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Determination Of Relative Efficacy Of Duralabhadi Choorna Comparison With Vidangadi Choorna In Vataja Kasa (Tropical Pulmonary Eosinophillia)

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ABSTRACT: In *Ayurveda Kasa* is classified into five types out of which *Vataja Kasa* symptoms are *Shushka Kasa, Prasakta Manta, Shushka Alpakapha Nishtivana, Swarabedha, Dourbalya* etc. are similar to Tropical Pulmonary Eosinophilia as it shows symptoms like wheezing, fever, breathlessness, cough, chest pain. In previous research paper it was defined and co-related *Vataja Kasa* as Tropical Pulmonary Eosinophilia. Tropical Pulmonary Eosinophilia is an occult form of filariasis and is characterized by dry cough, dyspnoea, nocturnal wheezing etc. and marked peripheral blood eosinophilia. India being one of the tropical countries, the prevalence of Tropical Pulmonary Eosinophilia (*Vataja Kasa*) is remarkably high. *Ayurvedic* medicines such as *Vidangadi Choorna, Kantkari avleha*, and *Dusaparshadi leha* have been proven in previous research to have the potential to greatly reduce the symptoms of *Vataja Kasa* as well as the absolute eosinophil count. In *Ayurvedic* literature *Duralabhadi Choorna* is prescribed to treat *Vataja Kasa*. It contains *Duralabha, Shringvera, Shati, Draksha, Karkat -Shringi*, *Sita* which overall has *Madhur* Ras, *Ushna Veerya*, *Madhur Vipak*[2].

KEYWORDS: *Duralabhadi Choorna, Vidangadi Choorna*, *Vataja Kasa,* Tropical Pulmonary Eosinophillia.

INTRODUCTION: Both *Vataja Kasa* [EA-3.2] and Tropical Pulmonary Eosinophilia have symptoms that are not dissimilar to one another. Coughing, chest tightness, fever, wheezing, and

shortness of breath are some of the symptoms that may be experienced for this condition. Tropical Pulmonary Eosinophilia was the name that was once used to refer to *Vataja Kasa*. Dyspnea, night time wheezing, a dry cough, and a high level of peripheral blood eosinophilia are some of the symptoms that are associated with a relatively rare form of tropical pulmonary eosinophilia. *Vataja Kasa*, which is another name for Tropical Pulmonary Eosinophilia, is a condition that is rather common in India because of the tropical environment that the nation experiences [1,2].

In addition to the states of Kerala, Karnataka, and Maharashtra, it is very prevalent in coastal regions, the states of Andhra Pradesh, Orissa, Bengal, and Bihar, and the state of India. Within the age range of 15 to 40 years old, tropical pulmonary eosinophilia is more prevalent in males than it is in females. The symptoms of tropical pulmonary eosinophilia are now being treated by researchers using a variety of drugs, including anti-tussive, anti-allergic treatment, anti-inflammatory treatment, and others. Some of the side effects that may be caused by these drugs include sleepiness, tremors, and addiction. *Ayurvedic* medicines such as *Vidangadi Choorna, Kantkari avleha*, and *Dusaparshadi leha* have been proven in previous research to have the potential to greatly reduce the symptoms of *Vataja Kasa* as well as the absolute eosinophil count. In *Ayurvedic* literature *Duralabhadi Choorna* is prescribed to treat *Vataja Kasa*. It contains *Duralabha, Shringvera, Shati, Draksha, Karkat-Shringi*, *Sita* which overall has *Madhur Ras, Ushna Veerya*, *Madhur Vipak*[2].

