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Clinical Study to Evaluate the Efficacy of Drakshadi Avaleh and Yoga Intervention Program in Management of Tamaka Shwasa w. s. r to Childhood Asthma

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Abstract: Childhood Bronchial Asthma, a well - known hypersensitivity disorder is characterized by respiratory ventilation insufficiency. Asthma has multifactor causation like Geographical location, environmental, racial, as well as factors related to behaviors & life styles are associated with the disease. Tamaka Shwasa is a disease described in Ayurvedic texts that shows close resemblance with Bronchial Asthma on the basis of clinical manifestation. Tamaka shwasa is one among the major disease explained in Ayurveda. Difficulty in breathing, failure of normal process of respiration is known as shwasa roga. Shwasa is pathological condition in which the normal process of respiration is distributed. Tamaka Shwasa is caused due to vitiation of Kapha and Vata dosha affecting Pranavaha Srotas. Approximately 50% of children, have clearly defined allergen exposure that can be associated with Asthma. The global prevalence of Asthma is anticipated to be approximately 45%. There are about 334 million peoples affected with Asthma, across the world. India has an estimated 15 - 20 million Asthmatics. The prevalence of Asthma has increased over time and an additional 100 million people worldwide will be expected to develop Asthma by the year 2025. In morden medical science, management of bronchial Asthma is carried out with usage of bronchodilatores, leucotriene antagonist, mast cell stabilizers corticosteroids. Long lasting use of morden drugs also produces adverse and reduces the effectiveness of therapy. Taking into consideration all the above facts a study, had been designed under the title "Clinical Study to evaluate the efficacy of Drakshadi avaleh and Yoga Intervention program in Tamaka Shwasa w. s. r to Childhood Asthma."

Keywords: Asthma, Drakshadi avaleh, Shwasa, Ayurveda, Pranvah srotas

1. Introduction

Bronchial Asthma is an exaggerated immune response occurs as a most common chronic disorders explained mainly as because of increased stress on the system by factors such as greater chemical pollution in the air, water & food. Its prevalence is rapidly increasing in developing countries. It is also considered as an adversary of medical treatment for various specific ailments that can alter immune balance. There is no everlasting cure for Asthma as per the Conventional Medical Science, Mordern management of Asthma line is mainly based on Short - acting b2 - agonists. theophylline, oral and inhaled corticosteroids etc.

Tamaka Shwasa is a disease described in Ayurvedic texts that shows close resemblance with Bronchial Asthma on the basis of clinical manifestation. Tamaka shwasa is a disease of Pranvaha Srotas caused by predominant of Vata Kapha dosha afflicting the Rasa dhatu. The disease shwasa as described in Ayurveda is of 5 varieties, out of which 3 types of Shwasa are stated to be incurable, while one of them does not need any treatment only rest is sufficient, whereas the "Tamaka Shwsa" is Yapya, i. e. palliative. The main symptoms include Shwasakrucchata (Breathlessness), Ghurghuraka (wheezing), kasa (cough), Peenasa (Rhinitis), Anidra (Difficulty in sleeping). Kanthodhvamsa (Hoareseness of voice), Asino Labhte Saukhyam (Relief in siting position) etc. The unique treatment modality of Ayurveda provides long lasting results and a better life to patients. As mentioned above Tamaka Shwasa is predominantely Vata Kaphaja Vyadhi. The trial drugs**Drakshadiavaleh** which is combination of four drugs mention in **Yog Ratnakar** pacifies Vata kaphaj doshas for betterment of respiratory health.

Aim and Objective of Study

- To review ancient as well as modern literature available on Tamakshwasa and it's management.
- To study the efficacy of Drakshadi yog and yoga in management of Tamak shwasa w. s. r. to childhood asthma.
- To assess and monitor any adverse effects of trial drugs.

2. Material and Methods

Selection of the drugs:

Drakshadiyog is the combination of 4 drugs explained by **Yogratnakar in balrogadhikaar.** All drugs are in equal quantity.

द्राक्षावासाभयाकृष्णचूर्णञ्चक्षौद्रेणसर्पिषा। लीढंश्वासंनिहन्तत्याशुकासंचतमकंतथा।। (यो. र. बा. रो. पृ४४२)

| Draksha - | Vitis vinifera |
|------------|--------------------|
| Vasa - | Adhatoda vasica |
| Haritaki - | Terminalia chebula |
| Pippali - | Piper longum |

Contents of Drakhadi yoga described below -

1) Draksha (Vitis vinifera):

Latin Name: - Vitis vinifera Family: - Vitaceae

Synonyms -

Sanskrit Name: - Draksa, Mrudvika, Gostani, Swaduphala, Brahmani, Rasaala, Guda, Vrushya, Krushna, Madhurasa, Priyala, Tapasapriya Hindi name - Angoor, Munakka English Name: Grapes

Ayurvedic Properties -

- Rasa: Madhura
- Guna: Snigdha, Guru, Mrudu
- Veerya: Sheeta
- Vipaka: Madhura

Karma:

Dosha karma: Vata - pitta hara, Vrshya, Brmhana, Chakshushya,

Virechanopaga, swarya.

Pharmacological Activity

Due to snigdha, guru, mradu and madhur it helps to overcome vata dosa usefull in vatajkasa. (P. V. Sharma: Dravyagunvigyanam)

Pharmacological Propertyies

Vitis vinifera has shown presence of Antioxidant, Antifungal, Antiulcer, Hepato Protective, Wound Healing, Anti Mutagenic, Anti Herpetic, Cardio

Protective. Breast Cancer Suppressor, Angiotensin - Converting Enzyme (ACE Antibacterial Activity..)

Effects

It has Anti - oxidant, Hepatoprotective actions, Antimicrobial and antiviral effects and anti - inflammatory activates.

