IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

CLINICAL EVALUATION OF THE EFFICACY OF *BRAHMI VATI* WITH *SARASWATARISTHA* FOLLOWED BY *TAKRADHARA* IN THE MANAGEMENT OF *CHITTODVEGA* W.S.R. TO GENERALIZED ANXIETY DISORDER

Dr. Nishu Raina

Assistant Professor Kayachikitsa

GRAU, Hoshiarpur

ABSTRACT:-

Chittodvega is a *Manas Vikar* , so called minor mental disorder described by *Acharya Charaka* and develops due to vitiation of *Raja* and *Tama* along with the association of *Prana*, *Udana* and *Vyana Vayu* as well as *Sadhaka Pitta* & *Tarpak Kapha*.. *Chittodvega*[1] is nearest term for anxiety disorders which is one of the psychological disorders described by *Acharya Charaka*.. In many classics different different terms are used to relate to mental status like *Chittavibhramsa*, *Chittanasa*, *Chittavibhrama*, *Chittaviparyaya*, *Anavasthita Chitta* etc. But *Chittodvega*[1]seems to be most appropriate term for the anxiety disorder. Persons suffering from *Chittodvega* can perform their day to day activities without much difficulty (i.e. neurosis) and this neurosis when turns into psychosis, prodromal features of *Unmada*, like stimulates Generalized Anxiety Disorder which is characterized by excessive, uncontrollable and often irrational worry about everyday things that is disproportionate to the actual source of worry. Keeping in view the increasing incidence of this problem a study named "clinical evaluation of the efficacy of *brahmi vati* along with *Saraswataristha* followed by *Takradhara* with *Takra* in the management of *Chittodvega* w.s.r. to generalized anxiety disorder" was conducted.

Key Words: *Chittodvega*, *Takradhara* *Brahmi vati* , *Saraswataristha* Generalized Anxiety Disorder,

Introduction:-

Chittodvega is a *Manas Vikar* , so called minor mental disorder[2] described by *Acharya Charaka* and develops due to vitiation of *Raja* and *Tama* along with the association of *Prana*, *Udana* and *Vyana Vayu* as well as *Sadhaka Pitta* & *Tarpak Kapha*.. *Chittodvega*[3] is nearest term for anxiety disorders which is one of the psychological disorders described by *Acharya Charaka*. Patients with GAD have persistent, excessive, and/or unrealistic worry associated with muscle tension, impaired concentration, autonomic arousal, feeling "on edge" or restless, and insomnia. Onset of this disorder is usually before age 20, and a history of childhood fears and social inhibition may be present. The lifetime prevalence of GAD is 5–6%; the risk is higher in first-degree relatives of patients with the diagnosis. Interestingly, family studies

indicate that GAD and panic disorder segregate independently.. GAD is a common condition and pattern of frequent, constant worry and anxiety over many different activities and events may also contribute to the development of this disorder.

Effects of treatment were assessed on the basis of sign and symptoms of GAD according to DSM Scale. The main symptom of GAD is the almost constant presence of worry , even when there is little or no cause. Worries seem to float from one problem to another, such as family or relationship problems, work issues, money, health, and other problems and has to face much much difficulty in controlling them. Other symptoms include Difficulty concentrating , Fatigue, Irritability, Problems falling or staying asleep, and Restlessness often becoming startled very easily followed by number of physical symptoms including muscle tension (shakiness, headaches). Since the main *Doshas* are that of *Raja* and *Tama* (Ca. su. 1/57), Hence the *Nidana*, which vitiate *Raja* and *Tama* may be considered as the prime etiological factors behind *Chittodvega*.

Keeping these points in view, ***Takradhara*** *h*as been used in

Aims and Objectives:

1. To assess clinical evaluation of the efficacy of *Brahmi vati* along with *Saraswataristha* followed by *Takradhara* in the management of *Chittodvega* w.s.r. to generalized anxiety disorder

Material and Methods: The study was conducted on 40 clinically diagnosed patient of *Chittodvega* s. Detailed history and physical and mental examinations were done on the basis of specialized proforma prepared for this purpose. Pulse, respiration and blood pressure were checked to assess the present condition of the disease. Routine blood, urine and stool examinations were performed to exclude other pathogenesis.

Drug and Dose:-

Brahmi Vati- 2 tablet thrice in a day

Saraswataristha- 20 ml BD with equal amount of water after meal

Takradhara for one month .

