

CLINICAL EVALUATION OF THE EFFICACY OF CAPSULE ANXISHAMAN AND SHIRODHARA IN THE MANAGEMENT OF CHITTODVEGA W.S.R. TO ANXIETY DISORDERS

Abhishek Bhushan Sharma¹, Ajay Kumar Sharma²

¹Lecturer, Patanjali Ayurved college, Haridwar, Uttarakhand, India

²Ex-Director & Professor of P.G. Deptt. of Kayachikitsa, National institute of Ayurveda, Jaipur, Rajasthan, India

ABSTRACT

In modern unsystematic & busy life style; mind & soul get vitiated due to the decreasing of *Satva Guna* & prevalence of *Mansika Dosha* (*Raja & Tama*) & Causes various psychiatric ailments. Anxiety disorders is most prevalent psychiatric illness in the society due to significant stress which results in psychological, social, biological & other impairments. Present day, modern therapy gives significant result but continuous and long term use of drug is associated with variable outcome & adverse result. So the present study was undertaken with an aim of conceptualizing the concept of *chittodvega* with Anxiety disorders and to study the effect of Ayurvedic management on it with better results.

The study was performed on 30 registered patients fulfilling the criteria adopted for it. (DSM IV criteria & clinical features suggestive of *chittodvega*). Selected patients were randomly divided into 3 groups. Group A (n=10) received *Shirodhara* (ksheera) for 15 days while group B (n=10) received Capsule *Anxishaman* in dose of 2 gm/ day in two divided doses (2 caps twice daily) for 30 days and group C (n=10) received capsule *Anxishaman* in dose of 2 gm/ day in two divided doses (2 caps twice daily) for 30 days along with *Shirodhara* (Ksheera) for 15 days. Duration of trial was one month and patients were followed every weekly for four visits. Parameter for assessment were based on Ayurvedic features. The overall Improvement (Percentage wise) of treatment on *Lakshanas* of *Chittodvega* in Group A, B & C were 56.03%, 31.13% & 63.88% respectively. *Shirodhara* with *Ksheera* when administered with Caps. *Anxishaman* in Group C acts synergistically producing remarkable anxiolytic effects in a series of patients of *Chittodvega* (Anxiety disorders) in form of tranquility of mind.

Keyword : *Chittodvega*, Anxiety disorders, *Kushmanda*, *Shirodhara*.

INTRODUCTION

Anxiety is a normal human emotion. In moderation, anxiety stimulates an anticipatory and adaptive response to challenging or stressful events. In excess, anxiety destabilizes the individual and dysfunctional state results. Anxiety is considered excessive or pathologi-

cal when it arises in the absence of challenge or stress, when it is out of proportion to the challenge or stress in duration or severity, when it results in significant distress, and when it results in psychological, social, occupational, biological, and other impairment.[1]

Anxiety disorders, the most prevalent psychiatric illnesses in the general community, are present in 15–20% of medical clinic patients[2]. . The DSM-IV (American Psychiatric Association) [includes the following major categories of anxiety disorders: Panic disorder (with or without agoraphobia), agoraphobia without panic, social phobia (social anxiety disorder), specific phobia, generalized anxiety disorder (GAD), acute stress disorder, posttraumatic stress disorder, obsessive compulsive disorder, and anxiety disorder not otherwise specified.[3]

The treatment approach of *Ayurveda* is purely Psychosomatic. They have widely described about the *sharirika & mansika rogas*. *Ayurveda* has considered the three qualities of mind i.e. *Satva, Raja & Tama*. In which *Satva* is pure & delightful and does not produce any ailment while *Raja & tama* are considered as *mansika Vikaras* which produce many psychiatric ailments i.e. Lust (*Kama*), Anger (*Krodha*), Greed (*Lobha*), Delusion (*Moha*), Jealousy (*Irsya*), Pride (*Mana*), Euphoria (*Mada*), Grief (*Shoka*), Anxiety (***Chinta***), Neurosis (***Udvega***), Fear (*Bhaya*), Happiness (*Harsha*).[4]

In modern unsystematic & busy life style; mind & soul get vitiated due to the decreasing of *Satva Guna & prevalence of Mansika Dosh* (*Raja & Tama*) & Causes various psychiatric ailments. *Chittodvega* (Anxiety Disorders) has not been described as an individual disease in *Ayurvedic* treatises. But it has been mentioned under the chapter of *unmada roga* as one of the causative factors & also mentioned as *Mano Vikara* by *Acharya Charaka*. [5] But in modern *Ayurvedic* texts, it has been described as *Manodvega* or *Gadodvega* and can be correlated with Anxiety Disorders. Term *Chittodvega* is appropriate for

Anxiety Disorders because *Acharya charaka* has mentioned it as one of the *Mano vikara*, may be referred as neurosis in which there is not a gross disability while in *Unmada & Attatvabhinivesa* (another psychiatric ailments) orientation of patient is hampered which leads to disability. So these may be come under psychosis.

