“A STUDY OF VAMANA KARMA AND ITS EFFECT ON BIO CHEMICAL CHANGES IN TAMAKA SHWASA W.S.R TO ALLERGIC ASTHMA”

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ABSTRACT: Vamana karma, the first therapy among the Panchakarma is considered as the best line of treatment for all Kaphajavikaras. It is an unparalleled treatment for Dushitakapha and Pitta wherein the doshas are forcibly expelled out through urdhwabhaga i.e., mukha. It is indicated in Tamakashwasa which has KaphaVata involvement and the disease being Pitta sthanasamudbhava. Asthma is growing in an alarming rate in all major cities today and its main reason being allergy. Thus, vamana karma was employed to control allergic asthma whose presentation is similar to Tamakashwasa. This study is taken up for assessing bio chemical changes due to Vamana karma and to prove its effect in Tamakashwasa. An observational clinical study done on 30 subjects of both sexes, between the age group of 20-60 years who were given Vamana karma with Madanaphalayoga. Assessment was done on symptoms of tamakashwasa & allergic asthma. Vamana karma showed significant improvement in Tamakashwasa. Both objective & subjective parameters showed significant results.

Key Words: TamakaShwasa, Vamanakarma, Allergic Asthma.

INTRODUCTION
Shodhana is a treatment modality to eliminate the doshas from the body and thereby to prevent the recurrence of diseases. It attacks the very root cause of disease, deases srotas and improve the body resistance and thereby checks the pathogenesis of the disease.1 Vamanakarma is the best line of treatment for dooshitakapha & pitta which will be expelled out through urdhwamarga.2 Tamakashwasa which is a kaphavajavikara & pittasthanasamudbhavita is one of the indications for vamanakarma.3 In modern parlance, asthma whose presentation is similar to tamakashwasa is growing in an alarming rate in all major cities today & its main reason being allergy. India has a huge population of asthmatics & it is constantly on the rise accounting for changing weather conditions, increased air pollution & bad eating habits. IgE, mast cells, B lymphocytes, eosinophils etc are the main components responsible for allergy. All these are present in blood serum & serum being considered as rasa dhatu is the ashraya for kaphadosha. Therefore, these components come under kaphadosha. When these components are sensitive to allergen it is prakruta & is bala. When these become hypersensitive to allergens it is vikruta & is mala. vamana karma which is best for vikrutakapha can be employed to control allergic asthma. Presently anti-inflammatory, bronchodilation treatments concurrent with inhaled & systemic corticosteroids & the latest being immunotherapy are effective therapies which comes with adverse effects as well.4 Hence this study is taken up for assessing the effect & biochemical changes due to vamanakarma in tamakashwasa at every stage of the procedure & to prove its time bound effect on recurrence of symptoms.

MATERIALS AND METHODS
The present clinical study was carried out by utilizing following drugs and materials-

<table>
<thead>
<tr>
<th>POORVA KARMA</th>
<th>DRUGS</th>
<th>DOSE</th>
<th>ANUPANA</th>
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<tbody>
<tr>
<td>Deepanapachana</td>
<td>Panchakolachurna</td>
<td>3g TID</td>
<td>Ushnajala</td>
</tr>
<tr>
<td>Snehapana</td>
<td>Moorchitaghrita</td>
<td>Arohanakarma</td>
<td>Ushnajala</td>
</tr>
<tr>
<td>Sarvangaabhyanga</td>
<td>Moorchitatilataila</td>
<td>Q.S</td>
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<th>PRADHANA KARMA</th>
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Akantapana
**Source of Collection of Data –**
Patients attending the OPD, IPD and camp conducted at Shri Jayachamarajendra Institute of Indian Medicine Hospital, Bangalore were taken for this study. 30 patients who fulfilled the inclusion criteria were randomly selected for the study without bias of social, economic, educational or religious status.

**Diagnostic criteria:**
Diagnosis was made on the following clinical features of *Takashwasa* mentioned in Ayurvedic classics, signs & symptoms of allergic asthma. They are: *Shwasakricchrata*, *Kasa*, *Ghurghuraka*, Aggravation of symptoms on exposure to dust & cold air, oily & cold food.