CONTENTS OF *BRAHMI VATI*[4]:-

(Reference:- Ayurveda Sara Sangraha Gutika Vati Prakarana P:456)

S.NO	INGREDIENTS	BOTANICAL NAME	DOSE
1.	*Brahmi*	Bacopa Monnieri	20 g
2.	*Shankhapushpi*	Convolvulus Pluricaulis	20 g
3.	*Vacha*	Acorus Calamus	10 g
4.	*Maricha*	Black Pepper	5 g
5.	*Gavkava*		20 g
6.	*Swarn Makshika Bhasma*	Calx of copper and iron pyrite	10 g
7.	*Rasasindhur*	Compound of Purified mercury and sulphur	10 g

CONTENTS OF *SARASWATARISTHA*[5]-
(*Bhaishaja Ratnavali, Rasayana* 178- 191)

S.NO	INGREDIENTS	BOTANICAL NAME	DOSE
1.	*Brahmi*	Bacopa monnieri- whole plant	960 g
2.	*Shatavari*	Asparagus Racemosus- root	240 g
3.	*Vidari*	Pueraria tuberose- Tuber	240 g
4.	*Abhaya*	Terminilia chebula- Fruit rind	240 g
5.	*Usheer*	Vetiveria zizaniodes	
6.	*Shunthi*	Zingiber officinalis(rhizome)	240 g
7.	*Mishi*	Foeniculum vulgare(fruit)	240 g
8	Water for kashaya boiled and reduced to		12.28 L 3.072 L
9.	*Makshika*	Honey	480 g
10.	*Sita*	Sugar candy	1.2 kg
11.	*PRAKSHEPA DRUGS*		
12.	*Dhataki*	Woodfordia fruticosa(flower)	240 g
13.	*Renuka*	Vitex negundo(seed)	12 g
14.	*Kana*	Piper longum- fruit	12 g
15.	*Trivrit*	Operculina turpethum- root	12 g
16.	*Devapushpa*	Syzygium aromaticum- flower bud	12 g
17	*Vacha*	Acorus calamus- rhizome	12 g
18	*Kustha*	Saussurea lappa-root	12 g
19	*Vajigandha*	Withania somnifera- root	12 g
20	*Vibhitaki*	Terminalia bellerica- fruit rind	12 g
21	*Amruta*	Tinosporia cordifolia	12g
22	*Ela*	Elettaria cardamomum	12 g
23	*Vidanga*	Embelia Ribes- Fruit	
24	*Twak*	Cinnamon	12 G
25	*Gold leaf*		12 g

Criteria for diagnosis:
DSM IV (Diagnostic and Statistical Manual of Mental Disorders) diagnostic criteria for various anxiety disorders were primarily adapted.

DSM-IV Diagnostic Criteria for Generalized Anxiety Disorder:

S.NO	CRITERIA
1.	Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months
2.	The person finds it difficult to control the worry
3.	The anxiety and worries are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months) 1. Restlessness or feeling keyed up or on edge, 2. Being easily fatigued, 3. Difficulty concentrating or mind going blank, 4. Irritability, 5. Muscle tension, 6. Sleep disturbance (difficulty falling or staying a sleep, or restless unsatisfying sleep).
4.	The focus of the anxiety and worry is not confined to features of an Axis 1 disorder, e.g. the anxiety or worry is not about having a panic attack (as in panic disorder), being embarrassed in public (as in social phobia), being contaminated (as in obsessive – compulsive disorder), being away from home or close relatives (as in separation anxiety disorder), gaining weight (as in anorexia nervosa), having multiple physical complaints (as in somatization disorder), or having a serious illness (as in hypochondriasis), and the anxiety and worry do not occur exclusively during posttraumatic stress disorder.
5.	causing clinically significant distress or impairment which can be social, occupational, or other important areas of functioning.
6.	The disturbance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition (e.g. hypethyroidism), and does not occur exclusively during a mood disorder, psychotic disorder, or pervasive development disorder.

Improvement in all the signs and symptoms as per Hamilton's anxiety rating scale was assessed. Hamilton (1959) has described 14 types of clinical features of anxiety status, the details of which are as follows:

Signs and symptoms mentioned in Hamilton scale were assessed by adopting the following scoring system.