As a result of the qualities that *Duralabhadi Choorna* has, the combination has the potential to reduce the symptoms of *Vataja Kasa*. This particular combination is not used in ordinary practice very often, despite the fact that it is both economical and easy to create. However, there is no evidence that *Duralabhadi Choorna* has been included in any of the published research that have been conducted on the administration of *Vataja Kasa*. This study is being carried out with the intention of determining the efficacy of this formulation in the treatment of *Vataja Kasa*. In addition, testing was carried out on *Duralabhadi Choorna* in order to establish the efficacy of the drug in comparison to *Vidangadi Choorna* [1-3]. Mucus, toxic chemicals, and infectious organisms are expelled from a person's trachea, bronchi and larynx by coughing in order to make breathing easier. For example, coughing is one way to lessen the quantity of potentially harmful substances that are taken in via the lungs. It is possible that you will pass away from your illness if you do not cough it up. If a cough is accompanied by symptoms that are not connected to the respiratory system, patients and doctors may be able to learn more about the underlying cause of the cough as well as potential therapies for the cough. The excessive coughing that is being done should be regulated in order to avoid any more harm from occurring. In the United States, coughing is the most common illness suffered by people, and it is also the second most common cause for people to see a general practitioner. The percentage of outpatients who see chest specialists who have coughing fits ranges from ten to thirty-eight percent. Research in the field of epidemiology indicates that between 11 and 18 percent of individuals suffer from a persistent cough. However, it is not known how much of these coughs are considered to be "normal" or "pathological."

The first symptom of acute respiratory tract infections is often a short cough that goes away within one to two weeks for the most part. Pneumonia, pulmonary embolism, and the rapid progression of chronic obstructive pulmonary disease are some of the variables that contribute to the worsening of the illness. For a period of three to eight weeks, coughs that are classed as subacute are considered to be chronic. Both the mechanism and the aetiology of coughing will be investigated in this thesis, along with challenges that are associated with diagnosis and treatment. The practice of Ayurveda, often

known as traditional Indian medicine, is strongly rooted in the culture of India. This kind of medical system is the first one that has been formally developed by scientific research. The ancient Acharyas of our culture have been using herbal remedies for the treatment and prevention of a wide variety of illnesses ever since the beginning of time [4-6].

Due to the fact that it is constantly exposed to external stimuli from birth until death, the respiratory system is often the one that is most adversely impacted by infections and hypersensitivity. Last but not least, a cough is a typical protective mechanism that assists in unclogging the respiratory system of excess mucus and other chemicals that might be harmful to the respiratory system. In order to maintain one's life, it is necessary to breath in and out. One of the signs of excellent health and vigour is the practice of regular ventilation via the *Pranavaha Srotas*. There is a possibility that abnormalities in the respiratory system imply the presence of disease or death. This particular life sign is one of many that is affected by the ailment that is referred to as *Kasa. Kasa's* conduct is getting more difficult to cope with, despite the fact that it is not a habit that poses a danger to the life. It is possible that difficulties may arise in the future if you ignore them. Within the realm of Ayurvedic medicine, the term *"Kasa"* refers to a coughing spell.

MATERIALS AND METHODS

Drug

Duralabhadi Choorna was the trial drug used in Group A and *Vidangadi Choorna* was the standard drug used in Group B.

दुरालाभां शृंगवेरं शठीं द्राक्षां सितोपलां |
लिह्यात्कर्कटशृंगगीं च कासे तैलेन वातजे || (भा. भै. र. भाग ३/२९६८)

1) *Duralabhadi Choorna (Trial Drug)*

Drug	Botanical name	Part used	Quantity
Duralabha	*Fagonia Arabica*	Whole plant	500mg
Shringavera	*Zingiber officinale*	Rhizome	500mg
Shati	*Hedychiumspicatum hamit*	Rhizome	500mg
Draksha	*Vitis vinifera*	Fruit	500mg
Karkatshrungi	*Pistacia integerrima*	Galls	500mg
Sita	*Khanda sharkara*	-	500mg

2)*Vidangadi Choorna (Standard Drug)*

विडङ्गं नागरं रास्ना पिप्पली हिङ्गु सैन्धवम्|
भार्गी क्षारश्च तच्चूर्णं पिबेद्वा घृतमात्रया||४७||
सकफेऽनिलजे कासे श्वासहिक्काहताग्निषु| (च. चि. १८/४७)

Drug	Botanical name	Part used	Quantity
Vidanga	*Embelia ribes*	Root	375mg
Nagar	*Zingiber officinale*	Rhizome	375mg
Rasana	*Alpinia officinarum Hance*	Rhizome	375mg
Pippali	*Piper longum*	Fruit	375mg
Hingu	*Ferula northax*	Resin	375mg
Bharangi	*Clerodendrum indicum*	Root	375mg

Saindhav	*Rock salt*	-	375mg
Yavaksarah	*Potassium salt*	-	375mg

STUDY TYPE: Randomized Single Blind Controlled Clinical Study was conducted here.
STUDY SITE: Clinical trials were conducted on patients coming in dept. of *Kayachikitsa* of B.V.D.U.C.O.A and Hospital, Pune. 60 diagnosed patients of *Vataja Kasa* were selected based on inclusion criteria and divided into two groups; *Duralabhadi Choorna* was administered to group A and *Vidangadi Choorna* was given to group B.

