

Research Article

EFFECT OF MAMSYADI KWATHA AND YOGA THERAPY IN THE MANAGEMENT OF ANAVASTHITA CHITTATVA (GENERAL ANXIETY DISORDERS)

Shreevathsa¹, Rao Ravi S^{2*}, Krishnamurthy M S³, Raghavendra Udupa⁴, Shrikanth PH⁵

- 1. Associate Professor, Dept. of Ayurveda Siddhanta, Govt. Ayurveda Medical College, Mysore, Karnataka, India.
- 2. Associate Professor, Dept. of Dravyaguna, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.
- 3. Professor, Dept. of Bhaishajya Kalpana, Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.
- 4. Associate Professor, Dept of Ayurveda Siddhanta, Alva's Ayurveda Medical College, Moodbidri, Karnataka.
- 5. Asst. Professor, Ayurveda Siddhanta, SDM College of Ayurveda, Udupi, Karnataka, India.

Abstract

Anavasthita Chittatva, is a Vataja nanatmaja vikara nearly relates with 'General anxiety disorder' based on its pathogenesis. Among three modalities of Chikitsa viz. Daivavyapashraya Chikitsa, Yuktivyapashraya Chikitsa and Satvavajaya Chikitsa, two forms are implemented in the present study. Mamsyadi Kwatha, a combination of Jatamamsi (*Nardastchys jatamamsi*), Ashwagandha (*Withania somnifera*) and Parasika yavani (*Hyoscyamus niger*) in 8:4:1 ratio was administered in Yuktivyapashraya Chikitsa. In Satvavajaya Chikitsa yogic practices like Surya Namaskaras, Kriyas and Pranayamas - were advised.

30 patients of Anavasthita Chittatva were selected and divided randomly into 4 groups viz. 7 patients in control group, 7 patients in Yuktivyapashraya Chikitsa group, 7 patients in Satvavajaya Chikitsa group and 9 patients in combined therapy group. The treatment was given for 45 days. All the 3 groups viz Yuktivyapashraya Chikitsa, Satvavajaya Chikitsa and combined therapy group showed statistically highly significant improvement (p< 0.001) in total Hamilton's anxiety rating scale (75.63%, 96.33% and 85.66% respectively). The results revealed that Satvavajaya Chikitsa group has an edge over Yuktivyapashraya Chikitsa and combined therapy group in alleviating the symptoms of Anavasthita Chittatva.

Key words: Anavasthita Chittatva; Hamilton's anxiety rating scale; Mamsyadi Kwatha; Yuktivyapashraya Chikitsa; Satvavajaya Chikitsa.

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*Address for correspondence:

Dr. Ravi Rao S, Associate Professor, Dept. of Dravyaguna,

Alva's Ayurveda Medical College, Moodbidri, Karnataka, India.

E-mail: ravisorake@gmail.com

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INTRODUCTION

Nomenclature of the disease is done based on symptomatology, etiology, simile and pathogenesis in Ayurveda. Anavasthita Chittatva (Anxiety Neurosa) a Vataja Nanatmaja Vikara (Neurolgical disorders) manifests in Manas (Mind) and also affects Sharira (Body) in due course of disease. This

condition simulates with General Anxiety Disorder.

Management of a disease can be done by adopting Daivavyapashraya Chikitsa (Non medicinal therapy), Yuktivyapashraya Chikitsa (Medicinal Therapy) and Satvavajaya Chikitsa (Psychological Therapy), depending on the nidanas (Etiological factors) involved



samprapti ghatakas (Schematic representation of pathology). Charaka samhita prescribes Jnana (Knowledge), Vijnana (Science), (Courage), Smriti Dhairya (Memory) and Samadhi - as the line of treatment to be adopted for manasa rogas. Yogic techniques such as Surya Namaskara, Kapalabhati, Shavasana like Asanas, Nadishodhana like Pranayama - all these comes under Satvavajaya Chikitsa only, as they improve the capacity of manas i.e. "self control". [1][2]

Mamsyadi Kwatha, an Ayurvedic formulation quoted in Bheshaja Samhita and Siddha yoga sangraha of Yadavji Trikamji Acharya is said to be effective in minor mental disorders. [3][4] If it is given in appropriate dose and duration it acts as an ideal medicine in psychological diseases. Here in the present study Mamsyadi Kwatha is used in the form of Yukti vyapashraya Chikitsa.

