Case Report

Management of Obsessive Compulsive Disorder (OSD) Through Ayurveda

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Abstract

Introduction: Obsessive compulsive disorder (OCD) is a co-morbid condition of psychiatric disorders such as anxiety and depression. It is characterized by obsessions of contamination, followed by washing or accompanied by compulsive avoidance of the presumably contaminated object or Obsession of doubt, followed by a Compulsion of Checking and intrusive obsession of thoughts without a compulsion. There is a vast array of Ayurveda which can potentially add value in management of such type *Manas Vikara*. OCD can be compared to *Atattvabhinevesh* and various types of *Unmada* as described in Ayurveda texts. *Panchakarama* treatment is great boon to Ayurveda. By collaborative use of *Vamana*, *Shamana* treatment and *Sattvavajaya Chikitsa* showed encouraging results in case study of OCD. **Aim**: To study efficacy of *Panchkarma* treatment in the management of OCD.

Material and method: 26 years old female patient with history of recurrent washing and cleaning her hands, unexplained fear, insomnia and depression attended the OPD. *Vamana* with *Madanphala* decoction was administered, prior to that oleation with Cow ghee was given. After following diet regime, palliative treatment started with *Shirodhara* and *Nasya* treatment, Spiritual therapy like *Omkar* recitation by using basic principles to break pathophysiology of OCD.

Observation and result: The patient got relief in unexplained fear with appreciable recovery in Insomnia, decreased habit of recurrent washing hands and Depression.

Conclusion: Conservative management with Ayurveda principle provides significant relief in unexplained fear and anxiety, feeling of apprehension and fear, Insomnia, worry and. Feeling of uncertainty, anorexia, weight loss and improvement in quality of life of patient.

Keywords: Obsessive compulsive disorder, Anxiety disorders, *Atattvabhinevesh*, *Shodhana*, *Shamana*, *Satvavajaya Chikitsa*

Introduction:

Obsessive Compulsive Disorder (OCD) has two domains i.e. obsession (persistent thoughts) and Compulsion (seemingly purposeful behaviors) [1]. Such obsessions are usually repetitious thoughts of some sexual or aggressive act with need for symmetry or precision, which may leads to a Compulsion of Slowness.

OCD is a multi dimensional and etiologically heterogeneous condition. It occurs due to over interpretation of unwanted thoughts. OCD is influenced by motor activities [2]. The obsessions and/or compulsions cause marked distress, are time consuming, and interfere with a person's normal function.

The worldwide prevalence of obsessive compulsive disorder (OCD) is approximately 2% of the general population [3]. The World Health Organization has estimated that OCD is among the top 20 causes



of Illness related disability for people between the ages of 15 and 44. It usually begins in adolescence or in early adulthood [4].

OCD is one of the psychological problems which are rarely diagnosed because of the poor insight about the disease and due to strong social stigma attached with mental problem. Today a number of approaches work on this field both in physiological and psychological way but no one is certain about the root cause of disorder because many factors play a significant role on a person individually or collectively, Despite years of research, there is no single unifying theory to explain anxiety. In contemporary science it is generally treated by employing medication i.e. pharmacological management (antidepressant drugsselective serotonin-reuptake inhibitors (such as Clomipramine and Fluoxetine)[5]. and psychotherapy(behavioral modification in the form of exposure and response prevention). Among them only potent serotonin reuptake inhibitors (SSRIs) are effective in some patients of obsessive-compulsive disorder which indicates that serotonin dysfunction is the underlying cause in OCD [6]. But only 30-40% patients felt symptomatic relief [7]. And some may come multiple side effects or very high (approximately 90 percent) relapse rate of symptoms after stopping of medicines[8]. Though, OCD is anxiety disorders, anti-anxiety treatment remains in

effective. There is evidence that consumers are increasingly seeking treatment by Complementary and Alternative Medicine [9] which refers to modalities that differ from allopathy.

Ayurveda (Indian system of traditional medicine) embraces aspects of well-being of living creatures, physical, mental and spiritual health. It systematizes and applies the knowledge to restore this health and to cure disease through means of *Shodhana* (Purification) and *Shamana* treatment. *Manasikarogas* are explained in the classics, where there is function of *Manas* (mind) deranged, including *Dhee* (improving intellegence) *Budhhi* (cognition), and *Smriti* (memory). *Vayu* is the controller of the *Mana*. OCD is such disorder which can disturb all of these in considerable manner.

