

TO STUDY THE EFFICACY OF “RASNADI GUGGUL” IN THE MANAGEMENT OF KARNASRAVA

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Abstract :

Karnasrava is a disease mentioned by Acarya Susruta in the chapter named karnarog vigyaniya. The nidana and lakshana like Shiroabhigha (trauma to the head with blood discharge), Jaloprapakaudabhawa (Swimming- Watery Discharge), Vidradhi (Abscess). The condition „otorrhoea“ is having different causes like trauma, injury in external auditory canal, otomycosis, acute otitis externa, seborrhoeic otitis media, chronic suppurative otitis media etc. In the present work otorrhoea one of the cause of most of the ear diseases is taken for my study. Material: Drug Rasnadi Guggul taken from reputed Ayurved Aushdhalaya Company.

KEYWORDS: Karnasrava, Rasnadiguggul, AbhyantarSevan.

I. INTRODUCTION

Karnasrava is a disease mentioned by AHCarya Shusruta in the chapter named karnarog vigyaniya. He has counted karnasrava as a disease entity under 28 karnarogas.[1] AHCarya Charak included karnasrava as a symptom under the four types of karnarogas due to vitiation of different dosas.[2] AHCarya Vagbhatta has not described karnasrava separately.[3] It is a fact that systematic descriptions of karnarogas are available in all the ancient treatises. The condition „otorrhoea“ is having different causes like trauma, injury in external auditory canal, otomycosis, acute otitis externa, seborrhoeic otitis media, chronic suppurative otitis media etc.[4] In the present work otorrhoea one of the cause of most of the ear diseases is taken for my study. The general line of treatment of karnasrava includes, Pramajana, Praksalana (Dhavan), Dhoopan, karnapurana, shirovirechan, etc. Rasnadi Guggul has been selected for the present study which is mentioned in yogratnakar 7th edition 1999. It is very simple medicine having ingredients e.g. Rasna, Erandmool, Guduchi, Devdaru, Shunthi and Guggul which are very cheap & easily available in their authentic form. All above the ingredients are having kandu hara, vrana ropana and jantughna properties.[5]

DISCUSSION

In this study, It is seen that maximum no of patients are affected in age group 20-30 years in the both groups. Hearing is improved due to reduced otorrhoea. Otorrhoea is reduced because of the drugs which are used.

CONCLUSION

Prevalence of Karnasravas is found to be more in 30 – 40 Year's age group. Vata kapha Prakrti people are more prone for this disease. Maximum number of patients attending the O.P.D. were having Madhyama category of Sara, Samhanana. Satva, Satmya, Ahāra Sakti, Vyayama Sakti & Vaya.

AIM AND OBJECTIVES

- To study the efficacy of Rasnadi Guggul in karnasrava.
- To study the efficacy of Cefadroxil in otorrhoea, according to modern science.
- To study the correlation between karnasrava & Otorrhoea.

STUDY DESIGN

The study of efficacy of Rasnadi Guggul on karnasrava is performed in Bharati Ayurved College and Hospital Pune. Study is performed for the period of 2 years or this project the patients were divided randomly into 2 groups as experimental group and control group. Treatment is given to these patients. Pathyaapathya explained, follow up taken and results are observed.

DOSAGE & FOLLOW UP.

Rasnadi Guggul

Dose – 500 mg twice in a day

Duration – 8 days

Anupan – Sukhoshna jal

Cefadroxil

Dose – 500 mg twice in a day

Duration – 8 days

Anupan – water

FOLLOW-UP

Done on 0, 2nd, 4th, 6th, 8th day

TYPE OF STUDY

- The study is a randomized clinical trial.
- The results of study are based on subjective interpretation of clinical findings and narration of patient.

PLACE OF WORK

The collection of data of the patients were from OPD and IPD Shalakyā - Tantra Dept of Bharati Medical Foundation's Ayurved hospital Pune – Satara Road Pune – 43.

RESEARCH METHODOLOGY**INCLUSION CRITERIA**

- Patient of „Karnasrava“
- Patient having „Karnasrava“ like „Puyasrava“
- Patient in between the age of 14 years to 65 years

EXCLUSION CRITERIA

- Patient already operated for ear problem.
- Patient suffering from systemic diseases like Diabetes & hypertension.
- Patient below the age of 14 years & above 65 years.

Observations have been noted in tabular form according to the symptoms observed and narration of the patient.

Sl.N	Sign & Symptoms	0	2nd	4th	6th	8th
0						
1.	Karnasrava (Otorrhoea)					
2.	Karnashoola (Pain in ear)					
3.	Karnakandoo (Itching in ear)					
4.	Badhirya (Deafness)					

ASSESSMENT CRITERIA: - Severity of signs & symptoms are recorded by gradation method.

