

**STUDY THE EFFECT OF ARDRAK TAILA KARNAPOORAN IN KARNAKANDU WITH SPECIAL REFERENCE TO OTOMYCOSIS****Dr. Tushar B. Shelar<sup>1\*</sup> and Dr. Chandrashekhar N. Mule<sup>2</sup>**

<sup>1</sup>Assistant Professor, Department of Shalakyatantra, Hon. Shri. Annasaheb Dange Ayurved Medical College, Ashta, Sangli, Maharashtra, India.

<sup>2</sup>Professor and Head, Department of Shalakyatantra, Yashwant Ayurved College, P.G. Training and Research Centre, Kodoli, Kolhapur, Maharashtra, India.

Received on: 23/12/2021

Revised on: 13/01/2022

Accepted on: 03/02/2022

**\*Corresponding Author****Dr. Tushar B. Shelar**

Assistant Professor,

Department of

Shalakyatantra, Hon. Shri.

Annasaheb Dange Ayurved

Medical College, Ashta,

Sangli, Maharashtra, India.

**ABSTRACT**

Sushrutacharya gives maximum importance to sanchiti of Kaphadosha and describes it as whenever Kapha gets accumulated in Karna (karnastrotas) it causes severe itching, known as Karnakandu. The symptoms of Karnakandu are Kandu, Ruja, Karnastrava, Jadatva, Shophha and Badhirya. According to modern science, the symptoms of Otomycosis are Intense Itching, Discomfort, Pain in ear, Watery discharge with musty odour and Ear blockage (heaviness of ear) which are similar to Karnakandu. So Karnakandu can be correlated with Otomycosis. Aim of the study is to study the effect of ardrak taila karnapooran in karnakandu and the objective is to study the efficacy of ardrak taila and arka taila in karnakandu. A detailed proforma was prepared to study the disease. Patients willing for treatment of age group 10-60 years and having signs and symptoms of Karnakandu (Otomycosis) recruited in the study. Group A (Trial Group) treated with Ardrak Taila Karnapooran while Group B (Control Group) treated with Arka Taila Karnapooran for 15 days. Karnapooran was done once a day for 15 days. The results of drug used in group A i.e., Ardrak Taila Karnapooran is very significant on all the parameters. There is a difference of 10% between overall assessments of therapy between two drugs. It is concluded that Ardrak Taila Karnapooran is more effective than Arka Taila Karnapooran in treating Karnakandu as per studied in the Statistical Analysis.

**KEYWORDS:** Karnakandu, Otomycosis, Karnapooran, Ardrak taila, Arka taila.**INTRODUCTION**

Shalakyatantra mainly deals with diseases of sense organs. Shraavanendriya is one among five Dnyanendriyas and its adhishtana is Shrotra. It has been mentioned at first place in definition of shalakyatantra by Acharya Sushruta. Karnarogas if not treated properly, can hamper the main function of Karna i.e. hearing and can lead to Badhirya.

In Uttartantra of Sushruta Samhita, total 28 diseases of Karna are described and Karnakandu is one among them. According to Vagbhatacharya, there are 25 Karnarogas and Karnakandu is one of them. Acharya Charak mentioned 4 types of Karnaroga which do not include Karnakandu as a separate disease but it is explained as a symptom of Vataj and Kaphaj Karnaroga.

Ear is an important organ as it is one of the sense organs. Hearing is the main function of the ear. It is further classified into External, Middle and Internal ear according to modern science. The diseases related to ear if not treated can get worse and can hamper its main function i.e. hearing.

Sushrutacharya gives maximum importance to sanchiti of Kapha dosha and describes it as whenever Kapha gets accumulated in Karna (karnastrotas) it causes severe itching, known as Karnakandu. According to Acharya Vagbhata, when Kapha dosha gets accumulated in Karna strotas, it causes itching, pain, heaviness of ear and swelling over external auditory canal. The symptoms of Karnakandu are Kandu, Ruja, Karnastrava, Jadatva and Shophha. According to modern science, the symptoms of Otomycosis are Intense Itching, Discomfort, Pain in ear, Watery discharge with musty odour and Ear blockage (heaviness of ear) which are similar to Karnakandu. So Karnakandu can be correlated with Otomycosis. Prevalence rate of Otomycosis in India is about 9%.