In Ayurveda classical texts, there is no direct or exact correlation of OCD in Ayurveda contexts. However, some references are present which mimic with the symptoms of OCD. One among them is *Atattvabhinivesha* where in the person sees predominantly the unreal as real and vice versa as

well as the unwholesome as wholesome and vice versa. This disease is said to be *Mahagada* which states the severity of the disease [10].

Ayurveda believes in treating patients to restore balance rather than treat symptoms or medical conditions. Comprehensive therapy including *Panchakarma* therapy, *Yoga-Nidra*, *Pranayama*, *Gayatri mantra* and herbal medicines are generally advised as holistic psychotherapeutic approach in Ayurveda because the researcher uses these techniques for the psychological benefit of patients. In present paper, a case study of OCD with the symptoms of obsessions of contamination associated with mild depression is discussed which was successfully treated with selective comprehensive Ayurveda therapy for about 3 months to resolve symptoms of disease effectively in short period of intervention.

Aim & Objectives: Explication of role of *Shodhana* & *Shamana* treatment in management of obsessive compulsive disorder

Case history:

Table No. 1- Demographic detail of the patient

Name	:- A.B.C.	Occupation	:- Software Engineer
Sex	:-Female	Marital status	:- Unmarried
Age	:- 28 Years	Education	:- B.E.(I.T.)
Address	:-Amaravati	Socio economic s	tatus :-Upper Middle Class
Phone no.	:- *****2060	O.P.D. No.	:- 1708040044

History of present illness:

An unmarried female patient aged about 28 yrs with middle socioeconomic status background, who is soft ware engineer approached to Panchkarma OPD of Mahatma Gandhi Ayurveda Medical College Hospital and Research Centre, Salod (H), Wardha (MH), before 4 months with the persisting complaints unexplained fear and anxiety, feeling of apprehension and fear (which accompany physical symptoms such as increased heart rate, sweating and tension), Insomnia, fear, worry and a feeling of uncertainty; feeling of something is wrong continuously, not being sure that a task is done properly, fine tremors in the hands and reduced strength, Anorexia, weight loss, severe insomnia, filling of loneliness, depressed mood, lack of interest, extreme slowness in every activity; since 4 months.

She was apparently normal before 4 months. Gradually she developed habit of recurrent washing and cleaning hands and having unexplained fear and anxiety, feeling of apprehension. She used to spend approximately 2-3 hours in total in a day on washing and cleaning the hands. The obsessions as well as the compulsions were causing her little distress as there was much resistance and control over the obsessions and compulsions. Because of the shyness of her behavior she was feeling difficult in mingling with the people and was keeping herself alone at her home and lacked interest in any activities. Along with these she also had the symptoms like worthlessness, hopelessness, reduced enthusiasm, reduced interest in day to day activities, getting irritated very easily even for silly aspects. After her examination following findings were noted.

Table No. 2- History of the patient

	K/c/o allergic bronchitis and rhinitis &PCOD		
Past medical history	No H/o significant surgical illness		
	Weight loss since 2-3 months		
	Diet : Pure vegetarian, No addiction		
	Menstrual history: Menses regular but interval of 2 months with		
Personal history	dysmennorrohoea		
	Sleep:Disturbed but not >1 hour at night		
	Occupation: Job seeker		
Drug History	Intake of Analgesic frequently (Tab Akpar SOS)		
	Father-K/c/o/IHD &Dyslipidaemia		
Family history	Mother:H/o/Gastric ulcer		
	Siblings :Normal		

Table No. 3- Chief complaints of the patient

SN	Complaints	Duration
1	Recurrent washing and cleaning her hands	
2	Unexplained fear and anxiety	
3	Feeling of apprehension and fear (which accompanied physical symptoms	
	such as increased heart rate, sweating and tension.	
4	Insomnia	since 4 months
5	fear, worry and a feeling of uncertainty;	
6	feeling of something is wrong continuously	
7	not being sure that a task is done properly	
8	Anorexia	
9	weight loss	

On examination: Systemic examinations of Respiratory system, Cardiovascular and Central nervous systems observed no significant abnormality.

