CLINICAL EVALUATION OF VALUKA SWEDANA AND SHAMANA AUSHADI IN THE MANAGEMENT OF SNAYU GATA VATA W.S.R TO TENNIS ELBOW

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ABSTRACT

In *Ayurveda,Vata Vyadhi* is the given prime importance, in that context *Acharya's* have mentioned 80 *Vataj Nanatmaja Vikaras* along with the other *Vatavyadhies* in which *Snayu Gatavata* is one of the *Vyadhi* which is explained by the *Acharyas*. In which due to various *Aharaja, Viharaja, Karmaja* and *Manasika Nidanas* there is vitiation of *Vata Dosha*. And this vitiated *Vata* which settles down into the *Snayu* of the *Shareer* specially *Kurpara Sandhi* which produces *Lakshanas* like *Shoola, Kampa, Stambha* in the *Snayu* of the *Shareer*. Due to these sign and symptoms of *Snayu Gatavata* we can correlate it with tennis elbow. Tennis elbow is the condition in which there is a torn tendon of the elbow joint due to excessive work load which leads to the pain in elbow joint and loss of strength in holding the things. The incidence rate of tennis elbow is 4.5 per 1000 persons in a year. Tennis elbow does not means that it only affects the tennis players but it always affects the persons who use heavy mechanical tools with improper techniques. According to different *Acharyas Snehana Karma, Swedana Karma, Upanaha, Bandhana, Agnikarma* are explained under the treatment modalities for *Snayu Gatavata* which is cost effective and thereby beneficial for the welfare of the mankind*.*

KEYWORDS:-*Snayu Gatavata*, *Vatavyadhi*, Tennis elbow, *Valuka Swedana, Rasnadi Guggulu, Kaishora Guggulu, Kokilakshadi Kashayam.*

INTRODUCTION:-

The term *Vata* is derived from the root "*Va*" with "*kta*" *pratyaya*. And meaning of "Va Gatigandhanayo" is to move, to enlighten[1].*Vata dosha* is mainly responsible for movement in body. *Vata dosha* is the prime factor in disease manifestation. In *Vataja nanatmaja vyadhi* most of the diseases the *Gati* or *chalagunatva* of *vata* is vitiated. [2] *Vata* due to various *hetu* like *Ati bhara vahana*, *Ati vyama*, *Abhigata* etc gets vitiated in the *Shareera*. The term" *Gata*" is derived from the root" *Gam*" which means gone to, arrives at, situated in.[3]

This vitiated *Vata* travels and gets localises in a specific *Sthana* leading to depletion in the normal functioning of that *sthana.* In *Snayugata vata* vitiated *Vata* resides in *Snayu* and results into *Stambha*, *Kampa*, *Shoola*, *Aakshepa*.[4] The affliction of *Snayu* by *Prakupita Vata* results into *Karma Kshaya*.[5]*Acharyas* have mentioned various treatment modalities including *Snehana*(oleation), *Upanaha* (poultice), *Agnikarma*(cauterisation), *Bandhana* ,*Unmardana*.[6,7,8,9] By observing the symptoms we can consider tennis elbow under the wing of *Snayugata vata* condition. Tennis elbow (lateral epicondylitis) *Vata* (*vyana vata*) particularly affecting lateral epicondylar region of elbow. It rarely occurs before the age of 30 and is most common in the 4th or 5th decades of life. Most common condition which affects the elbow joint with an incidence of 1-3%. the dominant arm is more frequently affected. [10] Onset of symptoms may be sudden but is more commonly gradual. Manual laborers, smokers, heavy load carrying, and those who repetatively bend or straighten their elbow and have poor social support have been associated with higher rates of lateral epicondylitis.[11] Patients who are affected with this condition typically experience pain at the origin of the extensor muscle, pain with resisted wrist extension, and tenderness with palpation of the tendinous origin of the muscles (usually involved Extensor carpi radialis brevis) at the lateral humeral epicondyle. A more likely mechanism is a degenerative process, associated with a macroscopic or microscopic tendon tear, resulted from mechanical over load occuring during sports participation or at work.[12] Anti-inflammatory drugs are advised routinely for oral intake and local

application along with tennis elbow brace. Local infiltration with corticosteroids.[13,14] Various type of manipulations under anesthesia, physiotherapies, surgical treatments are advised. Patients are managed with conservative treatment mainly by NSAID'S refractory patients are given steroid injections which have respective adverse effects and complications in longterm usage. The patients who do not respond to conservative treatment have to opt for surgical intervention, but in surgery there are many complications and the treatment is very costly.

