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# Experimental evaluation of *Ardrakadi Ghritam* for its Anti-microbial Activity

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## ABSTRACT

**Background:** *Ardrakadi Ghrita* mentioned in *Sahasrayogam* and its Anti-microbial activity was analyzed. **Aim and objective:** An experimental evaluation of *Ardrakadi Ghrita* for its Anti-microbial activity. **Methods:** Experimental evaluation of *Ardrakadi Ghritam* for its Anti-microbial activity against microbes such as Escherichia Coli and Klebsiella Pneumonia. **Results:** Determination of zone inhibition by Agar well diffusion method. For Test Organism are Escherichia Coli and Klebsiella Pneumonia. Inoculum: Cell suspension prepared from cultures grown on Trypsin broth adjusted to  $1-2 \times 10^5$  cells/ml. **Conclusion:** From the experimental study the result it was found that *Ardrakadi Ghrita* not showed anti-microbial activity.

**Key words:** *Ardrakadi Ghrita*, Anti-microbial activity.

## INTRODUCTION

Ayurveda is the ancient Indian system of health care and longevity. It involves a holistic view of men his health and illness, *Ayurvedic* treatment is aimed at patient as an organic whole and treatment consists of salubrious use of drugs, diets and certain practices, currently *Ayurveda* is widely practiced in the Hindustan peninsula (India and the neighbouring countries) and in recent years, has attracted much attention in economically developed countries such as those in Europe and in the United States and Japan.

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This 5000 years old system of medicine recommends treatments with specific herbs and minerals to cure various diseases. Botanicals in the *Ayurvedic* material medicals have been proven to be safe and effective through several hundred to several thousand years of use. In modern pharmaceutical science, the method of preparation<sup>[1]</sup> is selected depending upon the Physico-chemical properties of the crude drugs and the main motto of the method adopted for a particular preparations of any drug has to extract the maximum pharmaceutically active ingredients of the crude drug. Therefore, the nature of pharmaceutically active ingredient is an important factor in deciding the method of preparation.

*Ardrakadi Ghrita* recommended for *Kamala* contains *Ardraka*, *Haridra*, *Eranda*, *Trivrit*, *Ghrita* and Milk. If the dry substance or a liquid is described to be taken in the quantity of *Prastha Mana*, then in actual practice such substance doubling of quantity is not necessary, Doubling of the quantity of wet and liquid substance is necessary because of their moisture content.<sup>[2]</sup> If the dry is mentioned in the text to be used in the quantity of *Tula*, then it should never be doubled even if it is a wet drug.<sup>[3]</sup> In modern science, percutaneous drainage

associated with antibiotic therapy in sever condition even surgery is advised. Medicines may cause side effects, such as itching, nausea, vomiting, seizures etc.

Hence the physician is looking for safe and effective medicine without side effects. In the view to contribute a safe and effective, these formulations were taken for the present study.

## MATERIALS AND METHODS

Raw drugs of *Ardrakadi Ghritam* was procured from Kerala. Herbal drugs (*Ardraka, Haridra, Eranda, Trivrit*) are authenticated from Department of Dravya Guna, Ramakrishna Ayurvedic Medical College, Yelahanka, Bangalore. The test drug was prepared from Department of Rasa Shastra & Bhaishajya Kalpana, Ramakrishna Ayurvedic Medical College, Yelahanka, Bengaluru.

In the present study, a sample of *Ardrakadi Ghritam* was given for laboratory analysis at Skanda life Sciences Pvt. Ltd, Bengaluru.

Determination of zone inhibition by Agar well diffusion method. For Test Organism are *Escherichia Coli* and *Klebsiella Pneumonia*. Inoculum: Cell suspension prepared from cultures grown on Trypsin broth adjusted to  $1-2 \times 10^5$  cells/ml.

**Table 1: Group Allocation**

Test Organisms	Test Compounds	Conc. Per well
<i>K. pneumoniae</i>	Control (Methanol) (20µl)	100%
	Ciprofloxacin (Standard) (20µl)	2(µg/ml)
	Sample (20µl)	2(mg/ml)
	Sample (10µl)	1(mg/ml)
	Control (Methanol) (20µl)	100%
<i>E. coli</i>	Ciprofloxacin (Standard) (20µl)	2(µg/ml)
	Sample (20µl)	2(mg/ml)

	Sample (10µl)	1(mg/ml)
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Determination of zone inhibition by Agar well diffusion method. For Test Organism are *Escherichia Coli* and *Klebsiella Pneumonia*.

## Inoculum

Cell suspension prepared from cultures grown on Trypsin broth adjusted to  $1-2 \times 10^5$  cells/ml.

## OBSERVATION AND RESULTS

**Table 2: Inhibitory activity of test compounds against test organisms.**

Test Organisms	Test Compounds	Conc. Per well	Zone of inhibition (mm)	Figure reference number
<i>K.pneumoniae</i>	Control (Methanol) (20µl)	100%	-	Fig 2
	Ciprofloxacin (Standard)(20 µl)	2(µg/ml)	22	
	Sample (20µl)	2(mg/ml)	-	
	Sample (10µl)	1(mg/ml)	-	
	Control (Methanol) (20µl)	100%	-	
<i>E.coli</i>	Ciprofloxacin (Standard)(20 µl)	2(µg/ml)	26	Fig 3
	Sample (20µl)	2(mg/ml)	-	
	Sample (10µl)	1(mg/ml)	-	

The study showed that the *Ardrakadi Ghritm* was not showing Anti-microbial activity against microbes such as *Escherichia Coli* and *Klebsiella Pneumonia*.

## DISCUSSION

*Ardraka Ghritam* is an Ayurvedic medicine, in herbal ghee form. This herbal ghee is made from special formulations used for *Kamala*, *Kumbakamala* and also used in treatment of indigestion, chronic diarrhoea. *Ardraka* means ginger, which is the main ingredient of this medicine. Effects on *Tridosha*: It calms *Vata* with *Pitta*. Side effects: High dose may cause burning sensation in stomach and diarrhoea. Principle: In this herbal ghee, the herbs are infused in the medium of ghee along with herb al water decoction. Then the solid waste herb materials are filtered at, thus this herbal ghee contains oil soluble and water soluble phyto active principles of medicinal herbs. *Shunti* is a dried form of *Ardraka*, which has many properties and differs in *Guna*, *Doshagnata* and *Karma*.

## CONCLUSION

On the basis of experimental observations made in this showed that the *Ardrakadi Ghritm* was not showing Anti-microbial activity against microbes such as *Escherichia Coli* and *Klebsiella Pneumonia*.

## REFERENCES

1. Tripathi Brahmanand. Sarngadhara Samhita, 1<sup>st</sup> ed. Varanasi: Chaukhamba Surbharati Prakashan; 2006.p.125.
2. Tripathi Brahmanand Sarngadhara Samhita 1<sup>st</sup> ed. Varanasi: Chaukhamba Surbharati Prakashan; 2006. p.54.
3. Bramhananda Tripathi. Dipika commentary on book of Sharangadhara samhitha ed. 10. prathamodhyaya: 01; verse 33, 34. Varanasi: Chaukambha Surbharathi, 2011:15.

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