Table No. 4: Ashtavidha Pariksha

1	Nadi (Pulse)	84/min	5	Shabda (Speech)	Spashta (Clear)
2	Mala (Stool)	satisfactory (Regular)	6	Sparsha (Touch)	Ushna (Normal)
3	Mutra (Urine)	4-5/day, 2-3time/night)	7	Druka (Vision)	Good
4	Jivha (Tongue)	Nirama	8	Akruti (Posture)	Madhyama

Investigations: Hematological investigations were within normal levels.

Diagnosis:

The diagnosis was made as per diagnostic criteria for OCD. Obsessive Compulsive Disorder (obsession of contamination) along with mild depression (Attatvabhinevesh/bhutnomada/Nijonmada).

Intervention:

The main line of treatment in OCD as in Ayurveda is spiritual therapy (*Daiva vyapashraya*

/Sattvavajaya) along with Yukti vyapashraya treatment. If the OCD patient shows Doshaja symptoms Bhutonmada with Nija Unmada, then in this case Yukti vyapashraya treatment is important [11]. So, management was directed to balance all three Doshas. Kapha is also predominant in this case so with special focus on evacuation of Kapha Dosha and then pacification of Vata. So, Yukti Vyapashraya treatment was adopted here which is composed of Shodhana (Vamana) as well as Shamana (Palliative).

Table No. 5: Details of the purification treatment

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	Shod hana		Drug	Anupana	Duration			
	Chi kits a		J	-				
1	Vamana	Dipana Pachana	Trikatu choorna	Luke warm	3 days			
			3gms BID before	water				
			each meal					
		Arohi Snehapana	Plain cow ghee	Luke warm	Consecutive 7			
				water	$days(4^{th}-10^{th} day)$			
	Bahya Snehana		Sahachara Oil	-	11 th -13 th day			
		and Dashmool	+Ksheerbala Oil					
		Qwath Nadi						
		Swedana						
		Vamana	Yastimadhu Phant	Luke warm	On 14 th day			
			+ Saindhava Jala	water				
		Sansarjana Karma	Peayadi krama	-	7 days			
	Bahya Chikitsa	Drugs	Duration					
1	Karna Poorana	Bilvadi taila	For 7 days					
2	Shirodhara	Bramhi oil +						
		sesame oil						

Table No. 6: Details of the internal medication

	Internal medication	Dose	Duration	Anupana	Time of administration
1	Tab Sumenta	250 mg 2tab BD BID	2 Months	Luke warm water	After each meal
2	Panchgavya ghrita	10 gm BID	2 Months	With lukewarm water	1 hour before each food
3	Saraswatarishta	15 ml	2 Months	With 15 ml lukewarm milk	After each meal

Spiritual therapy

Apart from the oral medication, Meditation such as *Omkar* recitation with *Anuloma* and *Viloma* & *Bhramari Pranayam* were advised to do regularly for half hour (each for 10 min) early in the morning.

Follow up-

During the 1st assessment after 21 days there was mild improvement seen. After one and half month, the time spent on obsessions and compulsions was reduced from 2-3hrs/day to 0-1hr/day. Interference to daily activities was reduced from moderate to mild and control over obsession and compulsions were also improved. After 3 months of treatment complete reduction in the symptoms of OCD was seen. Even the mild depression symptoms were also reduced markedly.

Observation & Result:

As patient restored physical & mental balance, she reported freedom from symptoms of anxiety after completion of whole treatment. The present case study revealed that, rational use of basic principle of *Shodhana* and *Shamana* treatment reduced stress, attenuated anxiety, negated depression, enhanced adjustment and attention in patient without any side effects.

The scores of each criterion of obsession (table no.8) and compulsion (table no.9) before the treatment and day wise assessment during the therapy as mentioned below.

