



To Study The Clinical Efficacy Of *Panchgavya Ghrita* Along With Psychotherapy In *Atatvabhinivesh* W.S.R To Obsessive Compulsive Disorder.

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Abstract

In India, the cow is worshipped as a god called '*Gaumata*,' indicating its nourishing nature like a mother and *Panchgavya* can also give back to mother nature by promoting soil fertility, earthworm production, protecting crops from bacterial and fungal infections and is also recommended for a variety of diseases viz., asthma, flu, allergies, cardiovascular diseases, renal disorders, rheumatoid arthritis, leucoderma, wound healing, leucorrhoea, hepatitis, dietary and gastrointestinal tract disorders, obesity, tuberculosis, ulcer, chemical intoxication, other bacterial, fungal and viral infections etc. Panchagavya represents milk, urine, dung, ghee, and curd, which is also an ancient traditional medicine in India. There are many research's on Panchagavya as a single or with multiple herbs or combined with herbal drugs. This review is about the human usage of Panchagavya or '*Panchagavyachikitsa*' or '*Cowpathy*'. Panchagavya like milk and curd are rich in nutrition, amino acids, proteins, vitamins, minerals, and hormones. cow urine is recommended for a variety of diseases viz. allergies, cardiovascular diseases, renal disorders, rheumatoid arthritis etc. Similarly Cow dung has demonstrated that it can kill the malarial parasite and Mycobacterium tuberculosis. The anti-fungal activity can be observed against *Corprophilous fungi*. Smoke liberated on burning of cow dung causes eye irritation and tears, which can help vision enhancement. Ayurveda also supports the co-administration of ghee along with other remedial treatments. Ghee-based formulations, i.e., *Ghrita*, are developed for targeted delivery and enhanced bioavailability of hydrophobic botanicals. For example, *Brahmi ghrita* for cognitive function, *Vasa ghrita* for the respiratory problem. These products are known to cure several human diseases and enhance immune power and also good for animals, which provides rich nutrition and helps to boost the immune system. This paper shows the Scope of Panchagavya in Therapeutics and Pharmaceutics.

Keywords: Panchagavya, Ghrita, Panchgavyachikitsa, Antibacterial.

Introduction

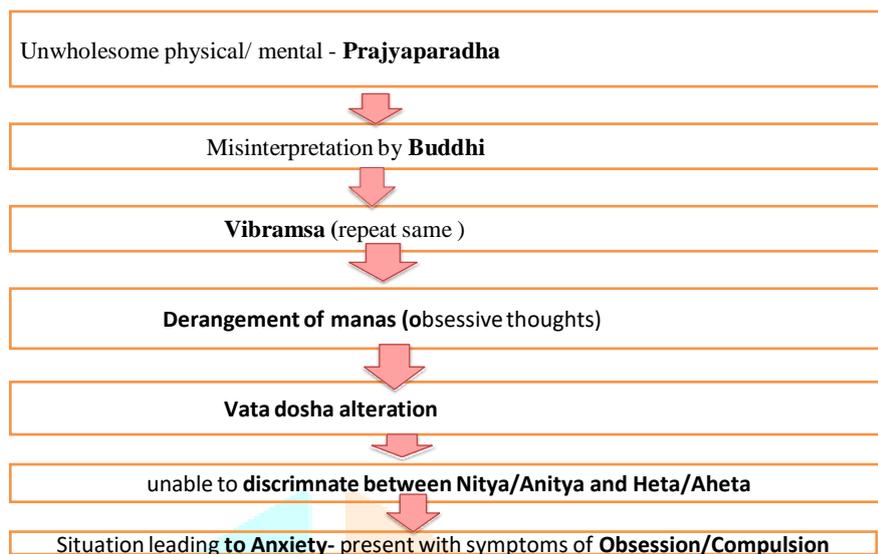
In India, the cow is worshipped as a god called '*Gaumata*,' or '*Kamadhenu*' (believed to accomplish desired things) indicating its nourishing nature like a mother and *Panchgavya* represents milk, urine, dung, ghee, and curd which is also an ancient traditional medicine in India, which in itself is a treasure of health benefits and medicinal properties. The Ayurvedic system of medicine too has described the significance of using cow milk, ghee, urine, dung, and curd, each of which is termed '*gavya*' (i.e., obtained from '*Gau*' means cow) for the treatment of various diseases. Each '*gavya*' can be used as a single therapy or in combination with other products or with other treatments^(1,2). *Panchgavya* therapy has also demonstrated its therapeutic potential against severe pathological conditions like cancer, AIDS, and diabetes^(3,4). The present review focuses on the composition of each *Panchgavya* product and its health benefits and medicinal properties based on available scientific evidence^(5,6). Cow curd is *Atisheeta* (v.coolant), *Deepana* (improves digestion), *Balavardhana* (improves strength and immunity), *Vataghna* (useful in neurological conditions like paralysis, neuropathy etc), *Madhura* (sweet), *Snigdha* (unctuous). Hence it is useful in *Arochaka* (Anorexia),

