



Research Article

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A RANDOMIZED CONTROLLED TRIAL ON THE EFFICACY OF PANCHAGAVYA GHRITA IN THE MANAGEMENT OF OBSESSIVE COMPULSIVE DISORDER

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ABSTRACT

Ayurveda has described many a psychiatric disorders in different contexts. Unmada is an entity where there is derangement of mind, cognition, orientation, memory, desire, habits, actions and rituals, either individually or as a whole. All of the above faculties are not impaired in a single clinical entity. Obsessive compulsive disorder (OCD) can be considered due to deviation of the mental attributes like cognition, will power, memory etc. which affects the day to day life of an individual. Management of psychiatric disorders in Ayurveda includes spiritual therapy, psychotherapy and pharmacotherapy focusing on the balancing of bodily and mental humors. Here in the case of OCD, vaata is the main humor vitiated among the three basic humors and the management should be directed to pacify all the three humors, with special consideration to vaata. Snehapana is the important one among them. In the case of thought abnormalities, mental functions will be fogged up. To cleanse the channels, the drug of choice should be pungent and having the property of srotosodhana i.e. clearing the channels. The selected drug in this study, Pancagavya ghrita is an ideal drug in that sense. The aim of this study was to assess the efficacy of Pancagavya ghrita in OCD when compared with the supportive psychotherapy. The method of this study is randomized controlled trial with sample size 20; assessments were done according to Yale Brown Obsessive Compulsive Scale. There were significant changes in the trial group and the control group. But there was no statistical significance on comparison between the two groups.

Keywords: Obsessive compulsive disorder, Pancagavya ghrita, Supportive psychotherapy

INTRODUCTION

Human beings are basically promoters of perfectionism in their day to day activities. Perhaps it depends upon their social standards, religious beliefs, customs and manners and the way they are born and brought up. Such a mentality is essential for the wellbeing of a person and also of his society. But when the need of perfection exceeds the limits or become irrational, then it affects the daily activities of him as well as society, it leads to the diagnosis of diseases like obsessive compulsive disorder. Obsessive compulsive disorder is a heterogeneous and a multidimensional psychiatric disorder¹. It is characterized mainly by obsessive thoughts and/or compulsive actions. Obsessions are recurrent and intrusive thoughts, feelings and ideas or sensations. Compulsions are conscious repetitive behaviors or actions such as checking, counting, avoiding etc. The obsession leads to compulsive acts and if the person tries to resist this, it may lead to anxiety or similar episodes.

Ayurveda has described the manas and its vishayas i.e. the areas of handling in a conspicuous manner². A range of manasika rogas are explained in the classics, where there is an absolute derangement of manas (mind), budhi (cognition), samjnaa jnaana (orientation), smriti (memory), bhakti (desire), sheela (habits), cheshta (action), aacaara (rituals) etc. either individually or as a whole³. Obsessive compulsive disorder can be considered to be the deviation of the manasika bhaavas like dheer, dhriti etc. in a countable or considerable manner and to the extent that affects their day to day life. Supportive psychotherapy is an important psychological intervention widely practised and recommended in the management of OCD⁴. Pancagavya ghrita is explained by Acharya

Charaka in his samhitha, along with the management of Apasmaara⁵. It is widely used by Ayurvedic practitioners in the management of diseases with symptoms of OCD like budhi vaishmya, budhi vibhramsa etc. and is effective according to them. This study is an attempt to analyse the efficacy of Pancagavya ghrita, in the management of obsessive compulsive disorder.

Previous studies

Very few clinical studies have been conducted on OCD till date, as per the available literature. OCD being a psychiatric disorder; was studied under the umbrella term Unmada, in the Ayurvedic parlance, with the specific symptoms visible. The previous studies in OCD and pancagavya ghrita need citation here, in this regard. A previous study on OCD by M. Prasad, M.P., Eswara Sarma, 2007, had explained it as a type of Bhootonmaada or unmada due to affection with graha⁶. Another study by Fathima Yasmeen, M.P. Eswara Sarma (2009), analyzed the etiology of OCD, with special reference to prajnaaparaadha as a contributory factor⁷. Researches on Pancagavya ghrita are also to be included here. Hepatoprotective activity of Pancagavya ghrita against carbon tetrachloride induced hepatotoxicity in rats was published by G.S. Achliya *et al* in the Indian journal of pharmacology, 2003. A study on the effect of Pancagavya ghrita in schizophrenia by Anumod A Kakkassery *et al*⁸ and An open clinical trial to study the efficacy of Pancagavya ghrita on cognitive domain in Down's syndrome by Fibi Mol PP *et al* also showed significance on assessment in their area of research⁹.