Assessment

Therapeutic response is assessed on the basis of the following parameters

Table No. 7: Clinical assessment of the symptoms

			Before	After Shodhana	After one and	After 3
SN	Symptoms					
	_		Shodhana	(After 21 days)	half month	months
1	Unexplained fe		100%	75%	25%	0
2	feeling of appro	ehension and fear	100%	75%	25%	0
3	Insomnia		100%	75%	50%	0
4	fear, worry and a feeling of uncertainty		100%	75%	50%	0
5	feeling of something is wrong continuously		100%	75%	25%	25%
6	not being sure to	that a task is	100%	75%	25%	25%
7	Anorexia		100%	50%	25%	0
8	weight loss		100%	50%	0	0
	Duration			Improvement		
After	21 days	Mild improveme	ent seen in symp	toms		
After 45 days 1hr/day Interference to day			aily activities wa	l compulsions was r as reduced from mod were also improved	lerate to mild and	-
After the 90 Days Complete reduction in the symptoms of OCD was seen						

Psychological assessment

Overall effect of therapy was assessed by Yale Brown Obsessive Compulsive Scale rating (Y-BOCS) [12]. It is a 5 point scale which is an indicative of degree of severity of obsessions and compulsions before and

after treatment. Before treatment this score was 82.50% which was decreased after treatment up to 20% which was great achievement.

Table No. 8: Effect of therapy on Obsessions [Yale Brown Obsessive Compulsive Scale rating (Y-BOCS)]

Time gnant on obsession	Before	After Shodhana	After one and half	After 3
Time spent on obsession	Shodhana	(After 21 days)	month	months
Interference from obsession	50%	25%	25%	0
Distress from obsession	50%	25%	0	0
Resistance to obsession	25%	25%	0	0
Control over obsession	25%	25%	0	0

Table No. 9: Effect of Therapy on Compulsions

Cymntoms	Before	After Shodhana	After one and	After 3
Symptoms	Shodhana	(After 21 days)	half month	months
Time spent on compulsion	50%	25%	0	0
Interference from compulsion	50%	25%	0	0
Distress from compulsion	50%	25%	0	0
Resistance to compulsion	25%	25%	0	0
Control over compulsion	50%	25%	0	0

Discussion:

As OCD is psychological and anxiety related disorder where body and mind role is very important. According to Ayurveda patho physiology, obsessions and repetitive compulsive acts are believed to be due to a disturbed or increased *Vata Dosha*. In this subject, as the *Kapha Dosha* was also involved *Vata Kaphahara* regimes with same medicines were administered with the better expectation of the results. Patient was treated with *Panchakarma* (therapeutic cleansing process-*Vamana*) and subtle therapies such as *Shirodhara*, *Karnapoorana Shamana* medicines, Spiritual therapy.

Shodhana

Vamana

Vamana (therapeutic emesis) is the procedure of eliminating Kapha Dosha from the body through the upper passages by vomiting. Vamana eradicates Tridosha in general and particularly Kapha Dosha[13]. Vata controls and regulates Mana[14] optimum psychosomatic state is responsible for proper sleep pattern and its physiology. Samshodhana has its beneficial psychosomatic effect therefore, it can be said that Vamana would be an excellent treatment in depressive illness being predominantly a Kaphaja disorder. Vamana eradicates Vata due to its quality of pacification of Tridosha. Lack of confidence and unexplained fear are very much related to mental status; it is the feature of *Hina Satva*. In this case study, impaired concentration and forgetfulness has thereby shown significant improvement, it may be due to improvement of mental functioning by Vamana[15]. Loss of appetite, disturbed sleep, lack of interest in activities is also due to excess of Kapha. All of these symptoms occur in OCD. All of these were reduced due to Kapha pacification property of *Vamana*.

Adaptogenic property due to its *Strotovisdhodhana* and Rasayana properties, so enables the organism to counteract and adapt to various stressors that can adversely affect the physiological system [16, 17].