Peenasa (Rhinitis), *Mutrakricha* (Dysuria), *Sheetajwara* (Fever) and *Vishamjwara* (Recurrent fever).

तत्रापि च अतत शीतं च अतत बल वर्न्म व् वात घनम मर्ुरम रूक्ष-----!!⁷ (Ayurveda mahodhadhi by sushena(14th century) /38-41)

Curd also called 'yogurt' or "Dahi", is consumed worldwide due to its high nutritional value and health benefits.. Curd is a rich source of probiotics (beneficial living micro-organisms) that exert various beneficial effects upon oral administration. Lactic acid-producing bacteria also include proteinous compounds in nature and a 3-hydroxylated fatty acid ⁸. Curd contains several nutrients and micronutrients, including water, proteins, vitamins like A, B, D, and E; minerals like calcium, phosphorous, magnesium, zinc, etc. Probiotics present in curd help in strengthening the immune system and digestive system, whereas various minerals, vitamins, and proteins in curd help fight against multiple pathogens, including HIV⁹. Curd also acts as a blood purifier¹⁰ and helps in lowering the total cholesterol, and low-density lipoproteins, thus, preventing the risk of obesity ¹¹, anti-fungal effect for treating dandruff from hair, and treating piles ¹². Curd should be taken with green gram or moong for *Vata Prakruti*, sugar for *Pitta Prakruti*, and cumin powder for *Kapha Prakruti* individuals. Curd consumption with all the recommended precautions prescribed by Ayurveda may significantly benefit health¹³. Cow dung is rich in several beneficial microbes like *Saccharomyces*, *Lactobacillus*, *Bacillus*, *Streptococcus*, *Candida*, etc. It also contains various nutritional components, including minerals, vitamins, potassium, nitrogen, oxygen, carbon, cellulose, hemicellulose, mucus, lignin. Cow dung is used to degrade waste generated from the city and hospitals due to the abundance of different micro-organisms beneficial for waste degradation ¹⁴. In rural areas of India, a dried cow dung cake is entirely environment- friendly¹⁵, and ensures air purification by killing the microbes in the surrounding air. . Cow dung helps increase the population of earthworms, showing an enhancement in the nitrification process ¹⁶. The use of cow dung can restrict the development of such fungal issues due to *Fusariumoxysporum*, *Fusariumsolani*, and *Sclerotinasclerotiorum* ¹⁷. Cow dung serves as the best replacement for these chemicals and ensures human and animal health ^(18,19,20).. The anti-fungal activity can be observed against *Corprophilous fungi* [20,21]. Smoke liberated on burning of cow dung causes eye irritation and tears, which can help vision enhancement ²¹. Cow ghee is prepared by heating the butter obtained from cow milk, and heating must be continued at high temperature until the moisture is completely lost ²². Ghee consumption could increase the risk of dyslipidemia and cause cardiovascular diseases. Such beliefs were responsible for the widespread avoidance of ghee in India ²³. Even though Ayurveda has given enormous benefits of consuming ghee, various scientific studies were conducted, and ghee's health benefits were re-established^{24,25}. Cow Milk is used for its health-protecting, health- promoting, and wide range of therapeutic effects²⁹. Cows' milk is a nutrient-dense food consisting of varying amounts of carbohydrate, fat, and protein. The major constituents of cows' milk are water (87.4%) and milk solids (12.6%), which includes vitamins, minerals, carbohydrate, fat, and protein. Cows' milk is known to contain many nutrients, including varying concentrations of fat and water-soluble vitamins, minerals, trace elements, and salts. The principal carbohydrate in milk is lactose. Great variability of the human IgE response to cows' milk exists. Cow urine is *Kriminut* (useful in intestinal worm infestation), *Kushtanut*(useful in skin disorders), *Kandu Shaman*(Itching), *Udara*(Ascites). As per *Acharya Charaka Sutra Sthana* chapter 1, almost all urines are hot, piercing,not completely dry, pungent, salty, useful in *Utsadana* and *Alepana*(ext application), *Virechana* etc . In diseases like edema, inflammation disorders due to *Kapha Dosha* aggravation, cow urine is administered along with *Haritki*(terminilia chebula) as per *Charak Chikitsa Sthana* 12th chapter. Besides this, cow urine also contains various enzymes to improve the digestive system and build a robust immune system. Vitamins including A, B, C, D, and E are also present in cow urine. In *Ayurveda*, OCD is defined as deviation of *Manas* from its functions like *Dhee*, *Dhriti*, *Smriti* etc to various extends like Perception, Cognition etc. This type of problem is mostly seen in *Satva* or *Heen Bala Purasha*.