Objectives

- To assess the effect of yuktivyapashraya chikitsa and satvavajaya chikits in the management of general anxiety disorder.
- To compare the effect of yuktivyapashraya chikitsa, satvavajaya chikitsa and combined therapy in the management of General Anxiety Disorder.

MATERIAL AND METHODS

Patients:

Patients attending O.P.D. and I.P.D. Sections of Basic Principles Department, I.P.G.T. & R.A. Hospital were screened for any mental disorders. Those who fulfill the criteria for diagnosis as anxiety disorders DSM-IV (Diagnostic and Statistical Manual) were selected randomly, irrespective of their Desa, Jati, Vaya, Prakrti, Satva etc. Detail history was taken according to the proforma specially prepared for assessment of anxiety disorders. Diagnosis was made on the basis of following criteria.

Criteria for diagnosis:

- 1) DSM-IV diagnostic criteria for anxiety disorders were primarily adopted.
- Clinical features of Anavasthita Cittatva derived on the basis of Anxiety Disorders according to Ayurvedic principles were used.
- 3) Routine blood, urine, stool examinations were carried out to exclude any other organic disorder as well as to assess the present condition of the patient.

Sampling and management:

All the patients were divided randomly into 4 groups viz.

- 1. Control Group C.G.
- 2. Yuktivyapasraya Chikitsa Group Y.G.
- 3. Satvavajaya Chikitsa Group S.G.
- 4. Combined Group Com.G.
- (1) Control Group: Gelatin coated capsule (placebo) was administered in this group.

Dose : 1 Capsule twice daily

Duration: 45 days Anupana : Milk

(2) Yuktivyapasraya Chikitsa Group: In this group freshly prepared Mamsyadi Kwatha was administered. The Patients were advised to prepare fresh kwatha by taking 20 g of coarse powder of Mamsyadi Kwatha added with 320 ml of water, boiled and reduced to 40 ml (1/8th part). Same procedure was advised in the night also.

Dose: 40 ml twice daily after food^[5]

Duration: 45 days

For IPD patients freshly prepared decoction was administered by the scholar twice daily.

(3) Satvavajaya Chikitsa Group: In this group, patients were taught, Suryanamaskara and Savasana, a part of Asana and Pranayama. They were advised to do it preferably early in the morning.



Suryanamaskara - Four cycles per day either at a time or in divided schedule.

Savasana - 10 minutes

Pranayama - Kapalabhati - 8 minutes

Nadisodhana - 8 minutes

Duration: 45days

(4) Combined Group: Both the treatment schedules i.e. Yuktivyapasraya and Satvavajaya Chikitsa were adopted in this group. Patients of this group were administered with 40 ml Mamsyadi Kwatha twice daily after food, Suryanamaskara 4 cycles per day, Savasana - 10 minutes Pranayama - Kapalabhati - 8 minutes. Nadisodhana - 8 minutes were advised.

Duration: 45 days

For all patients Haritaki Churna, in the dose of 5 g was administered for 3 days with warm water, before the food intake at night for Koshta Shodhana.^[6]

(D) Diet:

No dietary restrictions. Routine hospital diet was given to the IPD patients. OPD patients were advised to continue their routine diet.

(E) Criteria for assessment:

Symptomatic relief obtained by the treatment was assessed periodically before the treatment and after every seven days till the completion of the treatment with the following criteria.

Quantitative assessment of the major symptoms was done on the basis of Hamilton's anxiety rating scale. Grades were given as 0 for absent, 1 for mild, 2 for moderate and 3 for severe and 4 for grossly disabling. Grading was adopted from the previous study Shreevatsa et al. [7]