Aim

To improve the quality of life of individuals affected with Obsessive compulsive disorder

Objectives

- To study Obsessive Compulsive Disorder from the Ayurvedic point of view.
- To assess the efficacy of Pancagavya ghrita in Obsessive Compulsive Disorder.
- To compare the efficacy of Pancagavya ghrita with supportive psychotherapy in Obsessive Compulsive Disorder.

Research Question

Whether Pancagavya ghrita, administered orally as 25 ml at 9 PM for 1 month in patients attending the OPD of VPSV Ayurveda College, Kottakkal, Kerala, India is effective in the management of Obsessive Compulsive Disorder when compared with the supportive psychotherapy?

Hypothesis

Null hypothesis: Pancagavya ghrita is not effective in the management of Obsessive Compulsive Disorder when compared with the supportive psychotherapy.

Alternate hypothesis: Pancagavya ghrita is effective in the management of Obsessive Compulsive Disorder, when compared with the supportive psychotherapy.

MATERIALS AND METHODS

The trial drug: Pancagavya ghrita – 40 bottles of 150 g each was purchased from a GMP certified company

Placebo capsule: of fine arrow root powder, 2400 no. of 500 mg prepared from a GMP certified company.

Study design: Randomized controlled trial (Simple random method).

Sample size: 20

Setting: Manassanthi O.P.D; V.P.S.V. Ayurveda College Hospital, Kottakkal, Kerala, India.

Diagnosis: Diagnosis according to D.S.M –IV criteria for OCD¹⁰.

Ethical committee clearance: Synopsis submitted and approved by the Research Committee and Institutional Ethics Committee on 11. 04. 2011 (Approval No: IEC/ CI 005/ 11 dated 07.04.2011).

Informed consent: was obtained from all the allocated patients

Inclusion Criteria

- Patients diagnosed as O.C.D. according to the DSM-IV criteria.
- No discrimination of sex, caste, religion and economic status.
- Age group: 20 to 60 years.

- Those willing to give a written consent

Exclusion Criteria

- Associated with co morbid major psychiatric disorders
- Major organic disorders and systemic disorders
- Patients continuing with any modern psychiatric medication
- Pregnant women or lactating mother

Group 1 (control group)

- Supportive psychotherapy
- Placebo capsule of arrow root powder 500 mg, 2 bid.

Group 2 (study group)

- Supportive psychotherapy.
- Placebo capsule of arrow root powder 500 mg, 2 bid.
- Drug: Pancagavya ghrita 25 ml at bed time.

Duration

Intervention: 1 month.

Follow up period: 1 month.

Assessment Criteria

A proforma was designed to collect and record the information verbally, in the reported subjects. Proper grading of signs and symptoms were done and assessment was carried out, according to Yale Brown Obsessive Compulsive Scale (Y-BOCS).

Frequency of assessment

- Before treatment
- After 1 month of medication
- After follow up of 1 month

Analysis

The collected data on the basis of observations was subjected to statistical analysis in terms of mean difference and standard deviation. Paired t test was carried out to evaluate the significance of the data¹¹.

Pancagavya Ghrita

Pancagavya Ghrita is a ghrita preparation explained in the management of apasmaara in Carakasamhita and Ashtanga hridaya¹². The drug is widely used by Ayurvedic practitioners for various clinical conditions, especially in the diseases of abnormalities of thinking and judgment.

Ingredients

The combination contains 5 ingredients taken in equal proportions.

1. Gosakrit (Cow dung)
2. Godadhi (Curd)
3. Goksheera (Milk)
4. Gomootra (Cow's urine)
5. Goghrita (Ghee)

Table 1: Rasa pancaka of Pancagavya

Drug	Rasa	Guna	Veerya	Vipaaka	Doshakarma
Goksheera	Madhura	Snigdha, Guru	Seeta	Madhura	Vaata, pitta samana, Kaphakara
Godadhi	Amla	Guru	Ushna	Amla	Vaatasamana, Kapha Pitta Kara
Goghrita	Madhura	Snigdha	Seeta	Madhura	Vaata pitta samana
Gomaya	Kashaaya, Tikta	Laghu, Rooksha	Seeta	Katu	Kapha, Pittahara
Gomootra	Katu, Lavana	Laghu, Ruksha, Teekshna	Ushna	Katu	Kapha, Vaata samana, Pittakara

Observations

Data related to clinical picture

30 % of the patients were in the age group 20 – 30 years, which point to the occurrence of the symptoms at a younger age. 70 % of them were male and the presentation observed was seen more in male, in the clinics. 80 % of the subjects were from rural areas. 40 % of the patients were only having secondary education. 85 % were from middle class family. 70 % of the subjects were not satisfied with their present occupation. About 80 % of them were having affection in their married life. 75 % of them were approaching a physician, whenever the condition seems disturbing. They were moving from one clinic to other, as there was no satisfactory improvement.