Ayurveda and OCD



Shodana & Shamana chikitsa is mentioned in case of *Atatvabhinivesha*. In this research work, we have seen how *Panchgavya Ghrita* helped in imparting clarity to *Mana* and *Indriya* and *Satvavachaya chikitsa* helps to control it from its *Vishayas* that in turn are *Ahitkar* to the mind.

Objective:-

1. To Study Ayurvedic aspect of *Atatvabhinivesha*
2. Assess the efficacy of *Panchgavya Ghrita* in OCD.
3. To compare efficacy of *Panchgavya Ghrita* with supportive psychotherapy in OCD.

Materials and Methods :-

Drug:- *Panchgavya Ghrita* (*Ghrita* Preparation explained in the management of *Apasmara* in *Charak Samhita* and *Ashtang Hridaya*).

Dose:- 20 ml HS

Ingredients:- The combination contains 5 ingredients in equal quantity:-

1. *Gosakrit*(Cow Dung)
2. *Godadhi*(Curd)
3. *Goksheera*(Milk)
4. *Gomootra*(Cow urine)
5. *Goghrita*(Ghee)

Drug	Rasa	Guna	Veerya	Vipaka	Doshkarma
Cow milk	Madhura	Guru,snigdha	Sheeta	Madhura	Vatapittashamak, kaphkara
Cow curd	Amla	Guru	Ushna	Amla	Vatashamana, kaphapittakara
Cow ghrita	Madhura	Snigdha	Sheeta	Madhura	Vatapitta shamana
Cow dung	Kashaaya,Tikta	Laghu,Rooksha	Sheeta	Katu	kaphapittahara
Cow urine	Katu, Lavana	Laghu,rooksha, Teekshana	Ushna	Katu	Kaphavatasham ana,Pittakara

Study design- Simple random method, Paired “t” test.

Sample size- 36 (from the opd of kayachikitsa dac Punjab, from which six left the treatment in between)

Diagnosis- as per D.S.M – IV Criteria for OCD (Diagnostic and statistical manual of mental disorders) .

Inclusion criteria:-

- 1) Diagnosed as O.C.D According to DSM-IV Criteria.
- 2) Age group 20-60 yrs.

Exclusion criteria

1. Cardiac disorders like CAD, Dyslipidemia etc.
2. Major systemic disorders.
3. Patients on any allopathic psychiatric medication.
4. Pregnancy
5. Diabetes or any malignancy

Group-1

1. Supportive Psychotherapy along with Water as placebo

Group- 2

1. Supportive Psychotherapy
2. Panchgvaya Ghrita 25 ml HS

Follow up:- 30 days

Observations:-

1.	20-30 yrs age group	30%
2.	Males	75%
3.	Middle class	90%-
4.	Professional stress related to their workplace	70%
5.	Past psychiatric illness	5%
6.	Ritual related obsession	60%
7.	Religious	10%
8.	Somatic	5%
9.	Repeated compulsions	65%
10.	Avoiding	5%