Criteria for assessment

Sl.No.	Criteria	Assessment Criteria	Rating
1.	Anxious	Worries, Anticipation of the worst, fearful anticipation, irritability	
2.	Tension	Feeling of tension, fatigability startle response, moved to tears easily, trembling,	
		feeling of restlessness, inability to relax	
3.	Fears	Fears of dark, of strangers, of being left alone, of animals, of traffic, of crowds	
4.	Insomnia	Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on	
		waking, dreams, nightmares, night terrors	
5.	Intellectual	Difficulty in concentration, poor memory	
	(Cognition)		
6.	Depressed	Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal	
	Mood	swing	
7.	Somatic	Pain and aches, Twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady	
	(Muscular)	voice, increased muscular tone	
8.	Somatic	Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, picking	
	(Sensory)	sensation	
9.	Cardiovascular	Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting, feelings of	
	symptoms	missing beat	
10.	Respiratory	Pressure or constriction in chest, choking feelings, sighing, dyspnoea	
	symptoms		
11.	Gastro	Difficulty in swallowing, wind, abdominal pain, burning sensations, abdominal	
	intestinal	fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight,	
10	symptoms	constipation	
12.	Genito urinary	Frequency of micturition, urgency of micturition, amenorrhoea, menorrhagia,	
1.2	symptoms	development of frigidity, premature ejaculation, loss of libido, impotence	
13.	Autonomic	Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension, headache,	
1.4	symptoms	raising of hair	
14.	Behaviour at	Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face,	
	interview	sighing or rapid respiration, facial pallor, swallowing, belching, brisk tendon	
	N	jerks, dilated pupils, exopthalamos	

None = 0, Mild = 1, Moderate = 2, Severe = 3, Severe Grossly Disabling = 4



(E) Total effect of the therapy:

Total effect of the therapy was assessed in terms of cured, markedly improved, moderately improved, improved and unchanged with the following accounts.

- 1. CURED 100% shift of the grade of anxiety to 0% and 100% reduction in the score of Hamilton's rating scale
- 2. MARKEDLY IMPROVED More than 75% reduction in the score of Hamilton's anxiety rating scale
- 3. MODERATELY IMPROVED 50% to 75% reduction in the score of Hamilton's anxiety rating scale
- 4. IMPROVED 25% to 50% reduction in the score of Hamilton's anxiety rating scale
- 5. UNCHANGED Less than 25% reduction in the score of Hamilton's anxiety rating scale.

Statistical test – Unpaired t test was used to analyze the results.

RESULTS

In the present study out of 30 patients, 7 were treated in control Group, 7 were treated in Yuktivyapasraya Chikitsa Group, 7 were treated in Satvavajaya Chikitsa group and 9 patients were treated in combined treatment Group.

Effect of therapies on various parameters are presented in the Table 1 -15

Results of therapy were assessed mainly on the basis of Hamilton's anxiety rating scale. Statistically highly significant improvement can be noticed in Anxious mood (94.40%), Tension (100%),Cognitive impairment (90.46%), Depression (92.96%), Muscular (100%),Sensory symptoms symptoms (100%), CVS symptoms (100%), Respiratory (100%),system symptoms Autonomic nervous system symptoms (100%) Behaviour (100%) in Satvavajaya cikitsa group (p<0.001).

Statistically highly significant improvement can be noticed in Yuktivyapasraya Cikitsa Group in Anxious mood (66.66%), Tension (66.66%), Cognitive impairment (83.34%), Muscular symptoms (77.73%), Sensory symptoms (88.71%), Autonomic nervous system symptoms (71.4%) and Behaviour (100%) (P<0.001). (Table - 1, 2, 5, 7, 8, 14, 15)

In combined therapy group statistically highly significant (P<0.001) improvement has been noticed in Anxious mood (86.64%), Tension (86.654%), Cognitive Impairment (86.33%), Depression (77.77%), Muscular symptoms (90.89%), Cardiovascular symptoms (93.99%), Respiratory symptoms (89.98%), Genito Urinary System symptoms (82.35%), Autonomic Nervous system symptoms (90%) and Behaviour (86.48%). (Table – 1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

Effect of therapies on symptom profiles of Hamilton's anxiety rating was 11.15% in the control group. (Table 15)

DISCUSSION

Kapalabhati, a form of kriya is helpful for the purification of both body and mind hence this technique was implemented.

