A CLINICAL STUDY TO EVALUATE THE EFFECT OF *NIDIGDHIKADI KWATHA* AND *VYAGHRI TAILA NASYA* IN THE MANAGEMENT OF *DUSHTA PRATISHYAYA* W.S.R. TO CHRONIC SINUSITIS

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INTRODUCTION

The disease *Dushta Pratishyaya* in general are similar to that of Chronic Sinusitis in modern science. Paranasal sinuses are a group of four paired air-filled space surround the nasal cavity. Those are lined with mucus membrane which is continuation of nasal mucous membrane. Inflammation of nasal mucosa by infection, allergic reaction, etc will also lead inflammation of the para nasal sinuses due to continuation of mucosa. Long-term inflammation of the sinus mucosa is defined as chronic sinusitis. Paranasal sinuses drain through small opening (ostia) into nasal cavity. When mucous drainage of sinuses hampers by any causes lead to stagnation of mucus in the sinuses and symptoms of sinusitis will appear. Chronic sinusitis is a long-term inflammation of the sinuses. The sinuses are moist air contained spaces behind the bones of the upper face- between the eyes and behind the forehead; nose and cheeks those are lined with mucus membranes. Healthy sinuses contain no bacteria or other germs. Normally, the sinuses drain through small openings(ostia) into the inside of the nose. Anything that obstructs that flow can cause a pooling of mucus, and sometimes pus, in the sinuses.

Considering all these facts, a clinical trial on *Dushta Pratishyaya* was carried out to find a cheap and effective treatment protocol for management of the same. For this study. *Nidighhikadi Kwatha* orally and *Nasya* with *Vyaghri Taila* were selected. As *Dushta Pratishyaya* (Chronic Sinusitis) is a chronic condition of Dosha accumulation in particular Nasa and Shira, which happens mainly due to *Srotosanga,* administration of *Sneha Virechana Nasya* with *Vyaghri Taila* was selected for *Dosha Sravana* and *Srotostudhdhi*. On the other hand, due to decreased immunity, recurrences are very common. According to *Ayurveda, Rasayana* can be used for the improvement of *Vyadhikshamatwa*. So many *Rasayana* preparations are described in various texts, out of which. *Nidighhikadi Kwatha* was selected as oral medication, as it is indicated for *Peenasa* (Chronic Sinusitis) and having *Rasayana* and anti-inflammatory property.

AIMS AND OBJECTIVES
The present study has been planned to accomplish the following aims and objectives
i) Primary objective
To assess the efficacy of *Nidigdhikadi Kwatha and Vyaghri Taila Nasya* in the management of *Dushta Pratishyaya* w.s.r. to Chronic Sinusitis.

ii) Secondary objective
To evaluate the clinical safety of *Nidigdhikadi Kwatha and Vyaghri Taila Nasya* in the management of *Dushta Pratishyaya* w.s.r. to Chronic Sinusitis.

MATERIALS AND METHODS
Clinically study was carried out in two groups
➢ In this 10 patients were managed with *Nidigdhikadi kwatha* Orally and *Vyaghri Taila Nasya*.
Patients were registered from OPD/IPD of *Shalakya Tantra* P.G. Deptt. Of R.G.G.P.G. *Ayu*. Hospital and all the patients completed the trial. The clinical study's pertinent data were gathered and presented in tabular form.

Selection criteria
Uncomplicated patients with signs and symptoms of Chronic Sinusitis, attended OPD and IPD of RGGPG *Ayurvedic* College and Hospital Paprola were selected above 18 years age, irrespective of sex, religion, and occupation etc.

Inclusion Criteria
➢ Patients fulfilling the diagnostic criteria based on signs and symptoms *of Dushta Pratishyaya* (Chronic Sinusitis) in *Ayurveda* classics and modern science were selected for the present study.
➢ Patients who were willing for the treatment.

- Patient of either gender in the age group above 18 years.

Exclusion criteria
- Patients required surgical treatment e.g. cases of nasal polyp.
- Patients who had history of multiple episodes of epistaxis.

- Patients who were not willing for the trial.
- Patients below age of 18 years.
- Patient with chronic debilitating diseases like Diabetes mellitus, Carcinoma, Tuberculosis.
- Pregnant and lactating women.

Table No.-1: Effect of therapy on tenderness of paranasal sinus.