Ayurveda considers that the *Mano Doshas* i.e. *Raja & Tama* vitiate the *Manas* & produces many mental ailments & the seat of *Manas* is *Hridaya* (Brain). Thus the drugs & procedures which directly act on brain (*Medhya Aushadhi*) and enhance its power & functioning by increasing *satva guna & ojus*, can be used to manage various mental ailments. So taking all in to consideration this study was planned and *Kushamanda Ghansatva & Shirodhara* were selected to manage this problem effectively.

AIMS & OBJECTIVES:-

The present research work has been started with following aims & objectives.

1. Clinical and conceptual studies on *Chittodvega* vis-à-vis Anxiety Disorders.
2. To evaluate anxiolytic effects of a proposed herbal preparation and *Shirodhara* in a series of patients suffering from *Chittodvega* (Anxiety Disorders) on various scientific parameters.
3. To compare the efficacy of anxiolytic effect of the proposed herbal preparation & *Shirodhara*.

MATERIALS AND METHODS –

For the present clinical study total 30 clinically diagnosed cases of various Anxiety disorders were selected from O.P.D and I.P.D of Kayachitsa, National institute of Ayurveda (Jaipur) during year 2008-11. Duration of the trial was for 30 days. All patients were followed up once in a week regularly.

Selected patients were therapeutically randomized into three groups. Group A receiving Shirodhara, Group B receiving Capsule *Anxishaman* and Group C receiving Capsule *Anxishaman & Shirodhara*. In each Group i.e. A, B and C 10 patients were included to complete their trial for 30 days duration.

Criteria Adopted

(1) Inclusion Criteria's -Patients with typical clinical findings suggestive of *Chittodvega* (Anxiety Disorders) were the potential trial subjects. Patients in the age group of 16-60yrs of either sex were included in the study.

(2) Exclusion Criterias –

- Patients below 16 and above 60years of age.
- *Chittodvega* (Anxiety Disorders), due to direct physiological effect of a substance (e.g. A drug abuse, a medication) or a general medical condition (e.g. Hyperthyroidism)
- Occurrence of *Chittodvega* (Anxiety Disorders) exclusively during mood disorder, a psy-

chotic disorder or a pervasive development disorder.

- Patients having chronic diseases like encephalitis, meningitis, malignancies, chronic renal failure etc. were excluded.

(3) Clinical Assessment :-

All the signs and symptoms of *Chittodvega* (Anxiety Disorders) according to Ayurveda were taken. As *Chittodvega*(Anxiety Disorders) is not mentioned as a separate disease in the *Ayurvedic* texts, but mentioned as one of the causative factor of *Unmada*. Hence predominant symptoms of *Unmada* were considered as *Lakshanas of Chittodvega* as described by *Acharya Charak*. [6] So following signs & symptoms of *Chittodvega*(Anxiety Disorders) were looked for any improvement after the course of the therapy.

Table No.1 Showing Signs & Symptoms Of Chittodvega Acc. To Ayurved.

S. No.	Clinical Manifestations	Before Treatment	After Treatment			
			7th day	15th day	21st day	30th day
1.	<i>Shirsaha Shoonyata</i> or <i>Hridaya Sunyata</i> (Mind going blank)					
2.	<i>Chakshushorakulta</i> (Dialation of eyes)					
3.	<i>Swano karnyo</i> (Tinnitus)					
4.	<i>Ucchwasasyadhikyam</i> (Dyspnoea)					
5.	<i>Hridgraha</i> (Feeling of tightness in heart region)					
6.	<i>Dhayana</i> (Unrealistic Apprehension)					
7.	<i>Aayas</i> (Easily become fatigue)					
8.	<i>Sammoha</i> (Illusion)					
9.	<i>Udvega</i> (Palpitation)					