From the observations and results, it can be assessed that most of the group of symptoms that increase the anxiety disorders, as it is mentioned in Hamilton's Anxiety Rating Scale, can be effectively controlled by the three therapies i.e. Yukti vyapasraya Chikitsa, Satvavajaya Chikitsa and combined therapy. It is further conformed by the overall effect of total anxiety profile. Statistically highly significant improvement (P < 0.001)75.63% in Yukti vyapasraya Chikitsa group, 85.606% in Combined therapy group and 96.33% in Satvavajaya Chikitsa group can be noticed in the study.

In Satvavajaya Chikitsa group, the percentage wise relief was more when compared with



Yuktivyapasraya Chikitsa group and combined therapy group. These results highlight the role of Satvavajaya Chikitsa in the management of psychic disorders. In combined therapy, the percentage wise relief was less; it may be because of random sampling, chronicity of the disease, Avara Satvabala (Maximum number of patients i.e., 6 was from combined group). Avara Sara and Avara Samhanana (5 patients each) and Rajasika type of food consumption (5 patients out of 9). [1][8]

CONCLUSION

- From the present study it can be concluded that Yuktivyapashraya Chikitsa, Satvavajaya Chikitsa and the combined form of chikitsa are suitable in the management of Anavasthita Chittatva (General anxiety disorder).
- Mamsyadi Kwatha, is significantly useful in managing anxiety disorders

 Satvavajaya Chikitsa in the form of Yogic practices is ideal for the management of Anavasthita Chittatva (General Anxiety Disorder)

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Table 1: Effect of Therapies on Anxious Mood

Group	N	N	Iean					
		BT	AT	SD	SE	T	P	%
CG	7	3	2.571	0.534	0.202	2.118	< 0.1	14.30
YG	7	3	1	0.577	0.218	9.174	< 0.001	66.66
SG	7	2.57	0.142	0.975	0.368	6.597	< 0.001	94.47
Com.G	9	3.33	0.44	1.166	0.388	7.443	< 0.001	86.64

Table 2: Effect of Therapies on tension

Group	N	Me	ean					
		BT	AT	SD	SE	T	P	%
CG	7	3	2.571	0.534	0.202	02.118	< 0.1	14.3
YG	7	3	1	0.577	0.218	09.174	< 0.001	66.66
SG	7	3.428	0	0.786	0.297	11.542	< 0.001	100
Com G	9	3.33	0.44	1.166	0.388	07.443	< 0.001	86.64

Table 3: Effect of therapies on fears

Group	N	Me	ean					
_		BT	AT	SD	SE	T	P	%
CG	3	1.66	1.33	0.577	0.333	1	>0.1	19.88
YG	3	1.66	0.33	0.577	0.33	4.03	< 0.1	80.12
SG	4	1.5	0.5	0.5	0.25	5	< 0.05	83.33
Com G	6	2.166	0.5	0.816	0.333	4.984	< 0.05	76.91



Table 4: Effect of therapies on Insomnia

Group	N	Me	ean					
_		BT	AT	SD	SE	T	P	%
CG	6	2.166	1.833	0.516	0.21	1.585	>0.1	15.38
YG	6	2.166	0.333	0.983	0.401	4.563	< 0.01	84.62
SG	5	2.4	0.2	1.303	0.583	3.773	< 0.05	91.66
Com G	6	2.166	0.5	0.816	0.333	4.984	< 0.01	76.91

Table 5: Effect of therapies on cognitive impairment

Group	N	Me	ean					_
		BT	AT	SD	SE	T	P	%
CG	7	2.571	2.285	0.487	0.184	1.548	>0.1	11.13
YG	7	2.57	0.428	0.69	0.26	8.238	< 0.001	83.34
SG	7	3	0.285	0.951	0.359	7.559	< 0.001	90.46
Com G	7	2.44	0.33	1.054	0.351	6.014	< 0.001	86.33

Table 6: Effect of therapies on Depression

Group	N	M	ean	_	_			_
_		BT	AT	SD	SE	T	P	%
CG	6	1.66	1.66	0	0	0	>0.1	0
YG	6	1.5	0.166	0.516	0.21	6.33	< 0.01	88.66
SG	6	2.33	0.166	0.752	0.307	7.055	< 0.001	92.96
Com G	8	2.25	0.5	0.707	0.25	7	< 0.001	77.77

