and 15% of children affected by the disease.[3] Tamak Shwasa is a type of Shwasa in which patient feels excessive difficulty and drowning in dark is known as Tamak Shwasa. Tamak Shwasa is a disease in which patient experience respiratory distress with extreme weakness, fatigue and mental glooming. The name of Tamaka Shwasa is due to the fact that, the symptoms or attack of this disease precipitates at night and also during the time of attack, the breathing difficulty is so severe that patient feels entering into the darkness (Tama Pravesh). Both the Vata and Kapha have been considered to be the chief Doshas involved in the pathogenesis of Tamaka Shwasa.[2] **Bronchial Asthma** is a heterogeneous disease , usually characterised by chronic inflammatory disease of the airways.[4] It is defined by airflow obstruction that varies markedly both spontaneously and with treatment. Asthmatics harbor a special type of inflammation in the airways that makes them more responsive than nonasthmatics to a wide range of triggers, leading to excessive narrowing with consequent reduced airflow and symptomatic wheezing and dyspnea. Narrowing of the airways is usually reversible, but in some patients with chronic asthma there may be an element of irreversible airflow obstruction.[3]

Need of the study

According to modern point of veiw, the principles of the management of bronchial asthma aim to control symptoms, to prevent and treat exacerbation and to reduce chronic airway inflammation. The pharmacological treatment includes inhaled and systemic corticosteroids, leukotrienes modifiers, immunomodulation, LABA, SABA, methylxantines and anti cholinergics. Inspite of all round development in the medical research all the drugs suffer limitations along with adverse effects and drug dependent which still remains a challenge before medical science. So the modern treatment available is not the real answer to combat Bronchial Asthma.[5]

I intent to study about the clinical efficacy of vasadi kwath and Nitya virechan karma in the management of Tamak swasa w.s.r. to bronchial asthma.

According to Ayurveda Shvasa roga is a Kapha Vataja disease which is originated from Pittasthana. Whenever there is obstruction of Pranavayu by Kapha Dosha, the vitiated Vayu gets Pratiloma Gati (reverse movement) to produce Shvasa Roga. Acharaya Caraka and Vagbhata have described Virechana Karma in the management of Shvasa Roga. In Tamaka Shvasa, Kapha obstructs the passage of Vayu, the obstructed Vayu take the Pratiloma Gati. Virecana drugs having the quality of Vatanulomana, Usnaguna, Kaphavataghna property may be more beneficial in the condition of Shvasa. Virecana removes mainly Kapha and Pitta Dosha and makes Vata in Anuloma Gati. Thus this conceptual study was under taken to study the concepts of Tamaka Shvasa.[6]

AIMS AND OBJECTIVES

- To evaluate the clinical efficacy of Vasadi kwath in the management of Tamak Swasa
- To evaluate the clinical efficacy of Nitya Virechan karma in the management of Swasa.
- To review and evaluate available literature related with as Tamak shwasa, Bronchial asthma explained in Ayurveda and modern medical science.

Disease Review

Ayurvedic Review

Difficulty in breathing, labored breathing, or any disruption of normal respiration is known as Shwasa Roga. In Ayurveda, Shwasa is a pathological condition where the usual breathing process is disturbed. It is considered a disorder of the Pranavaha Srotas (the respiratory channels). When these channels are disturbed, it leads to excessive, restricted, disturbed, or noisy breathing.[7]

Shwasa Roga is seen as a Kapha-Vata disorder originating from the site of Pitta.[8] When the normal flow of Pranavayu (life force air) is blocked by Kapha (mucus or phlegm), it becomes vitiated and starts moving in the opposite direction (upward). This disruption prevents it from performing its normal functions, leading to Shwasa Roga.

In Tamaka Shwasa, the vitiated Vata moves against its natural course (Pratiloma Gati). The obstructed Vayu (air) in the Pranavaha Srotas aggravates the Kapha Dosha, causing obstruction in the throat (Greeva) and head (Shiras), and leading to conditions like Peenasa (nasal congestion).[9] This blocked Vayu produces a wheezing sound (Ghurghura Dhwani) and results in severe episodes of Shwasa.

Modern review[10]

Asthma is defined as disorder characterized by chronic airway inflammation and increased airway responsiveness resulting in symptoms of wheezing, cough, chest tightness, and dyspnea. It is characterized functionally by presence of airflow obstruction which is variable over short period of time or is reversible with treatment. It is not a uniform disease but rather a dynamic clinical syndrome which has a number of clinical patterns.