GRADATION CHART

Normal	0
Mild	+
Moderate	++
Severe	+++

OBSERVATIONS

- Normal – (0):**- Symptoms are reduced.
- Mild – (+) :-** Symptoms like itching in ear & little bit of other symptoms.
- Moderate – (++) :-** Symptoms like otorrhoea, pain in ear, itching in ear & some other symptom.
- Severe – (+++) :-** Symptoms like Profuse ear discharge and moderate to severe deafness with all other symptoms present.

STATISTICAL ANALYSIS

The present scientific study was undertaken to the study the efficacy of Rasnadi Guggul on karnsrava. So in clinical study patients are taken into trail and contol group randomly. Then Rasnadi Guggul had given to the

patient in trial group and tab. Cephadroxil given to the patients in control group. The observations according to parameter were noted before treatment and after treatment.

- Each sign statistically analyzed individually. Sample was small size. Wilcoxon signed Rank test Z was applied of the determination of significance of treatment as per need.

SHOWING GRADING OF OVERALL ASSESSMENT CRITERIA

PERCENTAGE OF CURE	GRADING	INTERPRETATION
75 -100%	3	Marked Response
50 - 74%	2	Moderate Response
25- 49%	1	Mild Response
0 -24%	0	No Response.

OBSERVATION AND RESULTS

KARNASRAVA

Day 0	Day 8		Wilcoxon signed Ranked test Z		P- Value	
Mean	SD		Mean	SD		
Trial	2.4667	.50742	.0452	.24973	-4.940a	.000
Control	2.6452	.48637	.0323	.17961	-5.035a	.000

In trial group average karna sarava was reduced from 2.4667 to 0.0452 which shows more effect than control group.

There is significantly better relief of symptom KarnaSrava observed in trial group than control group.

KARNASHOOLA

Day 0	Day 8		Wilcoxon signed Ranked test Z		P- Value	
Mean	SD		Mean	SD		
Trial	1.3333	.71116	.0000	.00000	-4.476a	.000
Control	1.5484	.80989	.0645	.35921	-4.635a	.000

The average value of karna shoola was reduced from 1.3333 to 0 in trial group which is more significant than control group. There is significantly better relief of symptom of Karna shoola observed in trial group than control group.

KARNA KANDU

Day 0	Day 8		Wilcoxon signed Ranked test Z		P- Value	
Mean	SD		Mean	SD		
Trial	2.0000	.64327	.0323	.17961	-4.903a	.000
Control	2.0000	.63246	.0645	.24973	-5.056a	.000

In trial group average Karna Kandu was reduced from 2 to 0.0323 which is more effective than control group. There is significantly better relief of symptom of Karna Kandu observed in trial group than control group.

BADHIRYA

Day 0	Day 8		Wilcoxon signed Ranked test Z		P- Value	
Mean	SD		Mean	SD		
Trial	1.2667	.58329	.0645	.24973	-4.664a	.000
Control	1.2258	.66881	.2581	.44480	-4.416a	.000

Average Karna Badhirya was reduced from 1.2667 to 0.0645 which is more significant than control group.

There is significantly better relief of symptom of Karna Badhirya observed in trial group than control group.

- Hearing is improved due to reduced otorrhoea.
- Otorrhoea is reduced because of the drug which are used.

DISCUSSION

It is the most important part of a Research work. After thorough Discussion of all the observations found throughout the treatment period, one can draw a definite conclusion.

The entire discussion can be divided into some parts for proper Understanding Such as.

- **Age-** In this study, patients are classified into age groups 10-20 years, 20-30years, 30-40 years, 40-50 years and above 50 years. It is seen that maximum no of patients are affected in age group 20-30 years in the both groups.
- **Sex-** Control group had equal male and female patients but in the trail group female patient more than male patients.
- **Karna srava-** There is significant relief of symptom KarnaSrava observed in trial group than control group.
- **Karna shola-** There is significant relief of symptom of Karna shoola observed in trial group than control group.
- **Karna kandu-** There is significantly better relief of symptom of Karna Kandu observed in trial group than control group.
- **karna bhadhirya-** Hearing is improved due to reduced otorrhoea.
- Otorrhoea is reduced because of the drug which are used.
- Maximum number of patients were from urban habitat and some patients were from rural habitat.
- Majority of patients having no previous history of karnasrava (otorrhoea).