HAMILTON ANXIETY RATING SCALE:

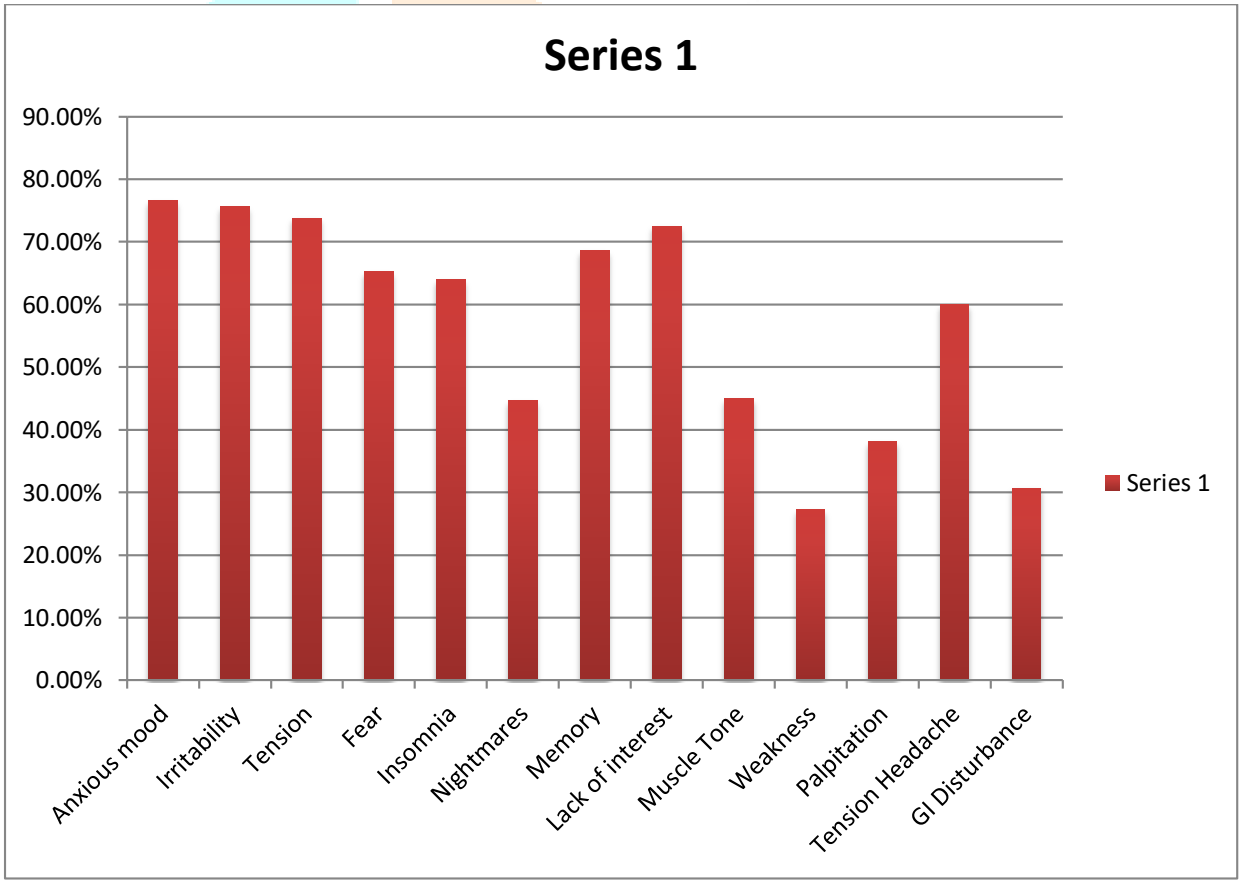
S.No.	System	Symptoms
1.	**Anxious mood**	Worries, anticipation of the worst, fearful anticipation, Irritability.
2.	. **Tension**	Feeling of tension, fatigability, startles response, moved to tear easily, trembling, restlessness, inability to relax.
3.	. **Fears**	. Of dark, strangers, being left alone, animals, traffic & crowds.
4.	. **Insomnia**	Difficulty in falling asleep, broken sleep, unsatisfying sleep, fatigue on waking, dreams, nightmares, night terrors.
5.	**Intellectual (Cognitive)**	Difficulty in concentration, poor memory.
6.	**Depressed mood**	Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing.
7.	**Somatic (Muscular)**	Pain and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.
8.	**Somatic (Sensory)**	Tinnitus, blurring of vision, hot and cold flushes, feeling of weakness, picking sensation.
9.	**Cardiovascular Symptoms**	Tachycardia, palpitation, pain in chest, throbbing of vessels, fainting feelings, missing beat.
10.	**Respiratory Symptoms**	Pressure or constriction in chest, choking feeling, sighing, dyspnoea
11	**Gastrointestinal Symptoms**	Difficulty in swallowing, wind, abdominal pain, burning sensation, abdominal fullness, nausea, vomiting, looseness of bowels, loss of weight, constipation.
12	**Genitourinary Symptoms**	Frequency of maturation, Urgency micturation, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence.
13	**Autonomic Symptoms**	Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair
14	**Behaviour at interview**	Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing, belching, brisk tendon jerks, dilated pupils, exophthalmos.