Classification[11]

According to etiology

1. Allergic, Extrinsic or Early onset Asthma: In extrinsic asthma, the asthmatic episode is typically initiated by a type I hypersensitivity reaction induced by exposure to an extrinsic antigens like pollens, moulds, house dust, mite etc.
2. Non –allergic, intrinsic or late onset asthma: Although the majority of patients with asthma have atopy , in a proportion of patients with asthma there is no evidence of atopy with normal total and specific IgE and negative skin tests. This so-called "intrinsic" asthma usually comes on later in life and tends to be more severe than allergic asthma The pathophysiology is very similar to that of allergic asthma and there is increasing evidence for local IgE production, possibly directed at bacterial or viral antigen.
3. Mixed type- A third type is a mixed pattern in which the features do not fit clearly into either of the two main types.

MATERIALS AND METHODS

Drug Review

In Ayurvedic classics, the importance of Aushadha is described as "Nothing in the world exists which does not have therapeutic utility".

SELECTION OF DRUG: The selection of drug is made, considering the sign and symptoms and pathogenesis of Tamak swasa. My trial drug I.e vasadi kwath have ingredients such as Vasaka, Harida, Dhanyak, Guduchi, Bharangi, Pippali, Sunthi, Kantakari.

Therapeutic effects of the ingredients[12]

- Vasaka- Active ingredients of Vasaka are vasicine, oxyvasicine, vasicinone etc, vasicine showed bronchodilatory activity both in vitro and in Vivo comparable with that of theophylline, bronchodilatory activity of vasicinone was compared to that of isoprenaline and aminophyline.

- Haridra- It acts as an antioxidant, anti inflammatory, anti allergic and helps in Srota sodhan.
- Dhania- It balances all the doshas, It is a swasahara.
- Guduchi- It act as a immunomodulator, it has anti inflammatory property, antiallergic,and tridoshara.
- Bharangi & Kantakari: It is vata kaphahara, swasahara.
- Sunthi and Pippali - vata kapha hara, Ushna veerya, Rasayan, swasahara.

Clinical Study

a) Sample Size

Total 30 patients is considered for the study diagnosed with Tamak swasa taken government Ayurvedic college & Hospital, Guwahati 14.

b) Study design

It is a clinical comparative study where there are 2 groups of 15 each.

Group A

Total 15 patients will be interven with my trial drug Vasadi kwath 50 ml twice daily for 15 days.

Group B

Total 15 patients will be trial for Nitya Virechan with vata kapha hara drugs for 15 days, dose had been decided depending on the kostha of the patients.

c) diagnostic parameters[13]

●Dyspnea / swaskastatva

0 - Completely releived dyspnea.

1- Slight dyspnea after heavy work and relieved by rest.

2- Dyspnea even at rest.

4 - Very severe require hospitalisation.

● Cough/ Kasa

0 - No cough

1 - Dry cough without pain/wet cough with easy expoctoration.

2 - Dry cough with pain/wet cough with slight difficulty in expectoration.

3 - Dry cough with severe pain/ feeling of restlessness because of difficulty in expectoration.

4 - Frequent coughing due to which patient become unconscious.

● Ghurghurukam/ Whezzing

0 - No ghurghurkam

1- Only at night

2- At night occasionally during day

3- Throughout day

● Asino labhate sukham

0 - Relief on lying down.

1- Temporary feels better in sitting posture.

2- Sitting posture gives relief

4- Spontaneous Sitting posture, cannot sleep

Criteria for the assessment of overall effect of the therapies

The total effect of the therapy was assessed considering to the over all improvement in signs and symptoms. For this purpose, following categories were maintained.

1. Complete remission: 100% relief in the signs and symptoms
2. Marked improvement: 75%- 99% relief in the signs and symptoms
3. Moderate Improvement: 50%- 74% relief in the signs and symptoms
4. Mild Improvement: 25%- 49% relief in the signs and symptoms
5. Unchanged: Below 0%-24% relief in the signs and symptoms

OBSERVATION

Out of 30 patients, maximum 33.3% patients were of 50-60 yrs age group and followed by 30% of 45-50yrs group, 18(60%) were female and 12 (40%) patients were male. maximum patients 20 (66.6%) were Hindu, 09 (30%) were Muslim and 01 (3.3%) was Christian, All 30 (100%) patients were married, maximum 20 (66.6%) patients were not having any habits, 08 (26.7%) patients had habit of intake of alcohol and 02 (6.6%) having tobacco taking habit. Maximum 19 (63.3%) patients were of moderate work class, 10 (33.3%) patients were of active work class and 01 (3.3%) patients were of sedentary work class. Maximum 20 (66.7%) patients belonged to 40-60 kgs class, 06 (20%) belonged to 60-80 kgs class and 04 (13.3%) to 30-40 kg class. Maximum 14 (46.7%) patients were of lower middle class, 12 (40%) patients were of upper middle class and 04 (13.3%) patients were of Lower class. Maximum 20

(66.6%) patients were of mixed diet and 10(33.3%) were vegetarian.. Maximum 16 (53.3%) patients were having Chronicity upto 1 year, 12 (40%) patients were of 1-2 year and 02 (6.7%) were of more than 2 year chronicity. Maximum 25 (83.3%) patients bowel habit were regular.