Precipitating factors were present in half of the patients. In this study, only 10 % of the subjects were only having a history of past psychiatric illness. History of over discipline and over hygiene was present in only 20 % of the subjects. The course of the disease was progressive in 60 %, static in 25 % and episodic in 15 % of the individuals. 70 % of the subjects were of severe form of OCD. Obsession of rituals was present in 60 %, perfection and contamination in 30 %, religious and symmetry in 10 % and somatic in 5 % of the subjects. Regarding compulsions, repeated compulsion was present in 65 % of the subjects, cleaning in 30 %, checking in 15 % and ordering and avoiding in 5 % of the subjects.

Data related to Clinical study

Table 2: Symptoms in Control group

Symptom	BT	AT	Mean difference	% of relief	SD	t	P
Time spent in obsession	2.5	2.1	0.4	16	0.51	2.5	< 0.05
Interference from obsession	2.6	2.3	0.3	11.5	0.48	1.96	>0.05
Distress from obsession	2.7	2.1	0.6	22	0.7	2.7	< 0.05
Resistance to obsession	2.3	2.1	0.2	8.6	0.42	1.5	>0.05
Control over obsession	2.5	2.2	0.3	12	0.48	1.96	>0.05
Overall effect - obsession	12.6	10.9	1.7	13.5	1.8	2.9	<0.05
Time spent in compulsion	2.4	2.0	0.4	16.6	0.51	2.5	<0.05
Interference from compulsion	2.3	2.1	0.2	8.7	0.63	1	>0.05
Distress from compulsion	2.2	1.9	0.3	13.6	0.48	1.96	>0.05
Resistance to compulsion	2.1	1.8	0.3	14	0.48	1.96	>0.05
Control over compulsion	2.3	2.0	0.3	13	0.48	1.96	>0.05
Overall effect - compulsion	11.3	9.9	1.4	12.7	1.07	4.1	<0.01

BT: Before Treatment, AT: After Treatment

Table 3: Symptoms in study group

Symptom	BT	AT	Mean diff	% of relief	SD	t	P
Time spent in obsession	2.6	2.2	0.7	25	0.82	2.5	< 0.05
Interference from obsession	2.8	2.1	0.3	11.5	0.48	2.7	<0.05
Distress from obsession	2.6	2.0	0.6	23	0.69	2.7	< 0.05
Resistance to obsession	2.4	2.0	0.4	16.6	0.69	1.8	>0.05
Control over obsession	2.5	2.1	0.4	16	0.51	2.5	<0.05
Overall effect - obsession	12.9	10.5	2.4	18.4	2.3	3.2	<0.01
Time spent in compulsion	2.4	2.1	0.3	12.5	0.48	1.96	<0.05
Interference from compulsion	2.7	2.2	0.5	18.5	0.70	2.2	<0.05
Distress from compulsion	2.6	2.4	0.2	7.7	0.63	1.0	>0.05
Resistance to compulsion	2.4	2.2	0.2	8.3	0.48	1.96	>0.05
Control over compulsion	2.4	2.1	0.3	12.5	0.48	1.96	>0.05
Overall effect - compulsion	12.5	11	1.5	12	1.9	2.4	<0.05

BT: Before Treatment, AT: After Treatment

Comparison between the groups

The overall effect on obsession after treatment was 13.5 % relief in the control group and 18.5 % relief in the trial group. Both the changes were significant. The difference between the results in the two groups was found to be insignificant. The relief in this domain after follow up was 10.8 % in the control group and 18.4 % in the trial group.

Here the trial drug had better result and could retain the effect of the therapy, when compared with the control group. This difference between the groups was not significant, statistically. The overall effect on compulsion after treatment was 21 % relief in the control group and was statistically significant as well. There was only 14 % relief in the trial group and it was significant. These

results changed into 12.7 % and 12 % respectively in the two groups after follow up and both the changes were significant. The result obtained on compulsion after follow up was less in the trial group, but it was retained in the follow up period when compared to the control group. Both the groups were significant clinically, but the difference was not significant statistically.