Table 7: Effect of therapies on muscular symptoms

Group	N	Me	ean					
		BT	AT	SD	SE	T	P	%
CG	6	1.5	1.5	0	0	0	>0.1	0
YG	6	1.5	0.333	0.408	0.166	7.024	< 0.001	77.73
SG	7	1.714	0	0.755	0.285	6.014	< 0.001	100
Com G	7	1.571	0.142	0.534	0.202	7.069	< 0.001	90.89

Table 8: Effect of therapies on sensory symptoms

Group	N	Me	ean					
		BT	AT	SD	SE	T	P	%
CG	7	1.285	1.142	0.377	0.142	1	>0.1	11.13
YG	7	1.285	0.142	0.377	0.142	8.028	< 0.001	88.71
SG	7	1	0	0	0	-	< 0.001	100
Com G	8	1.625	0	0.916	0.323	5.03	< 0.01	100

Table 9: Effect of therapies on CVS symptoms

Group	N	Me	ean					
		BT	AT	SD	SE	T	P	%
CG	7	1.285	1.285	0	0	0	>0.1	0
YG	7	1.285	0.285	0.577	0.218	4.587	< 0.01	77.82
SG	7	1.571	0	0.534	0.202	7.475	< 0.001	100
Com G	8	1.875	0.125	0.707	0.25	7	< 0.001	93.33



Table 10: Effect of Therapies on RS symptoms

Group	N	Me	ean					
_		BT	AT	SD	SE	T	P	%
CG	6	1.166	1	0.408	0.166	1	>0.1	14.24
YG	6	1.166	0.166	0.632	0.258	3.875	< 0.05	85.76
SG	7	1.14	0	0.377	0.142	8.042	< 0.001	100
Com G	7	1.428	0.142	0.487	0.814	6.983	< 0.001	89.98

Table 11: Effect of Therapies on GIT symptoms

Group	N	Me	ean					
-		BT	AT	SD	SE	T	P	%
CG	7	2.14	1.714	0.534	0.202	2.118	< 0.1	19.91
YG	7	2.142	0.571	0.786	0.297	5.289	< 0.01	73.34
SG	7	2.14	0	1.069	0.404	5.301	< 0.01	100
Com G	6	2.5	0.5	1.095	0.447	4.47	< 0.01	80

Table 12: Effect of therapies on GUS symptoms

Group	N	Me	ean					
_		BT	AT	SD	SE	T	P	%
CG	7	1.57	1.428	0.377	0.142	1	>0.1	9.05
YG	7	1.57	0.571	0.577	0.218	4.587	< 0.01	63.69
SG	5	1.4	0	0.547	0.244	5.737	< 0.01	100
Com G	8	2.125	0.428	0.886	0.313	5.591	< 0.001	82.35

Table 13: Effect of therapies on Autonomic nervous system symptoms

Group	N	Me	ean					
		BT	AT	SD	SE	T	P	%
CG	7	3	2.857	0.377	0.142	1	>0.1	4.77
YG	7	3	0.857	0.69	0.26	8.238	< 0.001	71.4
SG	7	2.714	0	0.487	0.184	14.75	< 0.001	100
Com G	9	3.33	0.33	0.886	0.288	10.41	< 0.001	90

Table 14: Effect of therapies on behavior

Group	N	M	ean					
		BT	AT	SD	SE	T	P	%
CG	7	3	2.571	0.534	0.202	2.11	< 0.1	14.3
YG	7	3	0.857	0.69	0.26	8.238	< 0.001	71.4
SG	7	2.85	0	0.377	0.142	20.11	< 0.001	100
Com G	9	3.33	0.44	0.927	0.309	9.339	< 0.001	86.48

Table 15: Effect of Therapies on symptom profile of Hamilton's anxiety rating scale

Group	N	M	ean					
		BT	AT	SD	SE	T	P	%
CG	14	2.07	1.839	0.168	0.444	5.28	< 0.001	11.15
YG	14	2.06	0.502	0.468	0.125	12.45	< 0.001	75.63
SG	14	2.13	0.09	0.734	0.196	10.44	< 0.001	96.33
Com G	14	2.39	0.34	0.602	0.161	12.71	< 0.001	85.606

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