Therefore , in this study , a sincere attempt has been made to find a treatment protocol that can give relief and improves quality of life.

OBJECTIVES OF THE STUDY:-

➢ To Study the concept of *Snayugata Vata* and Tennis Elbow in detail.

➢ To Evaluate the combined efficacy of *Valuka Swedana* with *Rasnadi Guggulu* and there *Anupana* as *Kokilakshadi Kashayam* in *Snayugata Vata*.

➢ To Evaluate the combined efficacy of *Valuka Swedana* with *Kaishora Guggulu* and there *Anupana* as *Kokilakshadi Kashayam* in *Snayugata Vata*.

To Evaluate and compare the combined efficacy of both the groups in *Snayugata Vata*.

MATERIALS AND METHODS:-

➢ **Swedana:-** *Valuka Swedana*

➢ **Shamana Oushadi:-**

Guggulu:-*Rasnadi Guggulu, Kaishora Guggulu.*

Anupana:-*Kokilakshadi Kashayam.*

DIAGNOSTIC CRITERIA:-

 Pain on the Lateral Epicondyle of Humerus bone.

Tenderness over the Lateral Epicondyle.

Morning stiffness.

Cozen's test

Mill's maneuver

Maudsley's test

Pain during certain activities like pouring a container of liquid, lifting with the palm down, sweeping etc.

➢ **INVESTIGATION:-**

X-Ray Elbow joint.

➢ **INCLUSION CRITERIA:-**

1.) Signs and Symptoms of *Snayu Gatavata (Tennis Elbow)*.

2.) Age group between 20 to 60 years irrespective of sex, religion and occupation.

3.) Patients without any anatomical deformity will be included.

4.) Patients fit for *Swedana Karma*.

> **EXCLUSION CRITERIA:-**

1.) Malignant tumors, Senile Osteoporosis etc. in and around the elbow region.

2.) Patients associated with Golfer's elbow, Olecranon bursitis, Radial tunnel syndrome etc.

3.) Patients with history of Compound fracture, Pathological fracture, Non united fracture and Mal-united fracture of complaining limb.

4.) Pregnant and Lactating women's.

5.) Patients suffering from disease like Uncontrolled Diabetes Mellitus, Hypertension, Psoriatic Arthritis, *Gout*, Systemic Lupus Erythematosus, and Polymyalgia Rheumatica & Tuberculosis are excluded.

Parameter of study:-

1.) Subjective parameters:

❖ *Shoola* (Pain)

❖ *Stambha* (Stiffness)

❖ *Shopha* (Swelling)

2.) Objective parameters:-

❖ Visual Analogue Scale

❖ Cozen's test

❖ Mill's maneuver test

❖ Maudsley's test

Overall assessment of the study is made by assessing subjective and objective parameters before and after completion of the treatment. Statistical analysis is done by Student t test (paired and unpaired) and obtained results are measured according to grades given below;

Cured	100% relief in signs and symptoms.
Markedly improved	More than 76% relief in signs and symptoms.
Improved	26-75% relief in signs and symptoms.
Unchanged	Below 25% relief in signs and symptoms.

Intervention:-

The present clinical study contains sample size of 40 subjects, which was studied under two groups. The subjects which were fulfilling the inclusion criteria were examined properly and after that by knowing the *Nidanas* and *Samprapti,* the group of the treatment was choosed. The patient of both group first treated with *Valuka Swedana* for 7 days after that the patient who were included in Group A were prescribed with *Rasnadi Guggulu* along with *Kokilakshadi Kashayam* as *Anupanam* and in Group B subjects were prescribed with

Kaishora Guggulu along with *Kokilakshadi Kashayam* as *Anupanam*

for 30 days with follow up after every 15 days.

OBSERVATIONA ND RESULTS:-

EFFECT OF THERAPY ON SUBJECTIVE AND OBJECTIVE PARAMETERS IN SNAYUGATAVATA, IN GROUP A.

Table No.51 Effect of therapy on *Shoola:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
SHOOLA	45	17	1.400	62.22%	0.598	0.134	10.466	<0.0001	Highly Statistically Significant

Before treatment the parameter score was 45 which were changed to 17 after treatment with 62.22% relief. The total effect of therapy provides highly statistical significant (p<0.0001) result with 't' value of 10.466.