Shirodhara

Dhāra (pouring of medicinal liquid in a particular fashion) is very effective in inducing tranquilizing effect and help and reduce neuropsychological problems specially anxiety neurosis, induces sleep and thus it decreases irritability (Anvasthitcittata)[18]. This procedure stimulates pituitary glands and gives relaxed expression of awareness which results in dynamic psychosomatic balance. According to this study, the gentle pressure of the oil pouring on the forehead may also play a role in stimulating rest. In the procedure of Shirodhara, different pressure and vibration are created over the forehead. The vibration is magnified by the hollow sinus present in the frontal bone. The vibration is then transferred inwards through the liquid medium of Cerebro-spinal fluid (CSF). This vibration along with less temperature may trigger the functions of the thalamus and the basal forebrain, which then carries the amount of serotonin and catecholamine to the normal stage stimulates the sleep. Stress, according to Ayurveda, is a state of unbalance of *Prana Vayu*, Sadhaka Pitta, and Tarpaka Kapha. Shirodhara regenerates the functional integrity between these three *Doshic* subtypes and thus helps to relieve stress. Bramhi oil has antianxietic & antidepressant effect as well as it reduces mental fatigue and improves memory [19] Singh (1980) studied the effect of Brahmi on anxiety neurosis. This process stimulates third eye or pituitary gland which awakens your intuitive knowledge. Brahmi significantly improved concentration ability, memory span and over all mental performance with mild and moderate mental deficiency. There was no adverse side effect [20].

Bacoside A and Bacoside P in *Bramhi* and its mechanism of action is: Metal chelation/β-amyloid protection- Cholinesterase inhibition -5HT2c modulation - Antioxidant effects Antidepressant effects in forced swim and learned helplessness animal models [21, 22, 23]. It acts at promoting stability in neurological stability. Sesame is heated and useful in *Vata Dosha*[24].

Karnapoorana

The *Karnapoorna* act on cerebrum and psyche to pacifying *Vata* in ear cavity and ossicles which empower nerve endings that transmit signs to the mind to be deciphered. It helps in cerebral pain and headache that are related with body adjust issues. *Bilvadi oil* [25] reduces dryness and work as antitoxin for vitiated *Vata* due to insomnia. It also helps in strengthening the nervous system by pacifying *Vata* in that region, induces *Snehana*. *Karanpoorana* creates feeling of deep restfulness. *Bilva taila* is best for pacification of *Vata* in nature.

Shamana

Tab. Sumenta:

It is a herbomineral product having the neuro protective properties and having tranquilizer properties which helps in the correction of cognitive deficits. All drugs in Tab. Sumenta influence various neurotransmitter systems including serotonergic system. When we look into the qualities of all the drugs used in this combination of formulations most of the drugs are antistress, antianxiety, tranquilizer, brain tonic, immune stimulant. Hence, these drugs in combination were helpful in reducing the anxiety level and depression in the case of OCD.

All medicines potentiate the effects of modern antianxiotic drugs and reduce neuropsychological problems specially anxiety neurosis [26]. *Jatamansi* is cooling, nervine tonic, and intellect promoting [27]. *Ashwagandha* having GABA-mimetic activity which induces anxiolytic effect comparable to that produced by lorazepam in animal models (elevated plusmaze, social interaction and feeding latency in an unfamiliar environment tests) [28, 29]

Saraswatarishta

Good nervine tonic on insomnia and nervous system and acts as a antidepressant[30]. It promotes intelligence and cognition enhancer. Its ingredients are combination of anti oxidant, immune stimulant and anti inflammatory that help in memory enhancing process[31].

Panchgavya Ghrita

Snehapana is one of the important remedy for the treatment of disturbed Vata. As Mana is also affected in the pathophysiology of the disease, Medhya Sneha Panchgavya ghrita [32] which is advised as a Shamana Sneha in Charaka Samhita for Apasmara Chikitsa after Shodhana is prescribed.

Table No. 10: Detail properties of Panchgavya GhritasaGunaVeeryaVipakaDoshagh

	Rasa	Guna	Veerya	Vipaka	Doshaghnata	Karma[33]
Goksheera (cow's milk)	Madhura	Guru, Snigdha, Prasanna	Sheeta	Madhura	VataPittahara	Medhya jeevaneeya
Godadhi (cow's curd)	Amla, Kashaya	Guru, Snigdha	Ushna	Amla (Charaka, Vaghbata), Madhura (Sushruta)	Vatahara	Balya, Indriya bodhaka, Hridya,
Gomootra (cow's urine)	Katu, Lavana, Kshara	Laghu, Ruksha, Teekshna	Ushna	Katu	Kaphavatahara	Deepaka, Pachaka, Srothovivarana Medhya
Gomaya (cowdung)	Katu, Lavana	Laghu, Ruksha, Teekshna	Ushna	Katu	Pittahara	Deepaka Pachaka, Doshavilayana
Goghrita (cow's ghee)	Madhura	Guru, Snigdha, Picchila	Sheeta	Madhura	VataPittahara	Deepana, Medhya, Vayasthapaka