DISCUSSION

Ayurveda and OCD

Detailed description on manas has been described on the light of Ancient Indian philosophies like Saankhya and Vaiseshika¹³. Life is the combination of sareera, indriya, manas and atma. Manas is essential for the perception to occur. The presence and absence of jnaana is explained as the lakshana of manas¹⁴. Manas at its normalcy is utmost, for any type of knowledge to perceive as such in an individual. The discrimination power of mind is well explained by Charaka¹⁵. The perceptions received by the indriyas are analyzed by the manas for its positive and negative side and the actions are based on these. These functions are attributed to the vishayas of manas. Chintya is that by which manas analyses a thing, whether it is to be done or not. Vicharya is the discrimination of its good or bad consequences. Sankalpa is the discriminative knowledge of guna or dosha. Other entities perceived by the mind includes sukha, dukha etc¹⁶.

It is often difficult to divert the manas from undesirable objects without endurance. In condition like OCD, there is deviation of manas from its functions such as dheer, dhriti, smriti etc. to various extents. OCD comprises a wide range of presentations that represent various psychological domains such as perception, cognition, emotion and various other motor behaviors. This happens due to the derangement of manas and its functions. The tridoshas i.e. Vatha, pitta kapha and the doshas of the manas i.e. rajas and thamas is the causative factor for this derangement¹⁷.

The disease happens more in individuals with the heena or alpa bala of satva. Any unwholesome act, physical, mental or verbal termed as prajnaparadha becomes cause in this regard¹⁸. The resulting misinterpretation by the budhi will cause alteration in the proper understanding of observation whether, they are suitable or not. Following the vibramsa of budhi, one is not aware of his activities and its outcome and also he may repeat the same and the normal activities get impaired. By the derangement of manas, the chinta or faculty of thinking is affected. This may lead to irrational and intrusive obsessive thoughts. Vaatha dosha is also deranged resulting in the alteration of the functions of the manas¹⁹. Along with this, the person may not be able to discriminate nitya or anitya and hita or ahita. This situation will take him to an anxiety condition by which he will be presenting with the symptoms of obsession and compulsion. Among the faculties contributing to unmada, smriti (recollection), bhakti (desire), Sheela (habits), Chesta (activities) and

achara (rituals) gets affected in a person affected with OCD.

Management

This includes the three components of chikitsa such as yukti vyapasraya, daiva vyapasraya and satvavachaya chikitsa²⁰. In the first entity, oushada, ahara, vihara are properly administered as per the assessed dosha status of the condition. Here we can either go for the sodhana chikitsa or samana chikitsa. In this particular study, Panchgavya gritha with the properties of pacifying the manodoshas as well as the sareerika doshas impart clarity to the srotas of the mind as well as the indriyas have been selected by the trial drug. In satvavachaya chikitsa, manas is controlled from its vishayas which are not hita and are indulged in its arthas which are hita to the mind²¹. It can be executed with the proper practice of jnana, vijñana, dheer, dhairya and Samadhi. The selected technique in this study such as supportive psychotherapy is having its own role in this direction.

Overall effect of the Therapy

Probable mode of action of panchagavya gritha

The drug Panchagavya ghrita has Tridosha samana property and is predominantly vaata samana. It is also enhancing agni and provides clarity to srotuses²². Some of its ingredients have Anulomana property which is also have an action on vaata. The drug as a whole is Medhya, enhances Ojas and is Rasayana. Considering all these properties, the drug acts on mind and its faculties. The abnormalities like obsessions are greatly vaata predominant and it is cured by the vaata samana action of the drug. The srotosodhana action of the drug helps to act deeply on the mind destructing the aavarana of tamas and provides clarity to the mind. This property also seems working in the management of conditions like apasmara, where the drug is originally mentioned in classics. Ghrita is also having properties of potentiating dheer, dhriti and smriti, which is the one that gets deranged in clinical conditions like OCD^{23,24}.

CONCLUSION

Considering the overall result in obsession and compulsion, there is significant change in the trial group. There is also significant change in the control group, even though not at the level as for the study group. The effects attained by the trial group are better maintained in the follow up period when compared with the other. This shows the efficacy of panchagavya ghrita in the management of OCD. But when statistically compared, the difference, in both the groups were not statistically significant. Also the non pharmacological intervention can also be improved using latest methods like cognitive behaviour therapy and exposure and response prevention therapy. In brief, Ayurveda can contribute a lot to the management of conditions like OCD and to improve the quality of life.

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