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EFFECT OF TINOSPARA CORDIFOLIA (GUDUCHI) ON THIRST: AN AYURVEDA STUDY

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ABSTRACT
Thirst (Pipasha) is one of the most essential and unavoidable natural urges and if it is suppressed then dryness of throat and mouth may occurs along with deafness and fatigue (Charak, sut 7/21). Charak has mentioned Antidipsic drugs like Shunthi. Mustak, Parpatak, Chandana and Guduchi, etc. to control thirst. Considering these all aspects present article study has been designed to investigate antidipsic property of Guduchi.

KEYWORDS: Ayurveda, Pipasha, Guduchi, Thirst.

INTRODUCTION

Ayurveda is one of the oldest sciences of Indian knowledge mainly originated from *Vedas*. This System envisages comprehensive understanding of the totality of the body and the concept of health including their allegations. Thus the main aim of Ayurveda is to give guideline for maintenance and promotion of health as well as for prevention and treatment of diseases. Ayurveda described methods for the maintenance of balance state of *Dosha*, *Dhatu* and *Mala*. The management of thirst is very important aspect to control associated complications as depicted in **Figure 1**.

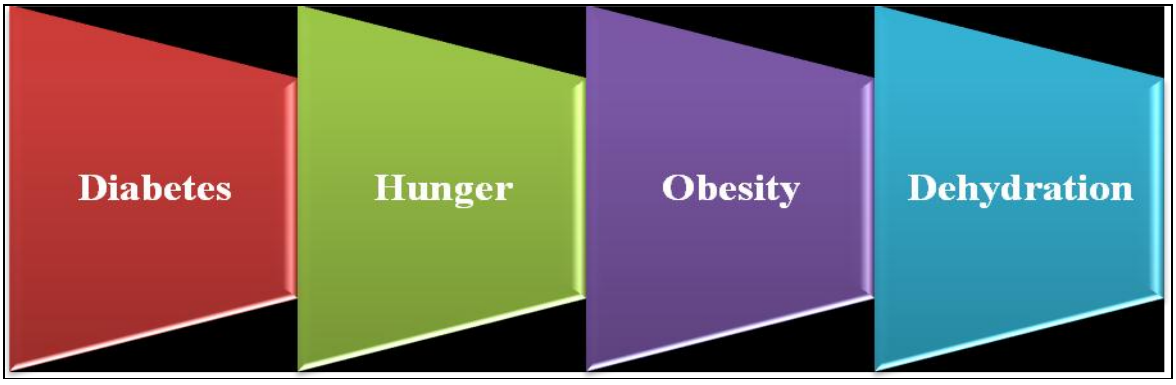

Figure 1: Complications associated with thirst.

MATERIAL AND METHODS

Experimental Animals (*Albino* rat) weighting 140-250 gm were used for this study. The rats were housed under standard laboratory conditions, temperature (28 ± 30°C) and 12 hour light & dark cycle. They were fed with standard rat feed and water *adlibitum*. The experiment is carried out in the department of physiology, Institute of Medical Sciences, Banaras Hindu University.

Selection of drug

On the basis of wide therapeutic uses mentioned in *Vrahattrayee* and in *Nighantus* dry steam of *Guduchi* was collected from the Ayurvedic garden of Banaras Hindu University. The drug is easily available, cheaper, nontoxic and offers other therapeutic benefits also.

Preparation of Drug

Fine powder of the stem of *Guduchi* was prepared in Ayurvedic Pharmacy of Banaras Hindu University and *Guduchi Kasay* was administered in experimental rats.

Dose of *Guduchi Kasay*: 0.5 mg/gm of rat.

Experimental Work

To justifying scientific parameters animals were divided into two groups; control & experimental. The water of both groups was observed along with weight & diet consumption for two weeks *adlibitum*. After two weeks the *Guduchi Kasay* was given to the animal of experimental group for next one weeks and results were observed in comparison with control group.

OBSERVATION AND RESULT

The intake of water depended on the weight of rats, temperature and humidity. After administration of *Guduchi Kasay* in experimental rats water intake was declined remarkably. The normal water intake of Rats was depicted in **Table 1**. Effect on water intake before and after administration of *Gudichi Kasay* depicted in **Table 2**.

Table 1: Normal water intake of Rats in ml.