The drug *Panchgavyaghrita* has *Tridoshasamana* property predominantly *Vata* pacifying and *Medhya* effect. It enhances the *Agni*, *Ojas* and provides *Srotoshuddhi* effect [34]. The *Srotoshodhana* action of drug helps to act deeply on the mind destructing the *Aavarana* of *Tama* and provides clarity to mind. *Ghrita* is also having properties of potentiating *Dhee*, *Dhriti* and *Smriti* and gets deranged in clinical condition like OCD [35,36]. The abnormalities like

obsession are greatly *Vata* predominant and it is cured by *Vata Shamana* action of drug.

By analyzing the properties it is evident that *Panchagavya Ghrita* has its action on *Buddhi*, *Manas*, *Indriya* and corrects the *Manovaha Srotodusti*. It purifies *Rajas* and *Tamas*. It acts on the *Sadhaka pitta*, which is responsible for *Dhee*, *Dhriti* and *Smriti* by improving the nutrition to the brain cells. Thus it acts as a *Medhya Rasayana* which helps in promotion of

nutritional status of nervous tissue thereby improving its function. A clinical study has shown that the effect of *Panchagavya Ghrita* is highly significant on the *Medhya Guna*. By analyzing the chemical constituents also, milk and its products contain tryptophan-amino acid, which is responsible for serotonin production. Tryptophan is an important precursor of serotonin in the serotonergic neurons and may be enhancing the biosynthesis of serotonin to facilitate the anti-compulsive effect [37]. Vitamin E which is present in ghee reduces the oxidative stress produced in OCD. Thus it combats the pathogenesis of OCD.

Following *Satvaavajaya Chikitsa* promotes *Satva* nature in person thereby control mind and body.

Anuloma and Viloma Pranayama and Bhramari Pranayama:

Pranayama means controlling technique of breath; by controlling of breath one can also control his mind. It appears to be superior to no treatment and progressive relaxation and reduction in symptoms for both depression and anxiety [38, 39, 40, 41]

It shows good safety and tolerability in short-term treatment [42]. Rodenback, (1999) and Miyard, (2002) conclude that *Bhramri pranayam* significantly reduce stress and anxiety after one month practice.

Meditation:

The *Omkar* recitation helps in relaxing both body and mind and minimize the tension and stress. Bahrke, 1997 concluded that due to the practice of Pranayama and Omkara recitation, relaxation was found to reduce tension effectively and improve the psychological well being of sufferers from anxiety. Specifically, it induces alpha dominance in the brain. which was characterized by mental relaxation and calms mental noise, washes off karmic impurities purify the ego and illuminates our inner body. Physiological effects of mantras on mind and body effects on Nervous system and reduce stress [43, 44, 45]. Combined action of therapy can be performing under following heads: Increasing brain serotonin activity; it may also produce more activity in the orbital region and caudate nuclei [46] may affect inhibition the neurotransmitter serotonin reuptake, it may alleviates anxiety by modulation of neuronal communication such as GABA neurotransmission via alteration of neurotransmitter synthesis simulating or sedating CNS activity, and regulating or supporting the healthy function of the endocrine system [47, 48] also works as 'adaptogenic' and 'tonic' actions, which are posited to provide increased adaptation to exogenous stressors via complex effects on neurochemistry and the endocrine system [49]

Conclusion:

Case with mild degree of OCD symptoms, restore to health by medicated body purification (*Shodhana*) and palliative (*Shamana*) treatment along with

spiritual therapy (*Satavavajaya Chikitsa*) helped the patient improve. This treatment help the patient to actualize her inner potential. Case study shows that comprehensive use of medicated purification and palliative treatment with spiritual therapy by using Ayurveda principles is effective in the management of OCD. Ayurveda treatment may be offered as a option in specifically anxiety related diseases. There is further scope of study in large sample size for the holistic approach of alternative medicines in stress related clinical disorders.

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