- I had seen 20 patients which are suffered from otitis externa and 10 patients which are suffered from otitis media in control group.
- I had seen 18 patients which suffered from otitis externa and 12 patients which are suffered from otitis media in trail group.
- Maximum number of patients were having unilateral infection. This may be due to local etiological factors.
- So we can use “Rasnadi Guggul” in external and mid ear otorrhoea for better results.
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PROBABLE MODE OF ACTION OF RASNADI GUGGUL^[5]

Sl no.	Content	Scientific name	Quantity
1.	Rasna	<i>Pluchea lanceolata</i>	1 part
2.	Guduchi	<i>Tinospora cordifolia</i>	1 part
3.	Erandamool	<i>Ricinus communis</i>	1 part
4.	Devdaru	<i>Cedrus deodara</i>	1 part
5.	Shunthi	<i>Zingiber officinale</i>	1 part
6.	Guggul	<i>Commiphora mukul</i>	

RASAPANCHAK OF RASNADI GUGGUL^[6,7,8]

SL.N	DRAYA	RASA	GUNA	VEERY	VIPAK	DOSHSHAMKT
O				A	A	A
1.	RASNA	Tikta	Guru	Ushna	Katu	Vata shamak
2.	GUDUCHI	Tikta, Kashaya	Guru, Snigdh	Ushna	Madhur	Tridosh shamak
3.	ERANDAMOO L	Madhur, Kashaya	Tikshna, Snigdh, sukshma	Ushna	Madhur	Kaphavata shamak
4.	DEV DARU	Tikta	Laghu, Snigdh	Ushna	Katu	Kaphavata shamak
5.	SHUNTHI	Katu	Laghu, Snigdh	Ushna	Madhur	Kaphavata shamak
6.	GUGGUL	Tikta, Katu	Laghu, Ruksha, Tikshna, vishad, sukshma, sar	Ushna	Katu	Tridosh shamak

ACTION OF RASNADI GUGGUL ON KARNASRAVA[6, 7, 8]

- **Rasnadi guggul** has different ingredients which plays important role in the treatment of karnasrava.
- It reduces the dhatupak and which again produces the new dhatu.
- It reduces the srava from the karna leading to dryness of the ear canal.
- It act on raktadharakala that it is act on yakrut and pliha which again directly act on twacha.
- It does the shoshan of different excess snigdha dravyas present in the ear.
- In rasa dhatu it does the pachan of drava and kled and does the raktavardhan.
- It reduces dravata, snighatva in meda dhatu.
- According to panchmahabhotika constitution karnasrava havi prithvi and jala mahabhauta pradhan, while Rasnadi Guggul has akash, vayu and teja mahabhuta pradhanata. Due to mahabhuta pradhanata it will helpful to reduce the karnasrava.

➤ **CEFADROXIL**

- **Cefadroxil** is a broad-spectrum antibiotic of the cephalosporin type, effective in Gram-positive and Gram-negative bacterial infections. It is a bactericidal antibiotic.
- **General use-** Treatment of mild to moderate susceptible infections such as the bacterium *Streptococcus pyogenes*.
- **Spectrum** - Good gram(+) (*Streptococcus pyogenes*, *Staphylococcus* gram(-) (*Proteus*, *E. coli*, *Klebsiella*)

➤ **PHARMACOKINETICS**

- a) Cefadroxil is almost completely absorbed from the gastrointestinal tract.
- b) After doses of 500 mg and 1 gm by mouth, peak plasma concentrations of about 16 and 30 micrograms/mL respectively are obtained after 1.5 to 2 hours.
- c) Although peak concentrations are similar to those of cefalexin, plasma concentrations are more sustained.
- d) Dosage with food does not appear to affect the absorption of Cefadroxil. About 20% of cefadroxil is reported to be bound to plasma proteins.
- e) The plasma half-life of cefadroxil is about 1.5 hours and is prolonged in patients with renal impairment.
- f) Cefadroxil is widely distributed to body tissues and fluids. It crosses the placenta and appears in breast milk. More than 90% of a dose of cefadroxil may be excreted unchanged in the urine within 24 hours by glomerular filtration and tubular secretion; peak urinary concentrations of 1.8 mg/mL have been reported after a dose of 500 mg. Cefadroxil is removed by haemodialysis.

DOSAGE

- i. Cefadroxil is given by mouth, and doses are expressed in terms of the anhydrous substance; 1.04 g of Cefadroxil monohydrate is equivalent to about 1 g of anhydrous Cefadroxil.
- ii. **Adults:** 500 mg–1gm /12h;
- iii. **Paediatrics:** 15 mg/kg /12h;
- iv. **Side effects** –The most common side effects of Cefadroxil are diarrhoea, nausea, upset stomach, and vomiting. Other side effects include:
 - b. Rashes . Itching

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