INCLUSION CRITERIA:

1. Patients between the age group of 15 to 80 years irrespective of sex and occupation.
2. Patients presenting with signs and symptoms of *Vataja Kasa*
3. Absolute eosinophilia counts more than 400 cells / cu.mm in the peripheral blood smear.

EXCLUSION CRITERIA:

1. Patients having complaints of Carcinoma of Respiratory system, pulmonary tuberculosis, pleurisy, lung collapse, ILD, pneumonia, pneumothorax.
2. Tropical Pulmonary Eosinophilia with complication / secondary infection /asthma syndromes are excluded.
3. Patients suffering from disease like bronchial asthma, pneumonia, other eosinophilic lung and ongoing treatment of Tropical Pulmonary Eosinophilia are excluded.
4. Patients having chief complaints of *Vataja Kasa* (Tropical Pulmonary Eosinophilia.) more than 2 years and having history of and depending on steroids, bronchodilator drug history.

INTERVENTION: Group A patients were treated with *Duralabhadi Choorna* with a dose of 3gm thrice in a day with Tila Tail 6 ml as Anupan after meal & Group B patients were treated with Vidangadi Choorna with a dose of 3 gm thrice in a day with Goghrita 6 ml as Anupan. The duration of the study was 28 days, follow up – $7^{th,}$ $14^{th,}$ 21^{st} day and after treatment on 28^{th}day.

METHODS OF STATISTICAL ANALYSIS:
To find the efficacy of trial drug by change in subjective parameter like *Shushka Kasa*, *Prasakta Vega*, *Urashoola*, *Shiroshoola*, *Shushak Kanth* etc. and objective parameter like Eosinophil count etc. through Wilcoxon signed rank test and paired t test respectively, for comparison of both drugs by analyzing the change in subjective and objective parameter was analysed by following test Mann Whitney U test, two sample t test respectively for the data collected.

ASSESSMENT CRITERIA / EFFICACY PARAMETER
SUBJECTIVE PARAMETER:
Subjective and objective criteria was carried out for assessment. Relevance of sign and symptoms as per described in *Ayurvedic* symptomology.

- ✓ *Ura Shoola* (Pain in thorax)
- ✓ *Shirah Shoola* (Headache)
- ✓ *Parshwa Shoola* (pain in flanks)

- ✓ *Shushka Kasa* (Dry cough)
- ✓ *Prasakt Vega* (continuous bouts of cough)
- ✓ *Swara Bheda* (Hoarseness of voice)
- ✓ *Shushka Kanth* (Dryness in throat)
- ✓ *Alpa Kapha Nishtivana* (Scanty expectoration)

OBJECTIVE PARAMETER:

1.Absolute Eosinophil Count (A.E.C): WBC (white blood cell) X Eosinophil count %.
2. Chest X-Ray (As per requirement)
3. VAS Test

OBSERVATIONS AND RESULTS:

Age: In this study Maximum number of patients i.e. 27.00 % were found to be in the age group of 18-30years because of erratic sleep patterns, irregular eating habits, stress, fasting P*rakopak* of Vata *dosha* induces L*akshana* of *Vatja Kasa* like *Shushka Kasa, Shirashoola , Urashoola , Shushka Kantha* etc. were seen . T.P.E was predominantly seen in age group of 15-40 years.

Prakruti: In this study *Vata-Pitta* as well as *Vata-Prakriti* was found predominantly in maximum number of patients as in *Vataja Kasa* the *Prana Vayu* and *Udana Vayu* is vitiated.

Agni: In this study 59.00 % patients have shown *Vishama Agni* while 33.00% patients have *Tikshana Agni, Manda Agni* was found in 8.00% of patient as *Vata Dosha* predominate with Vishama Agni.

