**Research** Artícle

# **World Journal of Pharmaceutical and Life Sciences** <u>WJPLS</u>

www.wjpls.org

SJIF Impact Factor: 6.129

## CLINICAL STUDY TO ACCESS THE EFFICACY OF HARIDRA AND CHITRAK IN MANAGEMENT OF MEDOROGA (OBESITY)

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Article Received on 08/10/2020

Article Revised on 29/10/2020

Article Accepted on 19/11/2020

## ABSTRACT

Among various metabolic disorders obesity is quite common these days, due to imbalance between energy intake and energy expenditure. Faulty lifestyle associated with other endocrine disorders lead to it. This is a grave condition leading to various complications in later stages, so there is an immense need to explore new effective medications. This clinical study was conducted on chitrak (Plumbago zeylenica) and haridra(Curcuma longa). Due to the lekhana properties as mentioned in ch.su.4, Dalhan su.su.40/50, Bhavparkash Pu.kh.6/224, they were found effective against various cardinal and associated symptoms of medhovriddhi.

KEYWORDS: Chitrak, Haridra, Lekhan, Medhovriddh.

## INTRODUCTION

Obesity is spreading almost like a pandemic in almost every part of the world. Due to the complications associated with it like hypertension, diabetes mellitus, coronary artery disease(CAD), osteoarthritis, gall bladder stones, it is receiving much attention in medical field due to increasing morbidity and mortality in our society.

There is excessive accumulation of fat in the patients effected from medoroga. Certain drugs like steroids, oral contraceptive, insulin are supposed to cause medoroga.

There are various causes mentioned medodhatu vriddhi in Ayurveda.

- -Dietary causes
- -Behavioural causes
- -Psychological causes
- -Miscellaneous causes

Charak Samhita has clearly established medovriddhi, staulya as two separate entities. Samprapti is same but medovriddhi is first stage of staulya, that is, overweight. Medovriddhi leads to staulaya which is the cause of various hazardous complications like hridroga, prameha.

Hence, there is need to explore new medicines and this clinical study was conducted in same series, choosing haridra and chitrak. Selected drugs have lekhana karma leading to emaciation, drying up,or dessication of all excess dosha, dhatu, mala having anti-obesity action.

## Aims and Objectives of The Study

- 1. To find out the relation of medovriddhi with that of age, sex, religion etc.
- 2. To do a scientific study on lekhana karma.
- 3. To explore the clear pathogenesis of medovriddhi.
- 4. To find out easily available and cheap lekhaneya drugs.
- 5. To evaluate clinically the lekhana karma of haridra and chitraka.

## Selection of Drug

The selected drugs haridra and chitrak are among the ten drugs of charak's lekhaneeya dasaimani group. Due to the ruksha, laghu and teekshana guna, ushna veerya, katu vipak, deepan and pachan properties these two are of special significance among the other members of the group.

## MATERIALS AND METHODS

30 patients with characteristic feature of medovriddhi from O.P.D and I.P.D of Jammu institute of Ayurveda and research were selected for the present study;simple random sampling technique was adopted for the selection of patients.

## **Criteria for Selection of Patients**

-Patients of medovriddhi, are selected according to B.M.I standard height weight index. Anyone weighing upto 20% more than their standard weight were considered overweight and over 20% was considered to be obese -

Routine pathological investigations were carried out to exclude any other systemic disease.

#### **Criteria of Assessment**

#Body weight as compared to height, weight chart of B.M.I standard.

#circumference of mid arm, abdominal girth, measurements of hip and chest.

#skin fold thickness or sub cutaneous fat measurements.

#clinical associated symptoms viz. snidhgatrata, swedadhikya, kshudhadhikya etc were considered.

#depending on the severity of symptoms, score was given individually to each symptom.

"O"--- ABSENCE OF SYMPTOM

"1"---MILD DEGREE OF SYMPTOM

"2"---MODERATE DEGREE

"3"---SEVERE DEGREE OF SYMPTOMS

#### **Grouping and Drug Administration Method**

The patient were selected and randomly grouped as follows-

#### Group A

Drug-chitrak powder in dose of 500 mg, four times a day, in capsule form.

## **Group B**

Drug-haridra powder in a dose of 1 gm, four times a day, in capsule form.

#### **Diet, Restriction and Exercise**

A restricted diet schedule of low calorie diet was advised to ensure effectiveness of the therapy. Some exercise viz. walking was also advised to evaluate the role of vihara in management of medovridhi.

PARAMETERS	CHITRAK				HARIDRA			
	Mean%	6 S.E	+/- t	р	Mean	1% S.	E+/-	t p
Abdomen skin fold thickness	15.82	0.29	2.88	< 0.05	17.37	0.28	3.2	< 0.05
Tricep skin fold thickness	14.79	0.19	3.62	< 0.05	32.72	0.28	3.49	9 < 0.05
Bicep skin fold thickness	21.8	0.22	4.6	< 0.01	22.72	0.4	2.48	3 < 0.05
Abdomen circumference(cms)	3.34	0.49	6.74 <	< 0.001	3.34	0.49	6.74	< 0.01
Mid arm circumference(cms)	9.94	1.24	2.5	< 0.05	9.94	1.24	2.5	< 0.05
Chest circumference(cms)	2.81	68	4.04	< 0.01	2.81	68	4.04	< 0.01
Hip circumference(cms)	3.07	0.14	2.91	< 0.05	3.07	0.14	2.91	< 0.05
Body weight	3.18	0.36	6.26 <	< 0.001	3.18	0.36	6.26	< 0.001

EFFECT	GROUP A	IMP%	<b>GROUP B</b>	IMP%	TOTAL	IMP%
Cured	0	00	0	00	0	00
Markedly improved	0	00	0	00	0	00
Moderately improved	5	71.42	3	50	8	42.10
Improved	2	28.57	3	50	9	47.37
No relief	0	00	0	00	2	10.53

Moderately improved-----10-5% reduction in weight improved------5-1% reduction in weight No relief-----no reduction in weight.

#### **RESULTS AND DISCUSSIONS**

The reduction in Biceps skin fold thickness was significant at < 0.01 level, but the reduction in tricep and abdominal skin fold was only significant at < 0.05 level. The drug was effective in reducing abdominal triceps and biceps skin fold thickness are found statistically significant at < 0.05 level.

Chitrak was highly useful in reducing the body weight of patients and also body circumferences.

It was found that maximum (71.42%) patients in chitrak group were moderately improved, whereas 50% patients improved in haridra group. Improvement was observed

in 14.28% patients of chitrak group 50% of haridra group and 66,67% of control group. None of the patients from all the groups have completely or markedly improved.

## CONCLUSION

Considering all the factors the present study could be considered a pilot study. It can be concluded that both the drugs chitrak and haridra are effective against cardinal as well as general sign and symptoms of Medovriddhi in patients. Efficacy of chitrak was found to be more than that of haridra in reducing the symptoms of Medovriddhi.

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