Control Group Symptoms:-

Symptoms	BT	AT	Mean difference	% Relief	SD	T	P
Time spent in obsession(O)	2.4	2.0	0.3	16	0.5	2.4	<0.05
Interference(O)	2.5	2.2	0.2	11.4	0.4	1.9	>0.05
Distress(O)	2.6	2.0	0.5	21.8	0.6	2.6	<0.05
Resistance(O)	2.2	2.0	0.2	8.5	0.4	1.5	>0.05
Control over(O)	2.4	2.1	0.2	12	0.4	1.9	>0.05
Overall effect(O)	12.5	10.8	1.6	13.4	1.7	2.9	<0.05
Time spent in compulsion (C)	2.3	2.0	0.4	16.5	0.5	2.5	<0.05
Interference(C)	2.2	1.9	0.2	8.6	0.6	1	>0.05
Distress(C)	2.2	1.8	0.3	13.5	0.39	1.89	>0.05
Resistance(C)	2.1	1.7	0.3	13.8	0.4	1.9	>0.05
Control over(C)	2.3	2.0	0.3	12.9	0.4	1.9	>0.05
Overall effect(C)	11.3	9.8	1.4	12.7	1.03	4.1	<0.01

STUDY GROUP STUDY (Symptom Wise)

Symptoms	BT	AT	Mean difference	% Relief	SD	t	P
Time spent in obsession(O)	2.5	2.1	0.6	24.9	0.8	2.4	<0.05
Interference(O)	2.7	2.0	0.2	11.4	0.4	2.6	<0.05
Distress(O)	2.5	1.9	0.5	22.9	0.6	2.6	<0.05
Resistance(O)	2.4	1.9	0.3	16.5	0.6	1.7	>0.05
Control over(O)	2.4	2.0	0.3	15.9	0.5	2.4	<0.05
Overall effect(O)	12.8	10.4	2.3	18.3	2.2	3.1	<0.01
Time spent in compulsion (C)	2.3	2.0	0.2	12.5	0.4	1.95	<0.05
Interference(C)	2.7	2.2	0.4	18.5	0.7	1	<0.05
Distress(C)	2.6	2.4	0.2	7.7	0.6	1.89	>0.05
Resistance(C)	2.4	2.2	0.2	8.3	0.4	1.9	>0.05
Control over(C)	2.4	2.1	0.3	12.5	0.4	1.9	>0.05
Overall effect(C)	12.5	11.0	1.5	12.0	1.8	2.4	<0.05

Results:-

1. *Phanchgvaya Ghrita* + Psychotherapy is more effective than *Phanchgvaya Ghrita*.
2. Effect of *Panchgvaya Ghrita* on obsession and compulsion is observed as

Effect on obsession	Effect on compulsion
Overall effect(on obsession) after treatment = 13.4 % (in control group) and 18.3%(in trial group) , but the difference is insignificant.	Overall effect(on compulsion) after treatment = 20.89 % (control group) and 13.9%(trial group), but the difference is Statistically significant
After follow up= 10.7%(control group) &18.3% (study group)	After follow up= 12.56%(control group)& 11.8% (study group)
Trial drug has thus good result , as it retained effect of therapy, although difference b/w the groups was not significant statistically	Trial drug has less results as retainedeffect of therapy was seen in rituals

Discussion:-

Phanchgvaya Ghrita + Psychotherapy is more effective than *Phanchgvaya Ghrita*. Effect of *Panchgvaya Ghrita* on obsession and compulsion when compared we find *Panchagavya Ghrita* is *Tridosha shamak* with *Vata Dosha Dominancy*, which makes it very good for obsession. Besides this, it also helps to Enhance *Agni* . Being *Anulomak* in nature, it thus clears *Srotas*, specially *Tama/Raja Aavrana* which gives mind much more clarity.. *Panchgvaya Ghrita* is *Medhya* in nature and also Enhances *Ojas* .It acts as a very good *Rasayana*. In short,overall qualities of it ,will help in potentiating deranged *Dhee, Dhriti and Smriti*.

Conclusion:-

From the above, it is clear that there is Significant change in study group even after follow up, that shows efficacy of *Panchgavya Ghrita* along with psychotherapy in OCD Management. Besides it, cognitive behaviour therapy /prevention therapy should be an add on feature in order to improve the quality of life. Above study, Shows Therapeutic and pharmacological potential against various human ailments. Hence *Panchgavya* effects must not be limited only to ancient classics, instead Scientific efforts should be encouraged to validate biological activities, safety and the mechanism of action of the active components

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