Occupation : Maximum number of patient were housewife i.e. 38.00% of total patients as they work in kitchen where they come in contact with *Dhuma & Raja* i.e. dust which alleviate *Vata Dosha* and starts pathological process in *Pranavaha Srotas* , followed by 20.00% of student as intake of *Vata Prokopaka aharas* (dry, cold and astringent food items), *Vegdharana* (suppression of natural urges) resulting in *Parkopa* of *Vata dosha* ,11.00 % patient were farmer they work in fields leading to allergic manifestation by having in contact with pollen grains and dust due to which eosinophil count seem to be raised resulting in pathology of *Vataja Kasa.*

EFFECT OF VIDANGADI CHOORNA (GROUP B) AND DURALABHADI CHOORNA (GROUP A) ON SUBJECTIVE PARAMETER:

Shushka Kasa	***Mean***		***X***	***-Rank***	***+Rank***	***Z Value***	***TIE Value***	***P Value***	***T Value***	***% of improvement***
	BT	*AT*								
Vidangadi Choorna (Group B)										
1st day-7th day	*3*	*2.4*	*0.6*	*171*	*0*	*-4.1219*	*102*	*0.00003758*	*-6.2384*	*20.00*
1st day-14th day	*3*	*1.6*	*1.4*	*351*	*0*	*-4.5522*	*72.375*	*0.000005309*	*-8.8035*	*46.13*
1st day-21th day	*3*	*1.4*	*1.6*	*435*	*0*	*-4.8559*	*141.75*	*0.000001198*	*-14.5478*	*52.40*

1st day-28th day	*3*	*0.6*	*2.4*	*465*	*0*	*-4.9173*	*137.75*	*0.000000863*	*-23.3121*	*79.40*
Duralabhadi Choorna (Group A)										
1st day-7th day	*3*	*2.3*	*0.7*	*210*	*0*	*-4.4508*	*166.25*	*0.000008554*	*-7.6158*	*23.33*
1st day-14th day	*3*	*1.9*	*1.1*	*378*	*0*	*-4.8103*	*196.87*	*0.000001507*	*-11*	*36.03*
1st day-21th day	*3*	*1.1*	*1.9*	*465*	*0*	*-5.0529*	*255.62*	*0.00000454*	*-21.650*	*62.60*
1st day-28th day	*3*	*0.3*	*2.7*	*465*	*0*	*-4.9725*	*186.87*	*0.0000062*	*-30.4631*	*89.70*

Praskta Vega	***Mean***		***x***	***- Rank***	***+ Rank***	***Z Value***	***TIE Value***	***P Value***	***T Value***	***% of improvement***
	BT	***AT***								
Vidangadi Choorna (Group B)										
1st day-7th day	*2.9*	*2.1*	*0.8*	*253*	*0*	*-4.5818*	*192.5*	*0.00000461*	*-8.3316*	*27.59*
1st day-14th day	*2.9*	*1.5*	*1.4*	*406*	*0*	*-4.7558*	*115.5*	*0.000001976*	*-12.5398*	*47.76*
1st day-21th day	*2.9*	*1.1*	*1.8*	*465*	*0*	*-4.8959*	*118.25*	*0.00000546*	*-15.503*	*61.31*
1st day-28th day	*2.9*	*0.4*	*2.5*	*465*	*0*	*-4.8988*	*120.87*	*0.0000076*	*-21.4858*	*85.79*
Duralabhadi Choorna (Group A)										
1st day-7th day	*2.9*	*2*	*0.9*	*276*	*0*	*-4.5475*	*166.75*	*0.000005429*	*-8.3083*	*31.03*
1st day-14th day	*2.9*	*1.4*	*1.5*	*406*	*0*	*-4.7743*	*129.5*	*0.000001803*	*-13.0467*	*51.24*
1st day-21th day	*2.9*	*0.9*	*2*	*465*	*0*	*-5.1389*	*325.62*	*0.000000054*	*-26.029*	*68.34*
1st day-28th day	*2.9*	*0*	*2.9*	*465*	*0*	*-5.1917*	*366.87*	*0.000000208*	*-45.4131*	*100.00*