Days S. No.	1st 11 June	2nd 12 June	3rd 13 June	4th 14 June	5th 15 June	6th 16 June	7th 17 June	8th 18 June	9th 19 June	10th 20 June	11th 21 June	12th 22 June	13th 23 June	14th 24 June
*C_1	-	54.3	54.3	57.5	52.0	42.5	54.0	46.3	35.9	42.2	46.0	43.5	50.6	50.1
*C_2	-	61.8	58.3	59.0	61.0	57.5	61.2	28.3	17.6	29.6	39.1	35.0	38.8	53.5
*C_3	-	67.8	66.3	62.0	61.0	65.0	59.5	21.8	20.5	25.6	33.9	22.0	24.9	24.0
*E_1	-	67.3	66.8	68.0	68.0	62.0	64.2	27.2	23.5	50.5	39.9	36.5	35.5	38.0
*E_2	-	73.3	68.8	69.0	66.0	69.0	68.0	23.4	21.8	28.5	33.5	32.8	35.1	33.0
*E_3	-	64.3	61.8	66.0	61.0	65.0	61.8	27.4	21.0	21.5	29.4	27.0	26.9	33.5
Temp	90	90	90	86	86	86	88	88	86	86	88	90	90	92
Humidity %	85	71	71	70	76	92	77	92	84	84	77	85	85	76

***C1, C2, C3 (rats of control group) and *E1, E2, E3 (rats of experimental group)**

Table 2: Effect on water intake before and after administration of *Gudichi Kasay*

Days Date Rate Code	1st 25 June	2nd 26 June	3rd 27 June	4th 28 June	5th 29 June	6th 30 June	7th 1 July	8th 3 July	9th 4 July	10th 5 July	11th 6 July	12th 7 July	13th 8 July	14th 9 July
*C_1	29.0	40.0	44.5	45.0	52.0	46.0	46.0	43.0	42.5	33.8	33.3	34.5	63.5	61.5
*C_2	42.5	38.5	45.5	48.5	69.5	-	-	23.5	32.0	49.3	35.8	32.8	40.0	37.0
*C_3	24.0	26.5	23.2	25.2	21.5	22.0	21.5	23.5	20.0	22.8	29.8	33.0	18.0	18.0
*E_1	37.5	42.5	44.5	42.0	42.5	28.8	52.4	48.5	25.0	33.8	25.8	29.0	15.0	15.0
*E_2	33.2	30.0	65.5	34.0	40.5	37.5	39.5	27.5	24.0	25.8	22.8	27.0	21.0	18.0
*E_3	37.0	30.0	35.5	38.5	35.7	37.5	42.5	39.5	22.0	22.8	20.8	26.0	21.0	15.0
Temp	94	92	92	94	96	94	86	86	92	92	88	86	88	90
Humidity %	86	76	76	74	84	86	76	84	76	76	77	84	77	71

***C1, C2, C3 (rats of control group) and *E1, E2, E3 (rats of experimental group)**

DISCUSSION

Tinospora cordifolia (Guduchi) considered as Antidipsic drug (*Trisna Nigrahan Mahakasay*) which can be used to control thirst and eliminate symptoms of thirst like dryness of throat, deafness, fatigue and depression. The present study has been carried out to evaluate effect of *Gudchi* preparation on symptoms of thirst. It is found that water intake of experimental rats (treated with *Guduchi Kashay*) was reduced in comparison to control group. This evidence proved the acumen of ancient workers as antidipsic property of *Guduchi*.

CONCLUSION

Present investigation has been planned to evaluate the effect of *Tinospora Cordifolia* (*Guduchi*) in the management of thirst. Various physiological parameters were applied to assess the effect of drug on Thirst. *Tinospora cordifoia* is one of the most important drugs of Ayurvedic system of medicine which has been referred for the management of many diseases including symptoms of thirst. It was observed that administration of *Guduchi Kasay* in rat decreases the amount of water intake. However thirst or symptoms of thirst not considered as disease but can be considered as complications of other diseases. In this connection *Guduchi* can play an important role in diabetes and obesity. It also helps in prevention of symptoms which can arise due to the suppression of thirst. The present wok is preliminary study therefore further work is needed to explore action of drug on the symptoms of thirst in large population.

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