

A Clinical Trial on the Efficacy of Sadvinu Taila Nasya on Sirashool W.S.R to Frontal Sinusitis

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Abstract

Sinusitis one of the most troublesome diseases disturbing the usual daily activities. It is manifested by severe headache, nasal discharge, sneezing etc which creates a great problem. For its management analgesics, nasal decongestants & finally curettage of the sinus to remove the fluid deposit is adopted in modern medical science. However in Ayurveda *Nasya & Dhumapan* is best applied in this connection. A clinical trial was carried out to evaluate the effectiveness of *Sadvindu Taila* nasal drop in the management of frontal sinusitis. For this purpose total 40 patients of frontal sinusitis were collected from the OPD & IPD of Gangasheel Ayurvedic medical college, Bareilly(UP) as per the selection criteria. They were divided into two groups i.e. trial group & control group (consisting of 20 patients each) to whom the nasal drop *Sadvindu Taila* & Otrivin (Xylometazoline hydrochloride) nasal drop was given respectively. The trial drug was given in the prescribed dose for 7 days under *Nasya & Dhumapana* procedure. The control drug, in normal way only nasal instillation. After 7 days evaluation was done depending on the subjective & objective parameters. For statistical evaluation, mean \pm SD, paired t-test was calculated. It was observed that the trial drug is very much effective in decreasing Headache, sneezing, nasal discharge & other allergic manifestation. Radiological the fluid level also decreased. Though the drug is better effective but it is not accepted by all the patients as it causes severe irritation in nasal mucosa. With the total study it can be concluded that the trial drug *Sadvindu Taila* has a great scope in the management of sinusitis, especially frontal sinusitis. Further studies are required to establish the drug more scientifically.

Keywords: Sinusitis, *Sadvindu Taila*, Headache, Sneezing.

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INTRODUCTION

Sinusitis one of the most troublesome diseases disturbing the usual daily activities. It is manifested by severe headache, nasal discharge, sneezing etc which creates a great problem. In Ayurveda this condition is called *Pratishyaya*, it may be acute or chronic. Particularly Sinusitis can be correlated with *Kaphaja pratishyaya* or *Jeerna Pratishyaya*[1]. For its management analgesics, nasal decongestants & finally curettage of the sinus to remove the fluid deposit is adopted in modern medical science [2]. However in Ayurveda *Nasya & Dhumapan* is best applied in this connection. In the treatment of *Kaphaja shiroroga* Maharshi Charak has mentioned the procedure of *Swedan*, *Dhumapana* and *Pradhamana Nasya*[3]. But due to convenience and easy availability here *Sadvindu Taila* has been selected for its *Ushna*, *Katu*, *Tikshna* and *srotosodhaka* property [4]. Besides this in Charak Samhita, *Shirovirechana* is indicated in *UrdhwaJatugata* (supra clavicular) diseases like

Manyasthambha, *Galagraha*, *Hanugraha*, *Pinasa*, *Pratishyaya* etc[5]. Hence in this connection a clinical trial was carried out to evaluate the effectiveness of *Sadvindu Taila* nasal drop in the management of frontal sinusitis.

AIM

To evaluate the efficacy of *Sadvindu Taila* on sinusitis especially frontal sinusitis.

MATERIAL & METHODS

Total 40 no of patients of frontal sinusitis having various complaints were collected from the OPD & IPD of Gangasheel Ayurvedic medical college, Bareilly (UP). They are divided in two groups consisting of 20 patients each. Out of the cases registered, all had a history of treatment several times earlier. Detailed examination & other investigations were properly carried out in a predetermined Performa. Prior to trial, the patients were explained regarding the

Statistical Assessment of Results

For the purpose of statistical assessment of the result, mean \pm SD value before treatment of different sign & symptoms was compared with that of after treatment.

T – Test was used for the purpose of the test of significance. The effectiveness of the nasal drop has been assessed through the p-value.

Null Hypothesis: For the purpose of assessment a Null Hypothesis was set “Let the nasal drop Otrivin nasal drop is more effective in treating Frontal sinusitis than sadvindu taila.

Follow up

All the patients were advised to attend the OPD of *Kayachikitsa* deptt weekly, after the date of completion of therapy for 1 month, so that follow up was made to observe any untoward effect or recurrence.