10.	Unmattchitatwam (Inability to concentrate)				
11.	Anannabhilasa (Anorexia)				
12.	Avipaka (Impaired digestion)				

- For the assessment of gravity of symptoms following criteria adopted :-

S. No.	Grading of symptoms		
1	Absent	-	00%
2	Mild	+	25%
3	Moderate	++	50%
4	Severe	+++	75%
5	More severe	++++	100%

- For the assessment of improvement in the symptoms following criteria adopted :-

S.No.	Grading of symptoms		
1	No Relief	++++	00%
2	Mild Relief	+++	25%
3	Moderate Relief	++	50%
4	Significant Relief	+	75%

(4) Trial Drugs-

A. HERBAL PREPARATION

Table no.2 Showing content of Caps. Anishaman

S.No.	Drug	Botanical Name	Part Used
1.	<i>Kushmanda</i>	Benincasa hispida	Seed

Kushamanda- seeds were collected from factory (petha sweets) near N.I.A., Jaipur and identified & authenticated by the Dravya guna department Of National Institute of Ayurveda. Anxishaman Capsules were prepared in Pharmacy of N.I.A., Jaipur.

Method of Preparation:-

Crude drug was taken in *Yavakuta Churna* form (Coarse powder). Then decoction was prepared according to classical method i.e.

considering total drug as one part, add 16 parts of water and boiled over mild flame. When 1/4th of water remained, the obtained decoction was filtered. This filtered decoction was again boiled with mild heat until *Ghansatva* (dried extract) was formed. Finally the capsules of 500mg each were prepared from the *Ghansatva*.

Method of administration of *Shirodhara* :-

The patients were subjected to *Shirodhara* with plain milk for 45 minutes daily for 15

days. The patient was asked to lay down on Dhara table on his back with his head resting on slightly elevated wooden platform made in the table. Then both the eyes were covered with cotton piece. The fresh milk at room temperature was filled up in Dharapatra and poured in Pendulum movement continuously on the forehead of the patient for 45 minutes by classical method.

Dose schedule:-

1. *Anxishaman* Capsules:- 2 Cap.(each of 500mg), two times in a day, with lukewarm water x 30days.
2. *Ksheera Dhara*:- 1-2 litre of *Ksheera* was used in each sitting.

Duration of trial:-

1. *Ksheera Dhara* was administered once daily for 15 days.
2. *Anxishaman* Capsule was given for 30 days.

(5) Criteria of diagnosis

- DSM IV (Diagnostic and Statistical Manual of Mental Disorders) diagnostic criteria for various anxiety disorders & clinical features of *Chittodvega* were primarily adapted.
- ECG & Thyroid profile were optional if there was need for differential diagnosis.

Value

OBSERVATIONS & RESULTS:-

Maximum incidences were found in between 21-30 years age group, maximum number of the patients i.e.46.66% patients were having *Vata-Pittaja Prakriti* ,86.66% patients were having *Rajsik prakriti*, 90% patients were of *Avara Satva*. Maximum i.e. 63.33%(19) patients were suffering from generalized anxiety disorder type, 13.33%(04) patients were of panic disorder with agoraphobia type, 10%(03) patients each were of obsessive compulsive disorder & anxiety disorder NOS type,panic, 01 (3%)patients were of post stress traumatic disorder. No patients of Social phobic disorder, specific phobic disorder,acute stress disorder & panic disorder with agoraphobia were found. 100% patients having *Hridgraha*, *Udvega*, *Aayasa*,96.66% having *Unmattchittatwam*.

SYMPTOMATIC IMPROVEMENT:-

TABLE NO-3 : SHOWING THE EFFECT OF THERAPY ON LAKHANAS OF CHITTODVEGA (ANXIETY DISORDERS) IN GROUP- A

Sr. No	Lakshana of Chittodvega	Mean Score		MEAN Diff. (n=10)	% Relief	S.D. +/-	S.E. +/-	t- Value	p- Value	Re- marks
		B.T. (n=10)	A.T. (n=10)							
1.	<i>Shirshashoonyata/ hridaya shoonyata</i>	1.6	0.5	1.1	68.75	0.73	0.23	4.71	<0.01	Sig.
2.	<i>Chakshushorakulta</i>	1.3	0.6	0.7	53.48	0.82	0.26	2.68	<0.05	Sig.
3.	<i>Ucchwasasyadhika</i>	2.0	0.9	1.1	55.00	0.73	0.23	4.71	<0.01	Sig.
4.	<i>Hridgraha</i>	1.8	0.6	1.2	66.66	0.63	0.20	6.00	<0.001	H.Sig