Table No. 52 Effect of therapy on *Shotha:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
SHOTHA	17	5	0.600	70.5%	0.503	0.112	5.339	<0.0001	Highly Statistically Significant

Before treatment the parameter score was 17 which were changed to 5 after treatment with 70.5% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 5.339.

Table No.53 Effect of therapy on *Stambha:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
STAMBHA	18	3	0.750	83.33%	0.716	0.160	4.682	=0.0002	Highly Statistically Significant

Before treatment the parameter score was 18 which were changed to 3 after treatment with 83.33% relief. The total effect of therapy provides highly statistically significant (p=0.0002) result with 't' value of 4.682.

Table No.54 Effect of therapy on Cozen test:-

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
COZEN TEST	35	12	1.150	65.71%	0.671	0.150	7.667	<0.0001	Highly Statistically Significant

Before treatment the parameter score was 35 which were changed to 12 after treatment with 65.71% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 7.667

Table No. 55 Effect of therapy on Mill Maneuver test:-

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
MILL MANEUVER TEST	26	10	0.800	61.53%	0.696	0.156	5.141	=0.0001	Highly Statistically Significant

Before treatment the parameter score was 26 which were changed to 10 after treatment with 61.53% relief. The total effect of therapy provides highly statistically significant (p

=0.0001) result with 't' value of 5.141.

Table No.56 Effect of therapy on Maudsley test:-

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
MAUDSLEY TEST	26	9	0.850	65.38%	0.671	0.150	5.667	<0.0001	Highly Statistically significant

Before treatment the parameter score was 26 which were changed to 9 after treatment with 65.38% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 5.667.

EFFECT OF THERAPY ON SUBJECTIVE AND OBJECTIVE PARAMETERS IN SNAYUGATAVATA, IN GROUP B.

Table No. 57 Effect of therapy on *Shoola:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
SHOOLA	41	9	1.600	78.0%	0.598	0.134	11.961	<0.0001	Highly Statistically significant

Before treatment the parameter score was 41 which were changed to 9 after treatment with 78% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 11.961.

Table No. 58 Effect of therapy on *Shotha:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
SHOTHA	20	7	0.650	65%	0.489	0.109	5.940	<0.0001	Highly Statistically significant

Before treatment the parameter score was 20 which were changed to 7 after treatment with 65% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 5.940.

Table No. 59 Effect of therapy on *Stambha:-*

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
STAMBHA	23	2	1.050	91.30%	0.510	0.114	9.200	<0.0001	Highly Statistically significant

Before treatment the parameter score was 23 which were changed to 2 after treatment with 91.30% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 9.200.

Table No. 60 Effect of therapy on Cozen test:-

PARAMETER	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	REMARKS
COZEN TEST	32	07	1.250	78.12%	0.550	0.123	10.162	<0.0001	Highly Statistically significant

Before treatment the parameter score was 32 which were changed to 07 after treatment with 78.12% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 10.162.

Table No. 61 Effect of therapy on Mill Maneuver test:-

Parameter	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	RE-MARKS
MILL MANEUVER TEST	22	5	0.850	77.27%	0.671	0.150	5.667	<0.0001	Highly Statistically significant

Before treatment the parameter score was 22 which were changed to 5 after treatment with 77.27% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 5.667.

Table No. 62 Effect of therapy on Maudsley test:-

Parameter	BT Score	AT Score	MEAN	% RELIEF	SD	SE	t Value	p Value	RE-MARKS
MAUDSLEY TEST	24	4	1.000	83.33%	0.562	0.126	7.958	<0.0001	Highly Statistically significant

Before treatment the parameter score was 24 which were changed to 4 after treatment with 83.33% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with 't' value of 7.958.

Table No. 63 Comparative efficacy of Therapies on Different Parameters in subjective parameters

SUBJECTIVE PARAMETERS:-

PARAMETERS	GROUP- A			GROUP- B			't'	SED	p	Remark
	Mean	S.D	S.E	Mean	S.D	S.E.				
SHOOLA	1.400	0.598	0.134	1.600	0.598	0.134	1.057	0.189	=0.2969	Statistically not significant
SHOTHA	0.600	0.503	0.112	0.650	0.489	0.109	0.3187	0.157	=0.7517	Statistically not significant
STAMBHA	0.750	0.716	0.160	1.050	0.510	0.114	1.5262	0.197	=0.1352	Statistically not significant

Table No. 64 Comparative efficacy of Therapies on Different Parameters in objective parameters