In this study, 62 patients were selected and Group A (Trial group) was treated with Ardrak taila Karnapooran and Group B (Control Group) was treated with Arka Taila Karnapooran in the dose of once a day for 15 days.

**AIM**

To study the effect of Ardrak Taila Karnapooran in the

signs and symptoms of Karnakandu.

## OBJECTIVES

### Primary

- To evaluate the efficacy of Ardrak Taila Karnapooran on Signs and Symptoms of Karnakandu.

### Secondary

- To study in detail the literature about Karnakandu.
- To study in detail the literature about Otomycosis.
- To study in detail the literature about Ardrak Taila.
- To study in detail the literature about Karnapooran.

## MATERIALS AND METHODS

A detailed proforma was prepared to study the disease Karnakandu with special reference to Otomycosis. A well informed consent was obtained from each participant before recruiting into the study.

### Inclusion Criteria

- 1) Patients having signs and symptoms of karnakandu.
- 2) Patients between 10 to 60 years of age group.
- 3) Irrespective of Gender, Caste, Religion, Economical Class, Race.
- 4) Unilateral or bilateral Otomycosis.
- 5) Intact tympanic membrane.

### Exclusion Criteria

- 1) Patients other than Karnakandu with special reference to Otomycosis will be excluded.
- 2) Patients below 10 and above 60 years of age group.
- 3) Patient having systemic disease with complications which can lead to interference with the study.

### Withdrawal Criteria

- 1) During the course of clinical study if any adverse

### Clinical Assessment

The signs and symptoms were assessed by adopting the gradation method. They are as follows:

#### Karnakandu

Grades	Symptoms	Score
Grade 0	No itching	0
Grade I	Mild/ occasional itching	1
Grade II	Moderate frequent itching	2
Grade III	Severe frequent itching	3
Grade IV	Very severe (which disturbs sleep and other routine activities)	4

**Karnaruja:** According to Numeric Rating Scale

Grades	Symptoms	Score
Grade 0	No Pain	0
Grade I	Mild Pain (Nagging, annoying, interfering little with daily activities)	1-3
Grade II	Moderate Pain (interferes significantly with daily activity)	4-6
Grade III	Severe Pain (Disabling, unable to perform daily activities due to pain)	7-10

event occurs which require urgent treatment.

- 2) If patient himself wants to get withdraw from study.

### Ethical Clearance

This study is carried out as per international conference of Harmonization- Good Clinical Practices Guidelines (ICH-GCP) and similarly study is approved with institutional ethical committee of YAC, PGT and RC Kodoli.

### Sampling Technique

Total 62 patients fulfilling the inclusion criteria of Karnakandu were selected from Yashwant Ayurved College, PGT and RC, Kodoli, Kolhapur, Maharashtra, India. Random sampling technique was adopted. All the patients were examined initially in the OPD and were selected for study based on clinical presentation. Patients were divided into two groups, i.e., Group A and Group B.

### Group A (Trial Group)

Total 31 patients were included in this group. They were treated with Ardrak Taila Karnapooran. Dose- Once a day for 15 days.

### Group B (Control Group)

Total 31 patients were included in this group. They were treated with Arka Taila Karnapooran. Dose- Once a day for 15 days.

### Administration

Swedan purvak Karnapooran was done once daily according to standard operating procedure.

### Assessment phase (Criteria for assessment)

The effect of treatment (result) was assessed regarding the clinical signs and symptoms based upon gradation system and overall improvement.