RESULTS

Statistical analysis of group A showed that the mean score of Swaskastatva, which was 1.66 before the treatment was reduced to 1.01 after treatment with 39.8% improvement with p value <0.001, it is statistically significant. Statistical analysis of group B showed that the mean score of Swaskastatva, which was 1.72 before the treatment was reduced to 1.10 after treatment with 36.01% improvement with p value <0.001, it is statistically significant.

Statistical analysis of group A showed that the mean score of Kasa, which was 2.15 before the treatment was reduced to 1.10 after treatment with 48.9% improvement with p value <0.001, it is statistically significant. Statistical analysis of group B showed that the mean score of Kasa, which was 2.05 before the treatment was reduced to 1.35 after treatment with 34.2% improvement with p value <0.001, it is statistically significant.

Statistical analysis of group A showed that the mean score of Gurghurakam, which was 2.8 before the treatment was reduced to 1.4 after treatment with 47.61% improvement with p value <0.001, it is statistically significant. Statistical analysis of group B showed that the mean score of Gurghurakam, which was 2.3 before the treatment was reduced to 1.25 after treatment with 54.4% improvement with p value <0.001, it is statistically significant.

Statistical analysis of group A showed that the mean score of Asino labhate sukham, which was 1.75 before the treatment was reduced to 1.25 after treatment with 29% improvement with p value <0.001, it is statistically significant. Statistical analysis of group B showed that the mean score of Asino labhate sukham, which was 1.75 before the treatment was reduced to 1.05 after treatment with 40% improvement with p value <0.001, it is statistically significant.

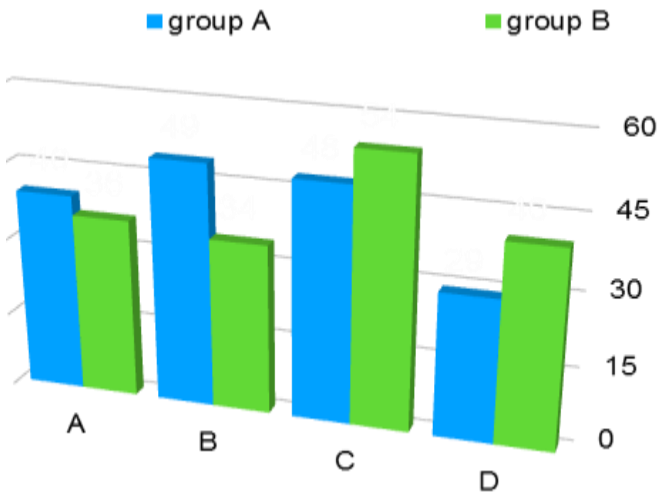

Fig 3D: projection of the results of the study (A - Swaskastatva, B - Kasa, C – Gurghurukam D- Asino labhate sukham.

Characteristics	Group - A			Group- B		
Sign and symptoms	Mean score		Percentage of relief	Mean score		Percentage of relief
	BT	AT		BT	AT	
Swaskastatva	1.66	1.01	39.8%	1.72	1.10	36.01%
Kasa	2.15	1.10	48.9%	2.05	1.35	34.2%
Gurghurakam	2.8	1.4	47.61%	2.3	1.25	54.4%
Asino labhate sukham	1.75	1.25	29%	1.75	1.05	40%

DISCUSSION AND CONCLUSION

Discussion is paramount in enhancing intellect. This study focuses on Tamaka Swasa, a disease with multifactorial causes influenced by nature, diet (Aahara), and lifestyle (Vihara). The management of Tamaka Swasa considers all these factors. The disease affects the Pranavaha Srotas, characterized by the vitiation of Kapha and Vata Dosha, originating in the Pittasthana. The study involved two groups, each comprising 15 patients. Comparative study between the two groups as carried by giving the selected drug Vasadi kwatht one group and Nitya Virechana to second group.

Group A, treated with Vasadi Kwath, showed notable improvements in Swaskastatva (39.8%), Kasa (48.9%), Gurghurakam (47.61%), and Asino labhate sukham (29%). Similarly, Group B, which underwent Nitya Virechan Karma, exhibited improvements in Swaskastatva (36.01%), Kasa (34.2%), Gurghurakam (54.4%), and Asino labhate sukham (40%). The overall effectiveness of both treatments was nearly equivalent, with Group A showing a 41.3% improvement and Group B showing a 41.15% improvement.

These findings suggest that both Vasadi Kwath and Nitya Virechan Karma are effective in managing Tamak Swasa, with each treatment offering unique benefits in symptom relief.

Therefore, integrating these Ayurvedic treatments can provide a holistic approach to managing bronchial asthma, potentially reducing dependency on modern pharmacological treatments and their associated side effects. Further studies with larger sample sizes and longer follow-up periods are recommended to validate these results and explore the long-term benefits of these Ayurvedic interventions.

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