**Inclusion Criteria:**
1) Patients between the age group of 20 to 60 years who fulfilled the diagnostic criteria of *Takashwasa*.
2) Patients fit for *Vamana Karma*

**Exclusion criteria:** Patients with any complications & systemic disorders which interfere with the course of treatment.

**Investigation:**
Total IgE, AEC, ESR was done before *deepanapachana*, ½ hr before *vamanakarma*, ½ hr after *vamanakarma*, after *samsarjanakrama*, after 1 month of follow up.

**Sample size & Grouping:** 30 patients who fulfilled inclusion criteria were randomly selected & studied under single group.

**Study design:** ‘A clinical study’
**Duration of the study:** ~50 days

**ASSESSMENT CRITERIA:**
Patients were assessed before *deepanapachana*, ½ hr before *vamana*, ½ hr after *vamana*, after *samsarjanakrama* and after 1 month follow up. The following parameters were considered. They were graded, and scores were given as follows:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>OBSERVATION</th>
<th>GRADE</th>
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<tbody>
<tr>
<td>Shwasakricchrata</td>
<td>Normal: no breathing difficulty</td>
<td>0</td>
</tr>
<tr>
<td>Mild: breathlessness only on exposure to allergens</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moderate: breathlessness at night, irrespective of allergen exposure</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Severe: breathlessness day &amp; night, irrespective of allergen exposure, disturbs daily activities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Kasa</td>
<td>Normal: No cough</td>
<td>0</td>
</tr>
<tr>
<td>Mild: Continuous cough only on exposure to allergens</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moderate: Continuous cough at night irrespective of allergen exposure, disturbs sleep</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Severe Continuous cough day & night irrespective of allergen exposure, disturbs daily activities 3

| Ghurghuraka | Normal | No wheezing | 0 |
| Mild | wheezing only on exposure to allergens | 1 |
| Moderate | wheeze at night irrespective of allergen exposure | 2 |
| Severe | wheeze day & night irrespective of allergen exposure throughout the week | 3 |

OBJECTIVE PARAMETERS:

<table>
<thead>
<tr>
<th>Before deepanapachana</th>
<th>½ hr before vamana karma</th>
<th>½ hr after vamana karma</th>
<th>After samsarjana karma</th>
<th>After 1 month of follow up</th>
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<tbody>
<tr>
<td>Total IgE</td>
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<td>AEC</td>
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RESULTS

- Effect of vamana karma on total IgE
  Statistical analysis showed that the mean score which was 1047 before the treatment was reduced to 769 after the treatment with 27% improvement. After the follow up it became 0.612 with 42% improvement, and there is a statistically insignificant change. (P>0.05)

- Effect of vamana karma on AEC
  Statistical analysis showed that the mean score which was 495 before the treatment was reduced to 354 after the treatment with 29% improvement. After the follow up it became 261 with 47% improvement, and there is a statistically significant change. (P<0.001)

- Effect of vamana karma on ESR
  Statistical analysis showed that the mean score which was 33 before the treatment was reduced to 22 after the treatment and reduced to 15 follow up with 55% improvement, and there is a statistically significant change (P<0.05).

Effects of Vamana karma on subjective parameters

- Effect of vamanakarma on shwasakricchrata
  Statistical analysis showed that the mean score which was 2.27 before the treatment was reduced to 0.30 after the treatment with 87% improvement. After the follow up it became 0.30 with 87% improvement, and there is a statistically significant change. (P<0.001)

- Effect of vamana karma on kasa
  Statistical analysis showed that the mean score which was 1.87 before the treatment was reduced to 0.23 after the treatment with 88% improvement. After the follow up it became 0.17 with 91% improvement, and there is a statistically significant change. (P<0.001)

- Effect of vamana karma on ghurghuraka:
  Statistical analysis showed that the mean score which was 2.17 before the treatment was reduced to 0.30 after the treatment and follow up with 91% improvement, and there is a statistically significant change. (P<0.001)

<table>
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<tr>
<th>OVERALL EFFECT OF TREATMENT</th>
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<tr>
<td>Grading</td>
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<tr>
<td>No Improvement</td>
</tr>
<tr>
<td>Mild Improvement</td>
</tr>
<tr>
<td>Moderate Improvement</td>
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<tr>
<td>Marked Improvement</td>
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</table>
In Overall effect of treatment in Allergic Asthma, out of 30 patients in this study 2 patients (7%) were getting Mild improvement, 3 patients (10%) were getting Moderate improvement and 25 patients (83%) were getting Marked Improvement.