5.	Dhyan	1.0	0.4	0.6	60.00	0.69	0.22	2.71	<0.05	Sig.
6.	Sammoha	0.9	0.3	0.6	66.66	0.84	0.26	2.25	>0.05	In-Sig.
7.	Ayasa	1.8	0.7	1.1	61.11	0.56	0.17	6.72	<0.001	H.Sig
8.	Udvega	2.4	0.9	1.5	62.50	0.70	0.22	6.70	<0.001	H.Sig
9.	Unmatchittat-wa-m	1.7	0.6	1.1	64.70	0.31	0.10	11.0	<0.001	H.Sig
10.	Anannabhilasa	1.8	1.3	0.5	27.77	0.70	0.22	2.23	>0.05	In-Sig.
11.	Avipaka	1.4	0.9	0.5	35.71	0.52	0.16	3.00	<0.05	Sig.
12.	Swano karnayo	0.2	0.1	0.1	50.00	0.31	0.10	1.00	>0.05	In-Sig.

(Sig. – significant; H.Sig. – highly significant; Insig. –insignificant)

TABLE NO-4: SHOWING THE EFFECT OF THERAPY ON LAKHANAS OF CHITTOD-VEGA (ANXIETY DISORDERS) IN GROUP- B

Sr. No	Lakshana of Chittodvega	Mean Score		MEAN Diff. (n=10)	% Relief	S.D. +/-	S.E. +/-	t- Value	p- Value	Remarks
		B.T. (n=10)	A.T. (n=10)							
1.	Shirsha-shoonya-ta/ hri-daya shoonyata	1.5	1.0	0.5	33.33	0.52	1.16	3.00	<0.05	Sig.
2.	Chakshushorak-ulta	0.7	0.5	0.2	28.57	0.42	0.13	1.50	>0.10	InSig.
3.	Ucchwasasyad-hi-ka	1.3	0.9	0.4	30.76	0.51	0.16	2.44	<0.05	Sig.
4.	Hridgraha	1.6	1.2	0.4	25.00	0.51	0.16	2.44	<0.05	Sig.
5.	Dhyan	0.8	0.5	0.3	37.51	0.88	0.15	1.96	>0.05	InSig.
6.	Sammoha	1.6	1.0	0.6	37.50	0.69	0.22	2.71	<0.05	Sig.
7.	Ayasa	0.9	0.7	0.2	22.22	0.42	0.13	1.50	>0.10	InSig.
8.	Udvega	1.5	1.0	0.5	33.33	0.52	0.16	3.00	<0.05	Sig.

9.	Unmatchittatwa-m	1.4	0.9	0.5	35.71	0.52	0.16	3.00	<0.05	Sig.
10.	Anannabhilasa	1.4	1.1	0.3	21.42	0.48	0.15	1.96	>0.05	InSig.
11.	Avipaka	1.1	0.9	0.2	18.18	0.42	0.13	1.50	>0.10	InSig.
12.	Swano karnayo	0.2	0.1	0.1	50.00	0.31	0.10	1.00	>0.10	InSig.

(Sig. – significant; H.Sig – highly significant; Insig –insignificant)