OBJECTIVE PARAMETERS:-

PARAMETERS	GROUP- A			GROUP- B			't'	SED	p	Remark
	Mean	S.D	S.E	Mean	S.D	S.E.				
COZEN TEST	1.150	0.671	0.150	1.250	0.550	0.123	0.5155	0.194	=0.6092	Statistically not significant
MILL MANEUVER TEST	0.800	0.696	0.156	0.850	0.671	0.150	0.2313	0.216	=0.8183	Statistically not significant
MAUDSLEY TEST	0.850	0.671	0.150	1.000	0.562	0.126	0.7664	0.196	=0.4482	Statistically not significant

The Mean Score of the Parameter *'Shoola'* in Group A is 1.400, S.D is 0.598 and S.E is 0.134. In Group B, The Mean Score of 'Parameter '*Shoola'* is 1.600, S.D is 0.598, S.E is 0.134. The Comparative Efficacy of Group A with Group B was statistically not significant (p=0.2969) with't' value of 1.057.

The Mean Score of the Parameter '*Shotha'* in Group A is 0.600, S.D is 0.503 and S.E is 0.112. In Group B, The Mean Score of 'Parameter '*Shotha'*

is 0.650, S.D is 0.489, S.E is 0.109. The Comparative Efficacy of Group A with Group B was statistically not significant (p=0.7517) with 't' value of 0.3187.

The Mean Score of the Parameter 'Stambha' in Group A is 0.750, S.D is 0.716 and S.E is 0.160. In Group B, The Mean Score of 'Stambha' is 1.050, S.D is 0.510, S.E is 0.114. The Comparative Efficacy of Group A with Group B was statistically not significant (p=0.1352) with 't' value of 1.5262.

The Mean Score of the Parameter 'Cozen test' in Group A is 1.150, S.D is 0.671 and S.E is 0.150. In Group B, the Mean Score of Parameter 'Cozen test' is 1.250, S.D is 0.550, S.E is 0.123. The Comparative Efficacy of Group A with Group B was statistically

not significant (p=0.6092) with 't' value of 0.5155.

The Mean Score of the Parameter 'Mill maneuver test' in Group A was 0.800, S.D is 0.696 and S.E is 0.156. In Group B, The Mean Score of 'Parameter 'Mill maneuver.'is 0.850, S.D is 0.671, S.E is 0.150. The Comparative Efficacy of Group A with Group B was statistically not significant (p=0.8183) with 't' value of 0.2313.

The Mean Score of the Parameter 'Maudsley test' in Group A is 0.850, S.D is 0.671 and S.E is 0.150. In Group B, the Mean Score of Parameter 'Maudsley test' is 1.000, S.D is 0.562, S.E is 0.126. The Comparative Efficacy of Group A with Group B was statistically not significant (p=0.4482) with 't' value of 0.7664.

Table No.66 Showing Result Assessments in Both Groups:-

Relief	No. of Patients GROUP A	No. of Patients GROUP B	Remarks
Less than 25%	00	00	Unchanged
26% to 75%	11	07	Improved
76 to 99%	03	03	Markedly improved
100%	06	10	Complete Relief

Table No. 67 Showing Parameter score Effect of therapy on individual subjects total parameters score:-

GROUP A				GROUP B			
BT	AT	BT-AT	PERCENTAGE	BT	AT	BT-AT	PERCENTAGE
163	51	112	68.71%	165	35	130	78.78%

The total symptoms score of 20 subjects before treatment in group A was 163 and after treatment the symptom score was 51, and the total symptoms score of 20 subjects in group B before treatment score was 165 and after treatment score was 35. The therapy provided 68.71% relief in group A and 78.78% relief in group B.

Discussion

Discussion is a critical part of any scientific research. *Ayurveda* is based on scientific ways of its kind. Facts mentioned in *Ayurvedic* classics are not merely stands on imaginations or logical interpretations but are written after careful investigations observations and experiments. Ancient research methodology has also accepted the importance of discussion prior coming to any conclusion.

In **Shoola** ; Group A parameter was 45 which is before treatment ,After treatment it reduces to 17; and got 62.22% relief from *Shoola*. The total effect of therapy provides highly statistically significant (p<0.0001) result with „t‟ value of 10.466. In Group B before treatment the

parameter score was 41 which were changed to 9 after treatment with 78% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with „t‟ value of 11.961. The comparison showed the result of *Valuka Swedana* along with *Shaman Oushadhi Kaishora Guggulu* showed marked relief than *Valuka Swedana* along with *Shaman Oushadhi Rasnadi Guggulu.* Because in *Kaishora Guggulu* the *Vedanastapaka Dravya* are more than that of the *Rasnadi Guggulu.*

SHOTHA:-

In Group A before treatment the parameter score was 17 which were changed to 5 after treatment with 70.5% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with „t‟ value of 5.339. In Group B before treatment the parameter score was 20 which were changed to 7 after treatment with 65% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with „t‟ value of

5.940. The comparison showed the result of *Valuka Swedana* along with *Shaman Oushadhi*

Rasnadi Guggulu showed marked relief than *Valuka Swedana* along with *Shaman Oushadhi*

Kaishora Guggulu because in Group A number of subjects with complain of *Shotha* is less

than in group B.