Parshwashoola	***Mean***		***x***	***- Rank***	***+ Rank***	***Z Value***	***TIE Value***	***P Value***	***T Value***	***% of improvement***
	BT	*AT*								
Vidangadi Choorna (Group B)										
1st day-7th day	*2.5*	*1.8*	*0.7*	*253*	*0*	*-4.5818*	*192.5*	*0.00000461*	*-8.3316*	*28.00*
1st day-14th day	*2.5*	*1.3*	*1.2*	*351*	*0*	*-4.5805*	*90.625*	*0.000004638*	*-9.3795*	*47.48*
1st day-21th day	*2.5*	*0.8*	*1.7*	*435*	*0*	*-4.7891*	*85.625*	*0.000001675*	*-12.4198*	*67.36*

1st day-28th day	*2.5*	*0.2*	*2.3*	*435*	*0*	*-4.8089*	*102.5*	*0.000001518*	*-16.8033*	*91.76*
Duralabhadi Choorna (Group A)										
1st day-7th day	*2*	*1.3*	*0.7*	*171*	*0*	*-3.9244*	*58.125*	*0.00008694*	*-5.8086*	*35.00*
1st day-14th day	*2*	*1*	*1*	*276*	*0*	*-4.3722*	*92*	*0.0000123*	*-7.8831*	*49.50*
1st day-21th day	*2*	*0.6*	*1.4*	*378*	*0*	*-4.6342*	*78*	*0.000003583*	*-9.6068*	*69.40*
1st day-28th day	*2*	*0*	*2*	*406*	*0*	*-4.7138*	*83*	*0.000002432*	*-12.6685*	*100.00*

Shirashoola	***Mean***		***x***	***- Rank***	***+ Rank***	***Z Value***	***TIE Value***	***P Value***	***T Value***	***% of improvement***
	BT	*AT*								
Vidangadi Choorna (Group B)										
1st day-7th day	*2.5*	*1.8*	*0.7*	*210*	*0*	*-4.358*	*142.5*	*0.00001313*	*-7.1667*	*28.00*
1st day-14th day	*2.5*	*1.2*	*1.3*	*435*	*0*	*-4.9047*	*181.25*	*0.00000935*	*-13.3207*	*51.52*
1st day-21th day	*2.5*	*0.8*	*1.7*	*435*	*0*	*-4.8492*	*136.25*	*0.000001239*	*-14.2974*	*67.36*
1st day-28th day	*2.5*	*0.2*	*2.3*	*435*	*0*	*-4.7959*	*91.5*	*0.000001619*	*-15.8171*	*91.76*
Duralabhadi Choorna (Group A)										
1st day-7th day	*2.6*	*1.8*	*0.8*	*253*	*0*	*-4.5818*	*192.5*	*0.00000461*	*-8.3316*	*30.77*
1st day-14th day	*2.6*	*1.3*	*1.3*	*435*	*0*	*-4.9047*	*181.25*	*0.00000093*	*-13.3207*	*49.50*
1st day-21th day	*2.6*	*0.8*	*1.8*	*465*	*0*	*-4.9611*	*176.87*	*0.000000070*	*-17.8974*	*68.62*
1st day-28th day	*2.6*	*0*	*2.6*	*465*	*0*	*-4.9293*	*148.62*	*0.000000082*	*-24.7364*	*100.00*

Swarabheda	***Mean***		***x***	***- Rank***	***+ Rank***	***Z Value***	***TIE Value***	***P Value***	***T Value***	***% of improvement***
	BT	***AT***								
Duralabhadi Choorna (Group A)										
1st day-7th day	*1.4*	*1.2*	*0.2*	*28*	*0*	*-2.5513*	*7*	*0.01073*	*-2.9709*	*14.29*
1st day-14th day	*1.4*	*0.9*	*0.5*	*91*	*0*	*-3.4615*	*35.75*	*0.0005371*	*-4.4737*	*35.07*
1st day-21th day	*1.4*	*0.4*	*1*	*253*	*0*	*-4.2441*	*67.375*	*0.00002194*	*-7.3739*	*70.86*

1st day-28th day	*1.4*	*0.1*	*1.3*	*378*	*0*	*-4.6898*	*117*	*0.000002734*	*-10.0331*	*92.64*
Vidangadi Choorna (Group B)										
1st day-7th day	*1.3*	*1*	*0.3*	*55*	*0*	*-2.9954*	*15*	*0.002741*	*-3.6117*	*23.08*
1st day-14th day	*1.3*	*0.8*	*0.5*	*105*	*0*	*-3.5229*	*35.875*	*0.0004269*	*-4.6456*	*37.85*
1st day-21th day	*1.3*	*0.2*	*1.1*	*300*	*0*	*-4.4647*	*103.75*	*0.000008019*	*-7.215*	*84.31*
1st day-28th day	*1.3*	*0*	*1.3*	*325*	*0*	*-4.4834*	*75.625*	*0.000007347*	*-7.7786*	*100.00*