TABLE NO-5 : SHOWING THE EFFECT OF THERAPY ON LAKHANAS OF CHIT-TODVEGA (ANXIETY DISORDERS) IN GROUP- C

Sr. No	Lakshana of Chittodvega	Mean Score		MEAN Diff. (n=10)	% Relief	S.D. +/-	S.E. +/-	t- Value	p- Value	Remarks
		B.T. (n=10)	A.T. (n=10)							
1.	Shirsha-shoonya-ta/ hridaya shoonyata	2.2	0.5	1.7	77.27	1.25	0.39	4.29	<0.01	Sig.
2.	Chakshushorak-ulta	1.2	0.4	0.8	66.66	0.63	0.20	4.00	<0.01	Sig.
3.	Uechwasasyadhi-ka	1.4	0.5	0.2	64.28	0.31	0.11	9.00	<0.001	H.Sig.
4.	Hridgraha	2.2	0.6	1.6	72.72	0.69	0.22	7.20	<0.001	H.Sig.
5.	Dhyan	1.9	0.6	1.3	68.42	0.67	0.21	6.09	<0.001	H.Sig.
6.	Sammoha	1.4	0.4	1.0	71.42	0.47	0.14	6.70	<0.001	H.Sig.
7.	Ayasa	2.1	0.6	1.5	71.42	0.52	0.16	9.00	<0.001	H.Sig.
8.	Udvega	1.6	0.5	1.3	68.75	0.68	0.31	11.0	<0.001	H.Sig.
9.	Unmatchittatwa-m	2.3	0.7	1.6	69.56	0.51	0.16	9.70	<0.001	H.Sig.
10.	Anannabhilasa	0.9	0.7	0.2	22.22	0.42	0.13	1.50	>0.10	InSig.
11.	Avipaka	0.8	0.4	0.4	50.00	0.51	0.16	1.44	>0.10	InSig.

12.	Swano karnayo	-	-	-	-	-	-	-	-	-
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(Sig. – significant; H.Sig – highly significant; Insig. –insignificant)

TABLE NO-6 : SHOWING OVERALL EFFECT OF THERAPY (PERCENTAGE WISE) ON LAKSHANAS OF CHITTODVEGA (ANXIETY DISORDERS) IN DIFFERENT GROUPS

GROUPS	% WISE EFFECT
A	56.03
B	31.13
C	63.88

In Group A Highly significant ($p < 0.001$) results were obtained in *Hridgraha, Ayasa & Udvega* While significant ($p < 0.01$ or $p < 0.05$) results were obtained in *Unmatchittatwam, Shirshashoonyata/ hridaya shoonyata, Chakshushorakulta, Ucchwasasyadhika, Dhyan & Sammoha.* (Table No.3) In Group B significant ($p < 0.01$ or $p < 0.05$) results were obtained in *Shirshashoonyata/ hridaya shoonyata Ucchwasasyadhika Hridgraha Sammoha Udvega & Unmatchittatwam* while insignificant ($p > 0.10$ or $p > 0.05$) results were obtained in *Chakshushorakulta Dhyan Ayasa Anannabhilasa Avipaka & Swano karnayo.* No any Highly significant ($p < 0.001$) result was obtained in any Lakshanas in Group B (Table No.4).

In Group C Highly significant ($p < 0.001$) results were obtained in *Ucchwasasyadhika, Hridgraha, Dhyan, Sammoha, Ayasa, Udvega, Unmatchittatwam* while significant ($p < 0.01$ or $p < 0.05$) results were obtained in *Shirshashoonyata/ hridaya shoonyata & Chakshushorakulta* and insignificant ($p > 0.10$ or $p > 0.05$) results were obtained in *Anannabhilasa & Avipaka.* (Table No.5) The overall Improvement (Percentage wise) of treatment on *Lakshanas* of *Chittodvega*

in Group A, B & C were 56.03, 31.13 & 63.88 respectively (Table No.6)

DISCUSSION

The effect of therapy observed on *Ayurvedic Lakshans* of *Chittodvega* at end of one months was better in Group C compared to Group A & B. Thus it signifies the effectiveness of combined approach incorporated for better improvement.

PROBABLE MODE OF ACTION OF KUSHMANDA-

It is considered that the *Medhya* action of *Kushamanda* is due to its *Prabhava* and in *Ayurvedic* texts in the definition of *Prabhava* has been given as follows. It is described that the *Prabhava* can not be assessed (*Achintaya*) by any measures. Despite above facts an effort is being made to define the action of *Kushmanda* according to its *Rasa, Guna, Veerya & Vipaka.*

Kushamanda has *Madhura Rasa, Madhura Vipaka, Sheeta veerya & Lahu and Snigdha Guna. Vridhdha kushmanda is Sarvadoshajit, vastishodhak, cheto vikarahara & hridaya* [7]. Following facts can be considered in its probable mode of action on *Chittodvega* (Anxiety Disorders).