Table -1: (Statistical analysis showing the effectiveness of the trial drug to different signs and symptoms)

Sl No.	Sing & Symptoms	Mean \pm S. D.		Degree of freedom	t-value	P-value	Remark
		BT	AT				
1	Nasal discharge	1.83 \pm 0.58	0.6 \pm 0.92	19	8.01	<0.001	Highly significant
2	Headache	1.23 \pm 0.49	0.36 \pm 0.54	19	9.35	<0.001	Highly significant
3	Sneezing	2.4 \pm 0.75	1.2 \pm 0.74	19	8.12	<0.001	Highly significant
4	Peripheral eosinophil%	18.8 \pm 11.25	9.43 \pm 5.37	17	7.24	<0.001	Highly significant
5	Nasal eosinophil count	12.58 \pm 4.70	6.18 \pm 3.20	15	10.63	<0.001	Highly significant
6	Nasal pH	7.29 \pm 0.59	6.88 \pm 0.58	19	6.55	<0.001	Highly significant
7	Radiological Changes	86 \pm 0.66	0.93 \pm 0.77	19	6.89	<0.001	Highly significant

S.D. – Standard deviation, BT - Before treatment
t- value – Test of significance, AT – After treatment

The p – value (<0.001) of different sign and symptoms indicates that the trial drug is highly significant in respect to different sign and symptoms at 0.1% level.

Table -2: (Statistical analysis showing the effectiveness of the control drug to different signs and symptoms)

Sl No.	Sing & Symptoms	Mean \pm S. D.		Degree of freedom	t-value	P-value	Remark
		BT	AT				
1	Nasal discharge	1.66 \pm 0.53	0.56 \pm 0.61	19	8.49	<0.001	Highly significant
2	Headache	1.73 \pm 0.51	0.6 \pm 0.66	19	9.26	<0.001	Highly significant
3	Sneezing	2.23 \pm 0.88	1.16 \pm 0.73	19	7.15	<0.001	Highly significant
4	Peripheral eosinophil count	17.76 \pm 9.15	10.96 \pm 5.45	17	6.92	<0.001	Highly significant
5	Nasal eosinophil count	14.11 \pm 4.05	7.08 \pm 2.83	15	8.03	<0.001	Highly significant
6	Nasal pH	7.03 \pm 0.56	6.99 \pm 0.65	19	7.31	<0.001	Highly significant
7	Radiological Changes	2.63 \pm 0.65	2.16 \pm 0.81	19	3.53	<0.005	Highly significant

S.D. – Standard deviation BT - Before treatment
t- Value – Test of significance AT – After treatment

The p – value (<0.001) of different sign and symptoms indicates that the trial drug is highly significant in respect to different sign and symptoms at 0.1% level.

Discussion on statistical analysis of the effectiveness on various sign & symptoms with trial drug and control drug

On the point of statistical adjudication the cardinal signs and symptoms as fixed under the criteria of assessment were individually calculated as highly significant at 0.1% level having p- value <0.001.

Comparing to the above sign and symptoms under control drug were individually calculated as highly significant at 0.1% level having p-value <0.001 expect the radiological evidences which was little less being <0.005.

Exploring the above adjudication the Null hypothesis which was framed earlier is here with rejected and it is confirmed that the trial drug is exceeding effective considering to the control drug.

Assessment of result

The result obtained were very carefully assessed keeping behind the clinical response, peripheral and nasal Eosinophil count, radiological improvement, alteration of nasal pH and statistical adjunction.

Acceptability of the trial drug

So far as the percentage of relief obtained in different sign and symptoms the trial drug can be accepted for the treatment of sinusitis. It is very much effective in relieving the chief complains which disturbs the patients very much like Headache, Nasal discharge, sneezing.

SUGGESTIONS

Though the trial drug is effective in the treatment of sinusitis, still it is not accepted by some patients especially in younger age group and ladies. Because it causes much irritation in nose which was not tolerated by some patients

CONCLUSION

With the total study it can be concluded that the trial drug *Sadvindu taila* has a great scope in the management of sinusitis, especially frontal sinusitis. Further studies are required to establish the drug more scientifically.

REFERENCES

1. Vaidya, Y.T., Sushruta, S. (2012). (Dalhana – Nibandha samgraha tikaa), published by Chaukhambha Surbharti Prakashana, Varanasi, edi, P.No. 651, (Su. U. 24/9-10)
2. Musher, S. H. Logan Turner's Diseases of the Nose, Throat & Ear, Head & Neck Surgery, Published by CRC press, Taylor & Francis group, 11th edition, P. No. 80.
3. Dr. Brahmananda, T., Charak, S. (2012). Vol-II, published by Chaukhambha Surbharti Prakashana, Varanasi, edi, P.No. 900, (Ch. Chi.26/180)
4. Prof. Sidhinandan, M., Bhaishajya, R. (2014). Chaukhamba Surbharati Publication, Varanasi, edi, 2, P.No. 1020
5. Dr. Brahmananda, T. (2012). Charak Samhita Vol-II , published by Chaukhambha Surbharti Prakashana, Varanasi, edi, P. No. 1187, (Ch. Si. 2/22).