Degree of anxiety and Pathological condition Scoring:

Degree	Scoring
None	0
Mild	1
Moderate	2
Severe, grossly disabling	3
Severe	4

Effect of therapies exhibited statistically in different parameters as shown in table-

SYMPTOMS	MEAN BT	MEAN AT	X	% RELIEF	S.D.	S.E	t	p
Anxious mood	2.5	0.6	1.8	76.6	0.5	0.1	14.5	<.001
Irritability	2.1	0.5	1.6	75.6	0.7	0.14	9.3	<.001
Tension	2.2	0.6	1.6	73.8	0.5	0.11	14.3	<.001
Fear	2.7	0.9	1.8	65.3	0.6	0.14	12.3	<.001
Insomnia	2.0	0.7	1.3	64.00	0.6	0.15	8.5	<.001
Nightmares	2.4	1.4	1.1	44.7	0.7	0.16	6.5	<.001
Memory	1.8	0.6	1.2	68.6	0.5	0.12	9.8	<.001
Lack of interest	2.1	0.6	1.5	72.50	0.7	0.15	9.5	<.001
Muscle tone	1.0	0.6	0.4	45.00	0.5	0.11	4.0	<.01
Weakness	2.3	1.7	0.6	27.2	0.8	0.19	3.3	<.01
Palpitation	2.2	1.4	0.8	38.1	0.6	0.13	6.0	<.01
Tension headache	1.8	0.7	1.1	60.00	0.7	0.16	6.5	<.001
GI disturbence	2.05	1.4	0.6	30.7	0.5	0.11	5.5	<.01



Out of 19 patients, observed % improvement in **anxiety** was 76.6%, its p value was <.001, i.e. highly significant; in **irritability** it was 75,6% and p value was <.001, i.e. highly significant; in **tension** it was 73.8% and p value was <.001, i.e. highly significant; in **fear** it was 65.3% and p value was <.001, i.e. highly significant; in **insomnia** it was 64 % and p value was <.001, i.e. highly significant; in **nightmares** it was 44.7% and p value was <.001, i.e. highly significant; in **memory** it was 68.6% and p value was <.001, i.e. highly significant; in **lack of interest** it was 72.5% and p value was <.001, i.e. highly significant; in **muscle tone** it was 45 % and p value was <.001, i.e. highly significant; in **weakness** it was 27.2% and p value was <.01, i.e. significant; in **palpitation** it was 38.1% and p value was <.01, i.e. significant; ; in **tension headache** it was 60 % and p value was <.001, i.e. highly significant; ; in GI disturbance it was 30.7% and p value was <.01, i.e. significant;

DISCUSSION:

From the above observations, Demographic profiles of these patients didn't show any relevancy because it is neither a community nor it is an age related disorder; but *Chittoudvega* was more prominent in married, retired and housewives. As far as The therapeutic trial of *Brahmi vati* along with *Saraswataristha* followed by *Takradhara* in the management of *Chittodvega* w.s.r. to generalized anxiety disorder" showed beneficial effects on various symptoms as per Hamilton's Anxiety Rating Scale (HARS) as shown in above mentioned table. *Brahmi vati* is a formulation reportedly having activity on hypertension, cns, cvs, diuretic activity etc. *Brahmi* has anxiolytic effects, anticonvulsive action, antioxidant activity, adaptogenic activity,cardiac depressive activity onlv contractilety, heart rate and coronary flow similar to that of quinidine on heart[6]. clinical study on jatamansi shows its anti oxidant[7], anti ischemic [8] & antiarrhythmic potential[9], increases HDL[10] which are cardio protective.Sankapushpi has anxiolytic activity[11]. vacha has calcium inhibitory effect and diuretic activity which may potentiate Na^+ excretion in HTN.krishna marich when administered intraveneously in dose dependant manner will decrease arterial pressure in normotensive anesthetized rats .Rasa sindhoora has augumenting antihypertensive effect

Effect of Saraswatarishta on learning and memory of mice was studied using elevated plus maze model (EPM)[12]. Reduction in TL (Transfer Latency) indicates improvement in learning or memory and prolongation indicates impairment. Diazepam induced prolongation of TL is an accepted model of dementia. In our study, 2 weeks daily treatment of Saraswatarishta completely prevented impairment of learning and memory by Diazepam, corroborating the Ayurvdic use of Saraswatarishta and Brahmi, its major ingredient in the management of dementia. Saraswatarishta can be used as preventive measure to overcome demensia in Alzheimer's disease.