EFFECT OF VIDANGADI CHOORNA (GROUP B) AND DURALABHADI CHOORNA (GROUP A) ON (OBJECTIVE PARAMETE:
EFFECT OF DURALABHADI CHOORNA & VIDANGADI CHOORNA ON EOSINOPHILS

Eosinophils	B.T.	A.T.	X	% of Improvement	P Value	T value
Vidangadi Choorna (G-B)	4.87	3.83	1.03	21.23	0	8.656
***Duralabhadi Choorna* (G-A)**	**6.24**	**4.00**	**2.23**	**35.83**	**0**	**5.869**

EFFECT OF VIDANGADI CHOORNA AND DURALABHADI CHOORNA ON ABSOLUTE EOSINOPHIL COUNT

Absolute Eosinophil Count	B.T.	A.T.	X	% of Improvement	T value	P Value
Vidangadi Choorna (G-B)	525.33	359.27	166.07	31.61	10.76	0
***Duralabhadi Choorna* (G-A)**	**698.99**	**364.30**	**334.69**	**47.88**	**5.421**	**0**

EFFECT OF DURALABHADI CHOORNA & VIDANGADI CHOORNA ON HB (GM%):

HB (GM%)	B.T.	A.T.	X	% of Improvement	T Value	P Value
Vidangadi Choorna (G-B)	12.70	12.22	0.48	3.75	3.357	0
***Duralabhadi Choorna* (G-A)**	**12.79**	**11.94**	**0.86**	**6.70**	**0.8051**	**0**

EFFECT OF DURALABHADI CHOORNA AND VIDANGADI CHOORNA ON VAS:

VAS	B.T.	A.T.	X	% of Improvement	T Value	P Value
Vidangadi Choorna (G-B)	4.77	2.57	2.20	46.15	27.24	0
***Duralabhadi Choorna* (G-A)**	**4.60**	**1.00**	**3.60**	**78.26**	**10.16**	**0**

EFFECT OF THERAPY ON VATAJA KASA ON VIDANGADI CHOORNA AND DURALABHADI CHOORNA

Effect of therapy	No. of patients in group A	No. of patients in group B
Completely cured (100%)	33.33%	23.33%
Marked Improvement (75%)	26.66%	20.00%
Moderate improvement (51-75%)	20.00%	23.33%
Mild Improvement (26-50%)	20.00%	36.66%
No improvement (0-25%)	0.00%	0.00%

DISCUSSION:

1) Respiratory system is one system which is in continuous contact with the external environment since birth until one 's lifetime, so it is most vulnerable to infections and considered as the prime victim of hyper sensitization in most of circumstances.

2) Early intervention is necessary in case of Kasa as it is a potential *Nidanarthakara Vyadhi* to produce *Kshaya.*

3) Especially in *Vatik* Kasa the patient will lose *Bala, Swara and Ojas*. Thus, in the present work *Vatik Kasa* was taken as the subject of intervention.

4) In this study the gradation of subjective parameter was taken from previous clinical study done on *Vataja Kasa* W.S.R. to T.P.E by *Shringarabhra Rasa* with *Mridu Virechana.*

5) A study has shown that control drug *Vidangadi Choorna* had significant result on symptoms of *Vataja Kasa* along with reduction of A.E.C.

6) In this study the comparison of *Vataja Kasa* with tropical pulmonary eosinophila was done. It was concluded from previous studies that *Vataja Kasa* symptoms are similar with T.P.E in Dry cough, dyspnea & nocturnal wheezing.

7) As stated in literature review *Duralabhadi Choorna* works in *Vataja Kasa* yet no research work was done till date. In this study, its effectiveness was studied along with reduction in A.E.C in tropical pulmonary eosinophilia.