STAMBHA:-

In Group A before treatment the parameter score was 18 which were changed to 3

after treatment with 83.33% relief. The total effect of therapy provides highly statistically

significant (p=0.0002) result with „t" value of 4.682. In Group B before treatment the

parameter score were 23 which were changed to 2 after treatment with 91.30% relief. The

total effect of therapy provides highly statistically significant (p<0.0001) result with „t" value of 9.200. The comparison showed the result of

Valuka Swedana along with *Shaman Oushadhi Kaishora Guggulu* showed marked relief than *Valuka Swedana* along with *Shaman*

Oushadhi Rasnadi Guggulu. Because in *Kaishora Guggulu Depana, Pachana* and

Raktshodhanka Dravya are more than that of the *Rasnadi Guggulu.*

COZEN TEST:-

In Group A before treatment the parameter score was 35 which were changed to 12

after treatment with 65.71% relief. The total effect of therapy provides highly statistically

significant (p<0.0001) result with „t" value of 7.667. In Group B before treatment the

parameter score was 32 which were changed to 7 after treatment with 78.12% relief. The total

effect of therapy provides highly statistically significant (p<0.0001) result with „t" value of

10.162. The comparison showed the result of *Valuka Swedana* along with *Shaman Oushadhi*

Kaishora Guggulu showed marked relief than *Valuka Swedana* along with *Shaman Oushadhi*

Rasnadi Guggulu. Because in *Kaishora Guggulu* there are more *Vedanashamana Dravyas*

then *Rasnadi Guggulu* and *Raktshodhanka Dravya* are more than that of the *Rasnadi Guggulu.*

MILL MANEUVER TEST:-

In Group A before treatment the parameter score was 26 which were changed to 10 after treatment with 61.53% relief. The total effect of therapy provides highly statistically significant (p=0.0001) result with „t" value of 5.141. In Group B before treatment the parameter score was 22 which were changed to 5 after treatment with 77.27% relief. The total effect of therapy provides highly statistically significant (p<0.0001) result with „t" value of 5.667.The comparison showed the result of *Valuka Swedana* along with *Shaman Oushadhi Kaishora Guggulu* showed marked relief than *Valuka Swedana* along with *Shaman Oushadhi Rasnadi Guggulu* because in *Kaishora Guggulu Shothahara and Raktshodhanka Dravya's*are more than that of the *Rasnadi Guggulu.*

CONCLUSION:-

• Both the groups are effective in treating *Snayu Gatavata* (Tennis elbow).

• The overall result on *Snayu Gatavata* by *Kaishora Guggulu* is 78.78% and by *Rasnadi Guggulu* is 68.71%

• *Snayu Gatavata* occurs mostly in the age group of 41 to 50 years because in this age group the degeneration of the body tissue is going to start.

• In *Snayu Gatavata* most of the females are affected because due to excessive daily physical exertion and no time for self's due to household works.

• Maximum number of subjects reported with *Vishmagni* which is produced as a result of *Vataprakopa* hence it justify the *Acharyas* statement that *Vata Prakopa* leads to *Vishmagni.*

• In this study most peoples were reported with *Vata Kapha Prakruti* in *Snayu Gatavata* because both *Doshas* having *Sheeta Guna* as similarity. *Snayu Gatavata* is *Vatapradhana* disorder and *Vata* having *Sheeta Guna.*

• In this study *Kaishora Guggulu* having good result over the *Shoola*(78%) and *Stambha* (91.30%) then *Rasnadi Guggulu* because there more

ingredients who act as a *Vedanastapna* and *Deepana, Pachana* then *Rasnadi Guggulu.*

- In this study *Rasnadi Guggulu* having good result over the *Shotha*(70.5%) then *Kaishora Guggulu* because the number of the subjects appeared with *Shotha* in Group A is more than that of Group B.

- No proper information is there regarding the relapse of this disease because the study duration is just 37 days.

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