**Karna Strava**

Grades	Symptoms	Score
Grade 0	No strava	0
Grade I	Strava after itching	1
Grade II	Strava with itching	2
Grade III	Frequent strava with itching	3

**Meatal Skin Color**

Grades	Symptoms	Score
Grade 0	Normal skin without swelling	0
Grade I	Reddish colored skin without swelling	1
Grade II	Reddish colored skin with swelling	2
Grade III	Red colored skin with swelling	3

**OBSERVATIONS AND RESULT**

In this study, total 62 patients with the signs and symptoms of Karnakandu were selected randomly for the study fulfilling inclusion criteria. The patients selected were divided into 2 groups i.e., Group A and Group B. Group A was treated with Ardrak taila karnapooran while Group B was treated with Arka taila karnapooran as per plan of the study. All the necessary information and

observations documented in specified case paper as-

Parameter	Trial Group	Control Group
Karna Kandu	87.63%	84.95%
Karna Ruja	90.42%	91.86%
Karna Strava	92.00%	86.21%
Meatal Skin Colour	88.69%	86.11%
<b>Mean % improvement</b>	<b>89.69%</b>	<b>87.28%</b>

**Distribution of patients according to relief**

For assessment, all the assessment parameters were used.

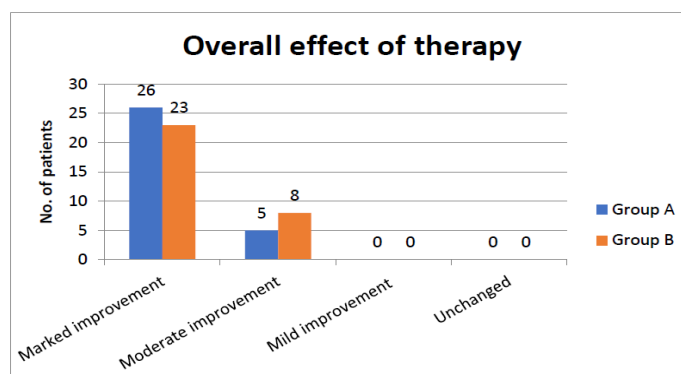
Overall Effect(patient wise)	Criteria
Marked improvement	>75 % relief in signs & symptoms
Moderate improvement	>50 % to 75 % relief in signs & symptoms
Mild improvement	>25% & 50% relief in signs & symptoms
Unchanged	Up to 25% relief in signs & symptoms

**Distribution of patients according to relief.**

Overall Effect(patient wise)	No. of patients			
	Trial Group		Control Group	
	Count	%	Count	%
Marked improvement	26	83.87%	23	74.19%
Moderate improvement	05	16.13%	08	25.81%
Mild improvement	00	00.00%	00	00.00%
Unchanged	00	00.00%	00	00.00%
<b>Total</b>	<b>31</b>	<b>100.00%</b>	<b>31</b>	<b>100.00%</b>

In Trial Group, 26 patients (84%) were markedly improved while 5 patients (16%) experienced moderate improvement.

In Control Group, 23 patients (74%) were markedly improved while 8 patients (26%) realized moderate improvement.



## DISCUSSION

The observations studied are discussed as follows:

### Gender

In present study, in Trial Group, 17 patients (55%) were male while 14 patients (45%) were female. Whereas, in Control Group, 16 patients (52%) were male while 15 patients (48%) were female.

So we can say that, there is equal chances of affliction in both sex.

### Age

The age ranges from 10 to 60 yrs. It was noted that higher incidence of Karnakandu seen in age group of 40-60 years i.e.

This data shows higher incidence of Karnakandu in fourth and fifth decade of life which is in accordance with modern statistical data. There is no specific reason which can conclude that this age group is more prone to the disease Karnakandu.

### Occupation

Among the 62 patients little higher incidence of Karnakandu found in house wives i.e. 29.03% (9 in number) in Trial Group 38.71% (12 in number) in Control Group followed by 10 patients ( were people having Jobs in both the groups.

Similarly in farmers, incidence rate Of Karnakandu was 16.13% (5 patients) in Trial Group 22.58% (7 patients) in Control Group while in students, this rate was 16.13% (5 patients) in Trial Group 3.23% (1 patient) in Control Group.

Again in patients who were self employed of, this rate is 6.45% (2 patients) in Trial Group 3.23% (1 patient) in Control Group.

So we can say that, the diseases strike most of who are engaged in excessive mental work and stress. So chances of scratching of the ear by finger, matchstick, hair pins, ball-pen, pencils etc. increases the incidence of Otomycosis.

### Religion

Maximum numbers of patients were Hindu i.e. 77.42% (24 patients) in Trial Group 70.97% (22 patients) in Control Group. 12.90% (4 patients) were of Christian in both the groups while 9.68% (3 patients) were from Buddhist in both the groups & 6.45% of Muslim (2 patients) were seen in Control Group.