2) PIPPLI

Latin Name: Piper longum Family: Piperacaea

Properties:

- Rasa: Katu, Madhura
- Guna: Laghu, Snigdh, Tikshna
- Veerya: Anushnasita
- Vipaka: Madhura
- Prabhava: Rasayana

Karma:

Dosha karma: Vatakaphashamaka

Classical Indication:

Vatashleshmaroga, Udarroga, Kushtha, Prameha, Gulma. Arsha, Pliharoga, Aamvata, Shwasa, Kasa, Aruchi, Pandu, Krimiroga (B. P.):

3) HARITKI:

Latin Name: Terminalia chebula

Ayurvedic Properties:

- Rasa Pancha rasa except Lavan but Kashaya rasa pradhan.
- Guna Laghu, Ruksha
- Veerya Ushna
- Vipaka Madhur

Karma

Dosha karma: Saravdosh shamak mainly vatashamak Anulomana, Rasayana, Prajasthapana, Sansthanika karma: Anulomana, Rasayana, Prajasthapana, Chakshsusya, Hridya, Lekhana.

Pharmacological Activity

Due to Madhur tikta kashaya it helps to overcome pitta dosa: katu, tikta kashaya it helps to overcome kapha dosa and amala, madhur it helps to overcome dosa, it is tridosahara property. (P. V Sharma, Dravyagunvigyanam).

Effects

It has Anti - oxidant, immune - modulatory activity, anti - bacterial activity, Hepatoprotective actions and anti - viral activity etc.

4) VASA:

Latin Name: Adhotoda vasica Family: Acanthaceae **Ayurvedic properties:** Rasa: Tikta, Kasaya Virya: sita Vipaka: katu Guna: Laghu, Ruksha Karma: Kapha - Pittahara, Hrdya, Svarya

Indication

Shwasa, Kasa, Jwara, Chardi, Prameha. Kushta, Pandu,.

Yoga Intervention Sukshma vyayam (warming up)

Asana (postures) -

- 1) Tadasana
- 2) Parvatasana
- 3) Paschimottanasan
- 4) Bhujangasana

Pranayam (Breathing exercise) -

- 1) Nadi shodhan
- 2) Kapalbhati

Relaxation (Shavasana)

During trial & follow up period patients were instructed to follow Pathya and Apathya regime.

Probable Mode of Action of Drug

In Ayurveda, the action of drugs is determined on Pharmacodynamic factors as Rasa, Guna, Veerya and Vipaka along with certain specific properties called prabhava. These drugs in combination act as antagonist to the main morbid factors i. e. Dosha and Dushya to cause Samprapti Vighatana to all of the symptoms of the disease.

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Tamaka shwasa or Asthma is a result of disturbance in the equilibrium of Vata and Kapha, which cause obstruction in the equilibrium of Vata and Kapha, which cause obstruction in the of Pranvaha Srotas, so a drug which can remove the blockage, is essential in this disorder. The trial medicine has pharmacokinetic properties as Katu Tikta Rasa, Laghu Ruksha Guna, Ushna Veerya and Katu Vipaka which help to clear the blockage. Katu Vipaka propertye of the drug helps to cure. Ama ie. the inflammatory condition of the bronchial tree. Laghu Ruksha Guna helps to control Kapha responsible for the mucogenic secretion in the respiratory Discension avrection in the respiratory tract.

Ingredients are Kaphavatashamak and have differem therapeutic actions like Anti - allergic, anti - tussive, anti histaminic. mast cell stabilizing activity. inflammatory and immunomodulatory action etc Trial drug showed promising results may be due to synergistic actions of all ingredients

A bundle of research work has been done on management of Tamaka shwasa and Asthma in both modern and Ayurveda sciences and lot of work in still goning on. But still an expectant cure is not found. According to Fundamentals of Ayurveda, for cure of any disease samprapti vightan is the basic line of treatment. As Tamaka shwasa have vata kaphaja predominance with srotodushti sang (srotovarodha) and vimarggaman, we have selected a regimen with vatakaphashamaka properties.

Mode of Action of Yoga

- Pranayam There was significant reduction in symptoms improvement in FEVI and PEFR.
- Tadasana By the Tadasana Lung surface area increased so increased air entry in lung so prevent the narrowing of bronchioles.
- Parvatasana It improves the working of your respiratory system and keeps a check on hormones.
- Paschimottanasana By the Paschitomottanasana Jatharagni induced because it is mandagni vikar so help in to treat bronchial Asthma.
- Bhujangasana This induced the Jatharagni. And it is Sarve Rognashak and it induced Kundalini Shakti. It improves oxygen and blood circulation throughout the body. It also opens up your chest and clears the passages to the lungs.
- Shavasana Shavasana relaxes your entire body and mind and takes away any built up anxiety or pressure. It brings you into a meditative state and completely refreshes you. The pose helps you to be calm and composed which is essential to tackle asthma. Shavasana is a beginner level Ashtanga Yoga Asana. Stay in the pose for a couple of minutes till feels completely relaxed.

3. Conclusion

- Tamaka Shwasa is more common in early childhood period because of dominant of kapha in childhood.
- Tamaka Shwasa exacerbations are mostly occurs in winter, rainy & spring season due to increased humidity & allergens.
- Chiefly Pranavaha, Annavaha, Rasavaha srotodusti is dominant in Tamaka Shwasa and Kapha and Vata are

main vitiated doshas.

- Ingridients of Drakshadi avaleh are Kaphavatashamak and may have Anti - allergic, Anti - tussive, anti histaminic, mast cell stabilizing activity, anti inflammatory and immunomodulatory action etc.
- Drakshadi avaleh shows promising results may be due synergistic actions of all ingredients.

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