Paranasal Sinus	Mean		Diff	% of relief	SD	SE	n	t	P
	BT	AT							
Rt. Maxillary Sinus	1.600	0.700	0.900	56.25%	0.516	0.163	10	9.000	<0.001
Lt. Maxillary Sinus	1.700	0.600	1.100	64.70%	0.483	0.153	10	6.128	<0.001
Rt. Frontal Sinus	0.600	0.300	0.300	50%	0.699	0.221	5	1.964	0.081
Lt. Frontal Sinus	0.700	0.300	0.400	57.15%	0.823	0.260	3	1.809	0.104
Rt. Ethmoid Sinus	0.200	0.1000	0.1000	50%	0.422	0.133	2	1.000	0.343
Lt. Ethmoid Sinus	0.1000	0.000	0.1000	100%	0.316	0.1000	1	1.000	0.343

Table no. 2: Effect of therapy on radiological investigation of PNS in group A.

Paranasal Sinus	Mean		Diff	% of relief	SD	SE	n	t	p
	BT	AT							
Rt. Maxillary Sinus	1.900	0.800	1.100	57.89%	0.738	0.233	10	4.714	0.001
Lt. MaxillarySinus	1.500	0.600	0.900	60%	0.527	0.167	10	3.857	0.004
Rt. Frontal Sinus	0.800	0.300	0.500	62.5%	1.135	0.359	4	2.236	0.052
Lt. Frontal Sinus	0.500	0.1000	0.400	80%	0.707	0.224	4	2.449	0.037

DISCUSSION
Table no.3.

Group A
Kshavathu- Initial mean score of *Kshavathu* was 1.100, which after the treatment reduced to 0.500 by 54.55% which was statistically significant.
Nasavarodha- Initial mean score of *Nasavarodha* was 2.400, which after the treatment reduced to 1.100 by 54.17% which was statistically highly significant.
Nasa Sarva- Initial mean score of *Nasa Sarva* was 1.200, which after the treatment reduced to 0.500 by 58.33% which was statistically significant.
Kasa- Initial mean score of *Kasa* was 0.700, which after the treatment reduced to 0.400 by 48.86% which was statistically insignificant.
Shirahshoola- Initial mean score of *Shirahshoola* was 1.100, which after the treatment reduced to 0.400 by 63.64% which was statistically highly significant.
Puyabha Satrav- Initial mean score of *Puyabha Satrav* was 0.800, which after the treatment reduced to 0.200 by 75% which was statistically significant.
Gandha Agyanata- Initial mean score of *Gandha Agyanata* was 0.500, which after the treatment reduced to 0.300 by 40% which was statistically insignificant.
Mukha Daaurgandhya- Initial mean score of *Mukha Daaurgandhya* was 0.300, which after the treatment reduced to 0.1000 by 66.66% which was statistically insignificant.
Jwara- Initial mean score of *Jwara* was 0.200, which after the treatment reduced to 0.1000 by 50% which was statistically insignificant.
Swarabheda- Initial mean score of *Swarabheda* was 0.700, which after the treatment reduced to 0.300 by 57.15% which was statistically insignificant.

Table no. 4: Effect of Therapy on Tenderness of Paranasal Sinus.

Group A
Right Maxillary Sinus-Mean score of tenderness before treatment was 1.600 which was reduced to 0.700 after treatment. Thus 56.25% relief was statistically highly significant.
Left Maxillary Sinus- Mean score of tenderness before treatment was1.700 which was reduced to 0.600 after treatment. Thus 64.70 % relief was statistically highly significant.

Right Frontal Sinus- Mean score of tenderness before treatment was 0.600 which was reduced to 0.300 after treatment. Thus 50 % relief was statistically insignificant.
Left Frontal Sinus- Mean score of tenderness before treatment was 0.700 which was reduced to 0.300 after treatment. Thus 57.15 % relief was statistically insignificant.
Right Ethmoid Sinus- Mean score of tenderness before treatment was 0.200 which was reduced to 0.100 after treatment. Thus 50 % relief was statistically insignificant.
Left Ethmoid Sinus- Mean score of tenderness before treatment was 0.1000 which was reduced to 0.00 after treatment. Thus 100 % relief was statistically insignificant.

Table no. 5: Effect of Therapy on Objective Criteria (Radiological Investigation).

Group A
Right Maxillary Sinus-Mean score before treatment was 1.900 which reduced to 0.800 after treatment. This 57.89% relief was statistically significant.
Left Maxillary Sinus- Mean score before treatment was 1.500 which reduced to 0.600 after treatment. This 60 % relief was statistically significant.
Right Frontal Sinus- Mean score before treatment was 0.800 which reduced to 0.300 after treatment. This 62.5 % relief was statistically significant.
Left Frontal Sinus- Mean score before 0.500 treatment was 0.1000 which reduced to after treatment. This 80 % relief was statistically significant.

Overall result was on *Nidighdikadi Kwatha* and *Vyaghri Taila Nasya* revealed that
Complete remission was noted in 20% patients, 30% were markedly improved, 40% moderately improved and 10% was mild improved.