DISCUSSION
The pippali of madanaphala that was collected from Belgaum was processed according to classics. During processing it was observed that pippali of madanaphala collected from Belgaum is harder when compared to that of Shimoga. Madanaphalapippali from Belgaum was powdered on the previous day of vamana in every case in the present study & this when given in....

1g – led to pradhanashuddhi in majority of subjects
2g – led to expulsion of blood along with the vomitus

This proves that the drug has more tikshnaguna.

The same madanaphalapippali when powdered on the same day just before its administration & given in 1g dose immediately after powdering led to expulsion of blood along with the vomitus with lumps of bloodstained mucous membrane. This again shows that tikshnata is more when the drug is powdered & given immediately. Madanaphalapippali when powdered & stored for longer time showed reduced potency in inducing vamana & required a higher dose for proper shodhana.

Here though AEC & ESR were well within normal limits, subjects were taken up for the study as they had presented with symptoms of allergic asthma irrespective of the values. It was observed in the study that values which were in normal limits did not show marked changes after treatment. There were only slight variations or no change in the values. But in cases of values being abnormally high showed remarkable reduction after treatment. This indicates that if these components are prakruta then the procedure maintains its samyavastha. Only when it is vikruta it brings it back to prakrutavastha.

During follow up, there was aggravation of symptoms within 15 days in all the patients & thus shamoushadhis were administered.

All the patients who were regularly on inhalers before treatment withdrew inhalers during & even after vamana karma. They were initially on shamanoushadhis & later rasayanadravya. Presently all the patients have withdrawn inhalers.

COMPLICATIONS OBSERVED DURING VAMANA:
In 3 patients’ expulsion of fresh blood was noted along with the vomitus & the reasons behind it were -

One patient was a chronic smoker. Even a small quantity drug led to mucosal erosion as the blood vessels in chronic smokers will hypertrophied.

For 1 patient – 2g of madanaphalapippalichurna was administered.
For 1 patient – madanaphalapippali was powdered & given immediately.

Both these cases indicate tikshnata of the drug used. All the 3 presented with chest pain & catching of breath. 10ml of Yashstiksheerpaka was given for every half an hour & symptoms subsided. This was given till the symptoms subsided completely.

Two patients had status asthmaticus after administration of dhoomapana. They were relieved with the symptoms of tamakashwasa after vamana but when dhoomapana was given there was immediate aggravation of breathlessness. In order to stabilize the condition asthalin & budecort nebulization was given.

Two patients had aggravation of symptoms after dhoomapana but did not go to status asthmaticus. Here after vamana they had very comfortable breathing but after dhoomapana symptoms increased & it also subsided on its own after half an hour to one hour.

Two drop outs were also due to aggravation of symptoms after dhoomapana. The reason behind the above complications were that rajodhooma is the mainly nidhana & aggravating factor in all the patients taken for study. In dhoomapana they are again exposed to aggravating factor & hence led to complication. Therefore, dhoomapana was not performed in further cases. Instead ushnajalakavala was adopted as the pashchhatkarma.

All the above cases were thus excluded from the study due to complications observed.
DISCUSSION ON PROBABLE MODE OF ACTION:

Vamanakarma is the best line of treatment for tamakashwasa in younger age group & a best way to withdraw inhalers. It increases body's immunity as the patients who have undergone vamana have a reduced intensity of symptoms even on exposure to allergens which proves its effect on allergic components. Vamana should be avoided in chronic smokers to avoid bleeding. Madanaphala which is properly processed according to classics has to be cautiously used with minimal dose & later manipulated according to need. Vamanakarma is only a temporary treatment. It is more effective with long lasting effects only when followed by shamanachikitsa.

CONCLUSION

Vamanakarma is the best line of treatment for tamakashwasa in younger age group & a best way to withdraw inhalers. It increases body's immunity as the patients who have undergone vamana have a reduced intensity of symptoms even on exposure to allergens which proves its effect on allergic components. Vamana should be avoided in chronic smokers to avoid bleeding. Madanaphala which is properly processed according to classics has to be cautiously used with minimal dose & later manipulated according to need. Vamanakarma is only a temporary treatment. It is more effective with long lasting effects only when followed by shamanachikitsa.

References