8) *Anupana: Goghrita* was used with *Vidangadi choorna. Goghrita* causes *Vatanulomana* and pacifies *Vimarga Kupita* Vata caused due *to Vimargagami Prana* and *Apana Vayu.*

9) *Tila Tail* was used with *Duralabhadi choorna.* It has *Madhur Ras, Ushna Virya, Madhur Vipak* along with *Suksma,Vyavayi , Vikasi Guna* resulting in good absorption and penetration of drug into *Suksma Srotas* easily. It also pacifies *Vimarga Kupita Vata Dosha*.

10) *Kala: Vyanodaana Kala* was selected for both drugs. As *Vyana Vayu* can easily pervades the whole body and also engaged in circulation along with movement & speed.

11)*Matra:* It was selected according to *Sharangadhar Samhita Madhyam Khand* i.e. one *Karsha* which is approx. 12gm so given thrice a day in divided dose for *Choorna* so that it can be easily palatable to the patient without any discomfort.

12) *Shushka Kasa*: During the study Group A *(Duralabhadi Choorna)* having 89.70% of mean improvement whereas Group *B (Vidangadi Choorna)* having 79.40 %. Therefore, *Group A*

(Duralabhadi Choorna)- Madhura Rasa, Madhura Vipak and *Ushna Virya - Shaman Vata Dosha,* in which *Draksha & Sita - Madhur Rasa, Madhura Vipak* with *Singhdha Guna* decrease *Shushka Kasa*
13) *Prasakata Vega:* In this study Group A having 100.00% of mean improvement whereas Group B having 85.79 %, also both groups having p value < 0.05% so both shows significant result but Group A has marked improvement than Group B, as *Karkatshrungi* in *Duralabhadi Choorna - Ushna Virya* and *Laghu Guna, Katu Vipak*, along with *Anupan* in this i.e. Tila Tail - *Madhur Ras, Ushna Virya, Madhur Vipak - Suksma, Vyavayi, Vikasi Guna* resulting in good absorption and penetration of drug into *Suksma Srotas* & also helps in *Shaman* of *Vimarga Kupita Vata Dosha*
14) *Swarbheda:* In this study Group B having better improvement than Group A . As *Vidangadi Choorna* having *Bharangi* which gives good rhythm to voice
15*) Alpa-Kaphanishtivan:* In this study Group B having 100% of mean improvement whereas Group A having 78% mean improvement, hence Group B has shown better improvement than Group A. As *Vidangadi Choorna* having *Katu Rasa, Ushna Virya, Laghu, Tikshna Guna- Bhedna & Vilayana* of *Kapha, Kaphasthivana – Srotoshudhi – Vata Sanga – Vimarga Gamana* is corrected.
16) *Shirashoola:* In this study Group A has shown better improvement than Group B as Shati reduces *Shirashoola, Parshwa Shoola* and *Ura Shoola* due to *Ushna Veerya,* act as a *Vedana Sthapaka,* pungent principle of *Shati* - potent antitussive- blocks vagal sensory afferents counter local anesthetic mechanism
17) Absolute Eosinophil count: Both groups have shown significant result in reducing Absolute Eosinophil count but it was observed that Group A has shown more effectiveness in reducing the count as it contains *Pistacia Integerrima* i.e. *Karkatshrungi* have shown inhibition of histamine release, its *Shringi* have anti-inflammatory action
18) VAS: Both groups have shown significant result as p value is <0.05% but it was observed that Group A was more effective than Group B.
19) Haemoglobin: Both groups didn't have effect on HB%
20) TLC, DLC: Both groups having mild effect on TLC, DLC.

CONCLUSION:

1) Thus, null hypothesis – H0 is rejected which states that *Duralabhadi Choorna* is not more effective than *Vidangadi Choorna* in *Vataja Kasa*
2) In this trial it was concluded that in the *Samprapati* of *Vataja Kasa* there is prominence of *Vata Dosha (Pran and Udan Vayu Dushti).*
3) *Duralabhadi Choorna* and *Vidangadi Choorna* were beneficial in reducing the symptoms of *Vataja Kasa.* Whereas *Duralabhadi Choorna* was more beneficial in reducing Absolute Eosinophilic count as compared to *Vidangadi Choorna.*
4) *Duralabhadi Choorna* was safely employed in treatment of *Vataja Kasa.*
5) Although both the groups showed highly significant results in symptoms, patients of Group A expressed greater benefit compared to Group B &75.00% marked improvement in symptoms of *Vataja Kasa* was seen.

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