As it has *Madhura Rasa, Madhura Vipaka, sheeta veerya & Snigdha guna*, which are also the **properties of Ojus**. So according to the basic principle of *Samanyam Vridhhi Karnam*, [8] *Kushmanda* increases the *Ojus* and the *Hridaya* is considered as the seat of *Ojus*, which is mainly vitiated by the *Raja & Tama* in the case of *Chittodvega* (Anxiety Disorders). In the case of *Chittodvega* (Anxiety Disorders) *Ojus* also decreases & produces symptoms of *Ojus Kshaya*. So by increasing the *Ojus*, it gives strength to the *Hridaya* and breakdown the pathogenesis of *Chittodvega* (Anxiety Disorders). & removes the coating of *Buddhi* & increases the consciousness of the patient.

Due to the above properties, it also **gives strength to the kapha**, which is considered as *Bala of Sharira*. The seats of *Kapha* are *Uraha, Kantha, Shira* (Brain) etc. And being situated in *Hridaya, Avalambaka Kapha* gives strength to other *Kaphas*. So it also gives strength to the *Hridaya*.

As *Kushmanda* is having **Vatahara** properties and *Acharya Charak* has mentioned that *Vata* controls the *Manas* & initiate it to perform its function properly (*Niyanta Preneta Cha Manasa*). So in this way when the *vata dosha* will come in equilibrium state, then it properly regulates the *Manas*, which is the main *Adhithana* of this mental disease.

Kushmanda is having **Pitta hara** properties, so it also pacify the *Pitta Dosha*. The seat of *Sadhak Pitta* is *Hridaya* and intellect (*Buddhi*), retention & recollecting power (*Medha*), & to achieve the desired things (*Abhiprethartha sadhanata*) are its functions. In this way it again gives strength to *Hridaya* & helps to break down the pathology of *Chittodvega* (Anxiety Disorders).

The effect of *Anxishaman Capsule* (*Benincasa hispida*'s seed extract) can be further postulated on principles of modern perspective as follows

Benincasa cerifera serves as ROS scavenger and an antioxidant effective agent. [9] It has a tissue protective preventive effect on colchicine induced Alzheimer's disease in rats via direct and indirect antioxidant activity. [10] *Kushmandadi Ghrita* showed significant results in the management *Chittodvega* (anxiety disorders). [11]

PROBABLE MODES OF ACTION OF SHIRODHARA-

In this regards following facts can be considered

1. **According to Ayurvedic point of view-**
 - a- According to *Acharya Charak*, the *Shirah* is the seat of *Prana* and all *Indriyas* (Sense organs) having shelter in *Shirah*, it is also known as **Uttamanga**. So due to this fact the *Shirodhara* with *Ksheera* provides strength to *Prana & Indriyas* which are mainly vitiated in case of psychological disorders. [12]
 - b- According to *Yoga Sutra* between both eye brows one of the *Shada Chakra*, i.e. **Agya Chakra** is located which controls the function of other *Chakras*, and it is also responsible for intellect, knowledge etc. So when the patient meditate on *Dhara*, it enhances the power of *Agya Chakra*, which in turn starts functioning properly & also regulates the function of other *Chakras* and relieve the symptoms of *Chittodvega* (Anxiety Disorders).
 - c- *Hridaya* (Brain) is considered as the seat of **Chetna** which is vitiated by the *Raja & Tama Guna*. *Shirodhara* with *ksheera* restores the *Chetna* by giving strength to the *Hridaya*.

According to modern –mode of action of Shirodhara

In a study the psycho – neuro - immunologic changes of *Shirodhara* were studied. The results show that *Shirodhara* has anxiolytic and ASC-inducing effects, and it promotes a decrease of noradrenaline and exhibits a sympatholytic effect, resulting in the activation of peripheral foot skin circulation and immunopotentiality.

It may simply be a specific way of changing the excitabilities in dysfunctional circuits of the brain so that to make the individual to perform normally.

Mechanism of action – [13]

The action starts from the tactile stimulation of the skin innervated by the first branch of the trigeminal nerve. It is possible that the impulses are transmitted to the thalamus through the principal nucleus and forwarded to the cerebral cortex. The impulses from the forehead cause a Somato-autonomic reflex, and changes in levels of various neurotransmitters including, serotonin, TRH, and catecholamine, resulting in sympathetic suppression and physio-immunologic changes of peripheral circulation and NK cell activity. (ASC=Altered state of consciousness, NK =Natural killer, PMN= Polymorphonuclear neutrophils)

CONCLUSION

On the basis of these clinical manifestations the disease *Chittodvega* can be correlated with the Anxiety disorders as described in modern medical science.