At the site of *Takradhara* *sthapani marma* issituated, which have an anatomical structures like cavernous plexus,optic chiasma and thalamus. *Ajna chakra* also situated at the site of this *sthapanimarma* has close relation with the hypothalamus, limbic system and neighbouring regions with connections to pituitary gland. this is one of the main reasons that Shirodhara when performed, stimulates different areas of the hypothalamus which in turn can cause every known type of neurogenic effect on cardiovascular system, including increased or decreased arterial pressure, increased or decreased heart rate. Reason behind this variation lies in the Stimulation of the concerned area as for example posterior and lateral hypothalamus when stimulated increases the arterial pressure and heart rate, whereas stimulation in the preoptic area *(sthapanimarma*) has opposite effect, resulting in decrease in both arterial pressure and heart rate (Guyton and Hall medical physiology 10th edition).And these are all these effects, that may increase the probability of having relief in insomnia and provides mental calm, in addition to provide cure of the above mentioned symptoms. *Takradhara* basically helps to stabilise the mind and improve The transmission of nerve impulses by increasing acetylcholine(ACH) which acts as a mediator between impulses.also takra helps to revitalize Prana Vayu by taking out exceeling heat out of body and reduces the spread of neuro transmitters that is the state of deep relaxation.

CONCLUSION:

Anxiety symptoms may occur as a manifestation of a primary psychiatric disorder or secondarily to either the medical illness or the medications prescribed for treatment (Harrison).

Chittodvega a minor psychiatric disorder has been mentioned by *Charaka (Charak Vi.* 6/5), which is produced due to vitiation of *Raja* & *Tama.* In addition *Prana, Udana, Vyana Vayu, Sadhaka Pitta* and *Tarpaka Kapha* are also provocated factors in it. Etymology of *Chittodvega* i.e. anxious status of mind is similar to anxiety, somatic manifestation are also same in both the condition.

Brahmi vati along with *Saraswataristha* followed by *Takradhara* has been found as safe and effective treatment modalities in . *Chittodvega* w.s.r Generalized Anxiety Disorder.

REFERENCES:

1. .Agnivesh,Charaka ,Charaka Samhita Edited with "Charaka Chandrika" hindi commentary by Dr. Brahmanand Tripathi, 4TH Edition, Chaukhambha Surbharati Prakashan , Varanasi Vol-. 1 Ch. Vi.6/5, p 703
2. Harrisons: Principals of internal medicine vol 11, 14 th edition(international edition), section 5, chapter 385, p 2486-2490
3. Agnivesh,Charaka ,Charaka Samhita Edited with "Charaka Chandrika" hindi commentary by Dr. Brahmanand Tripathi, 4TH Edition, Chaukhambha Surbharati Prakashan , Varanasi Vol-. 1 Ch. Vi.6/5, p 703
4. Ayurveda Sara Sangraha Gutika Vati Prakarana P:456
5. Ayurveda Sara Sangraha Gutika Vati Prakarana P:456
6. Al- snafi ali esmail. the pharmacology of bacopa monniera. a review. int j pharma sci res(IJPSR) Dec 2013;4(12):154-9
7. Subashini R, Yogeeta S, Gnanapragasam A, Devaki T. protective effect of nardostachys jatamansi on oxidative injury and cellular abnormalities during doxorubicin/ induced cardiac damage in rats.J Pharm Pharmacol 2006;58(2);257-62
8. Salim s ahmed M, Zafar KS, Ahmad AS, Islam F.Protective effect of nardos- tachysjatamansi in rat cerebral ischemia. pharmacol biochem behave 2003;74(2);481-6
9. Arora RB, Madan BR.Antiarrhythmics.111.Antiarrhythmic activity of Nardos- tachysjatamansi , Indian J Med Res 1956;44(2)-259-69
10. Dixit VP JainP, Joshi SC.Hypolipidemic effects of curcuma longa and of nardos-tachysjatamansi,DC in triton/induced hyperlipidaemic rats. , Indian J Physiol Pharmacol 1988;32(4);299-304.
11. Bhowmik debjit, sampath kumar KP, paswan shravan, srivatava shweta, yadav akhilesh pd, dutta amitsankar.traditional indian herbs convolovus pluricaulis & its medical importance.J Pharmacogen phytochem 2012;1(1) 44-51
12. Rajopadhye D. R, Sahasrabudhe A. R. Memory Enhancing Activity of Saraswatarishta in Mice. Biomed Pharmacol J 2020;13(4). Available from: https://bit.ly/3rPANdD

Results: Statistically highly significant