The patients of Hindu religion are observed more in this study which is because of number of patients enrolled in the study are more of Hindu religion. We cannot say that the particular religion is more prone to the disease Karnakandu.

### Karna kandu

There is marked improvement seen in 87.63% patients in Trial Group whereas 84.95% patients in Control Group. Hence, both Trial drug and Control drug can be considered as equally efficacious but we can say, reduction in the symptom Karnakandu is significantly

Higher in Trial Groups compared to Control Group.

### Karna ruja

Marked improvement in the symptom Karna Ruja is seen i.e. 91.86% and 90.42% in Control Trial respectively. Hence, the efficacy of both the Control drug and Trial drug can be considered as equally in Karnaruja.

### Karna strava

There is marked improvement in the symptom Karnastrava by Trial drug with 92.00% as compared to 86.21% by Control drug. Hence, in Karnastrava, treatment in Trial Group is highly efficacious than Control Group.

### Meatal skin color

Changes in Meatal skin color have been markedly improved in 88.69% patients in Trial Group whereas 86.11% patients in Control Group. Hence, both Trial drug and Control drug can be considered as equally effective.

### Overall effect of therapy

In Trial Group, 26 patients (84%) were markedly improved while 5 patients (16%) experienced moderate improvement.

In Control Group, 23 patients (74%) were markedly improved while 8 patients (26%) realized moderate improvement.

## CONCLUSION

In the Present study, due to Kaphagna property, both Ardrak Taila Karnapooran and Arka Taila Karnapooran worked effectively in the management of Karnakandu. While studying overall therapy effect, it is observed that, Ardrak taila karnapooran (84%) is more effective than Arka taila Karnapooran (74%). Hence, it is concluded that, Ardrak Taila Karnapooran is more effective than Arka Taila Karnapooran in the management Karnakandu.

## REFERENCES

1. Ambika Datta Shastri, Sushrut Samhita, Choukhamba Prakashan Sanskrit Sansthana, Edition reprint 2017, Sutrasthana 1/10, Page no. 5.
2. Ambika Datta Shastri, Sushrut Samhita, Choukhamba Prakashan Sanskrit Sansthana Edition reprint 2017, Uttarasthana 20/3-5 Page no. 111.
3. Moreshwar Kunte, Ashthang Hridayam Uttartantra, Choukhamba prakashan, Varanasi Sanskrit Sansthana, Edition reprint 2016, Adhyaya no 17, Shlok no. 14, Page no. 834
4. Ya.Go. Joshi, Charak Samhita, Khanda 2<sup>nd</sup>, Vaidyamitra Prakashan, Ed 5<sup>th</sup> Reprint, 2015, Trimarmiyadhyay, Ch.Su.26/128, Page no.592.
5. Ambika Datta Shastri, Sushrut Samhita, Choukhamba Prakashan Sanskrit Sansthana, Ed reprint, 2017, Uttartantra, Adhyay 20, Shlok 11, Page no.113

6. Ambika Datta Shastri. Sushrut Samhita Ed reprint 2017 varanasi choukhmba sanskrit sansthana, uttarasthana, Adhyay 21, Shlok 32.
7. American academy of Otolaryngology- Head and neck surgery foundation- 2006.
8. World Journal of Pharmaceutical Research, Volume 4, Review Article-ISSN 2277-7105
9. Dr.PL Dhingra, Dr.Shruti Dhingra, Dr. Deeksha Dhingra; Diseases of Ear, Nose and Throat& Head and Neck Surgery- 6<sup>th</sup> Edition, Chapter 8<sup>th</sup>, Diseases of External Auditory Canal,page no.52
10. KB Bhargav, SK Bhargav, TM Shah, Usha Publication, Ed 4th Reprint 2011, A short textbook of ENT Diseases, Section 2<sup>nd</sup>, Diseases of External Ear, Page no. 38.
11. Hodder Arnold, Scott Brown's Otorhinolaryngology and Head and neck surgery, 7<sup>th</sup> edition, 3<sup>rd</sup> volume, Chapter- The Ear.