Anxiety Disorders is a broader term which covers condition like GAD, OCD, Panic disorders, phobic disorders, specific disorder etc. Observations & results obtained in a series of patients of *Chittodvega*

(Anxiety disorders), treated with *Shirodhara* with *Ksheera* along with Caps. Anxishaman (group C) have shown the best recovery in clinical manifestations of the disease confirming the potent anxiolytic effects of *Shirodhara* with *Ksheera* & Caps. Anxishaman. It appears that *Shirodhara* with *Ksheera* when administered with Caps. Anxishaman acts synergistically producing remarkable anxiolytic effects in a series of patients of *Chittodvega* (Anxiety disorders) in form of producing tranquility of mind. The anxiolytic effects produced by *Shirodhara* with *Ksheera* when administered alone in patients of group A has shown moderate type of recovery in patients of *Chittodvega* (Anxiety disorders) after the course of the therapy in current research project. Caps Anxishaman when assessed in term of its anxiolytic effects in a series of patients of *Chittodvega* (Anxiety disorders) has witnessed milder improvement in various symptoms of the disease.

Since administration of *Shirodhara* with *Ksheera* & Caps. Anxishaman did not witness any side/ toxic effect in a series of patients of *Chittodvega* (Anxiety disorders) , obviously these two *Ayurvedic* modalities can be employed for longer duration in the management of patients of *Chittodvega* (Anxiety disorders) having edge over modern tranquillizers, hypnotics etc. used for the purpose demonstrating there side / toxic/ unwanted effects mainly in the form of drug dependence & hang over of the drug.

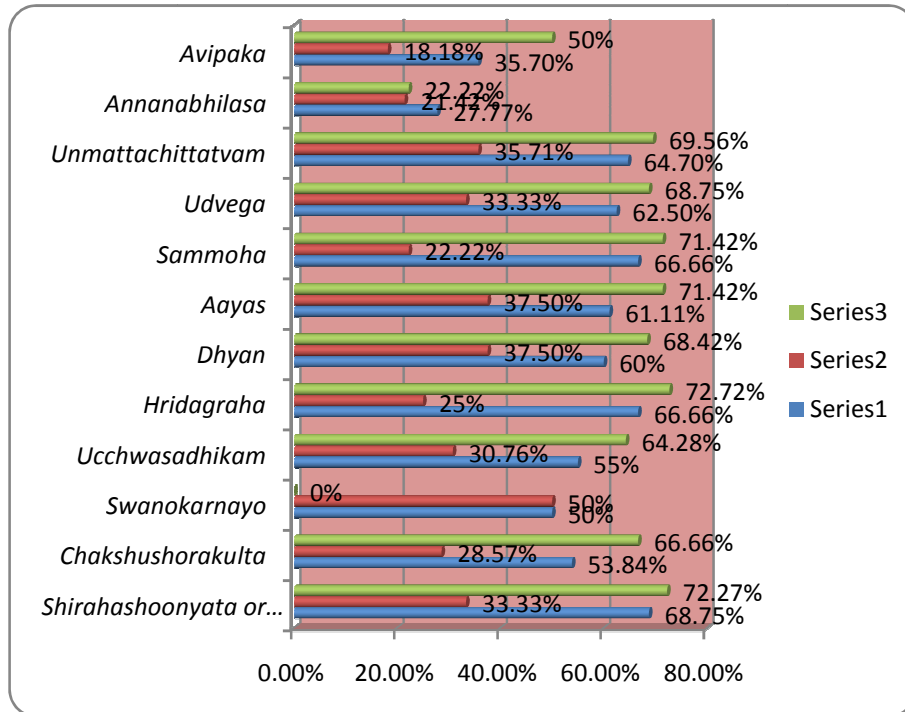
Therefore it can be concluded that *Shirodhara* with *Ksheera* & Caps. Anxishaman (containing the *Ghansatva* of *Kushmanda*) may be used effectively separately or in combination together for the

management of patients of *chittodvega* (Anxiety disorders) safely.

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Graph No. –16 Showing the comparative effect of therapy on all Groups on *Lakhanas* of *Chittodvega* (Anxiety Disorders).



CORRESPONDING AUTHOR

Dr. Abhishek Bhushan Sharma
 Lecturer, Patanjali Ayurved college,
 Haridwar, Uttarakhand, India
Email: ayu.abhishek@gmail.com

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