

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 7.523

Volume 6, Issue 4, 530-535.

Research Article

ISSN 2277-7105

# STUDY THE EFFECT OF SELECTED YOGIC KRIYA IN THE MANAGEMENT OF RHEUMATOID ARTHRITIS (AMAVATA) OF KNEE JOINT.

<sup>1</sup>\*Dr. Suhas Uttamrao Sakhare and <sup>2</sup>Dr. Yeshwant Rajpal Patil

<sup>1</sup>(PG Scholar) Govt. Ayurved College Nanded, Maharashtra, India.

<sup>2</sup>Guide and HOD, Dept. of Swasthvritta and Yoga, Govt. Ayurved College, Nanded.

Maharashtra, India.

Article Received on 26 Jan. 2017,

Revised on 16 Feb. 2017, Accepted on 09 March 2017

DOI: 10.20959/wjpr20174-8148

\*Corresponding Author Dr. Suhas Uttamrao Sakhare

(PG Scholar) Govt. Ayurved College Nanded,

Maharashtra, India.

#### **ABSTRACT**

Amavata is a commonest disorder seen in middle age people which affect both the sex, characterized by angmarda (Body pain), Aruchi (loss of taste), Trishna (thirst), Alsya (loss of enthusiasm), Gourava (heaviness), klama (tiredness without doing work), Apaka (indigestion) and fever. In the later stage pain may begin to migrate from place to place with a Vrishchika damshavat vedana(intense stinging type of pain) and burning sensation. Similar symptoms seen in Rheumatoid Arthritis in modern science. The treatment principle includes the pain management and steroids in allopathic medicine. In Ayurveda according to our classical Langhana (Light diet or fasting), Deepana,

pachana, Samshodhna (Different purifications) are suggested. In the present clinical study 20 Rheumatoid arthritis (Amavata) of knee joint patients were registered from the O.P.D. & I.P.D from all 20 patients 15 patients completed the treatment. The aim of the study was to see the effect of Pavanmuktasana, Vajrasana, Padmasana and Tadasana in Rheumatoid Arthritis (Amvata) of knee joint. Statistical analysis shows improvement in pain and stiffness of knee joint.

**KEYWORDS:-** Amavata, Rheumatoid arthritis, knee joint, Pavanmuktasana, Vajrasana, Padmasana, Tadasana.

#### INTRODUCTION

Being an eternal science, *Ayurveda* is the science of life deals with physical, psychological as well as spiritual wellbeing of an individual. It covers all the spheres of human life. All human being wish to live a healthy life in their healthy and active body.

The man is precious creature on the earth. He want to go for diversified to enjoy the life. For such activities harmony of musculoskeletal system is the minimum requirement. Now a day *Amavata* is a major health problem in 25 years and above age.

There are several such disorders which curtail one from leaving a happy and active life. *Amavata* is one of such disorders. *Amavata* is one of most common musculoskeletal disorder. It limits everyday activities of healthy person, thus making individual handicapped. Yoga promotes a holistic living-a drugless and disease free living uniting the physical, mental and spiritual aspect of our life into one platform. The great news with Yoga is that it is less complicated, hardly expensive, and easily affordable and can be practiced by one and all. It is helpful in the prevention and cure of different chronic disease. As a result, we have included certain yoga practices for the management of the Amavata in this clinical study.

#### REVIEW OF LITERATURE

#### आसन

हठस्यः प्रथमांगत्वाद आसनं पूर्वमुच्यते ॥ कुर्यात आसनं स्थिर्यम आरोग्यं च आंगलाघवम् ॥ घे.सं १/१७ तद आसन स्थिर्य देहस्य मनसश्चाञयल्यरुपरजोधर्मनशकर्त्वेन् स्थिरतां कुर्यात् ।

# पद्मासन :

क्रुत्वासंपुटितो करौ दृढ्तर् बद्ध्वा तु पद्मासनं गाढं वक्षसि सन्निधाय चिबुकं ध्यायंश्च तच्चेतसि ॥ ह.ठ. १/४८

# A) Inclusion criteria

- 1. Patients of either sex.
- 2. Patients between age group 25 to 75 years will be selected.
- 3. Patients presenting with classical features of *Amavata* will be selected.

#### B) Exclusion criteria

1. Patient below 25 years and above 75 years.

- 2. Patients suffering with other systemic disorders like Cardiac disease, Renal disease etc.
- 3. Patients suffering from metabolic disorders.
- 4. Pregnant and Lactating Women.
- 5. Un-cooperative Patients

## C) Discontinuation & withdrawal

- 1) Patient following the treatment very irregularly.
- 2) Patient willing to discontinue the trial.
- 3) After screening for inclusion criteria for study 20 patients having Rheumatoid arthritis of knee joints are included.
- 4) Among these 20 patients 15 patients gave regular follow up hence those 15 patients are included for proposed study.

#### SUBJECTIVE PARAMETERS

Sandhi Graha (Knee Joint Stiffness)				
1.	No stiffness	0		
2.	Stiffness lasting from 5 min. to 2 hr.	1		
3.	Stiffness lasting from 2hr. to 4 hr.	2		
4.	Stiffness lasting from more than 4 hr.	3		

Sandhi Shool (Knee Joint Pain)				
1.	No pain	0		
2.	Occasional Pain	1		
3.	Pain during Excess Work	2		
4.	Constant pain disturbing Routine	3		

#### **OBJECTIVE PARAMETERS**

1. Rheumatoid Arthritis (RA) Test.

RA TEST				
1.	Non Reactive	0		
2.	Reactive	1		

#### **METHODOLOGY**

#### A. Plan for Asana

Time Schedule: Daily morning at 6 to 6.25 am

1. Prartharna: for 2 min

2. Breathing Awareness before Asana: for 3 min

3. Time for Padmasana: 5min.

4. Time for Vajrasana: 5min.

5. Time for Pawanmuktasana: 3min

6. Time for Tadasana: 2min

7. Breathing awareness and after Asana: for 5 min

8. No pre & post medication and food is given during Asana Schedule.

9. Liquid diet before and after Asana upto 30 min avoided.

# Selection of Patients and duration of study

It is randomize control clinical trial. In this study 20 patients were randomly included after screening by inclusive and exclusive criteria. All selected patients adviced Padmasana, Vajrasana, Pawanmuktasana, Tadasana daily 25 min. for 1 month.

Selected subjective and objective criteria for this disease were recorded at the start of the study, the clinical data again recorded at the end of the study period of one month.

#### **Statistical Analysis**

Table 1: Difference of Sandhi Graha before and After Treatment

	Mean	S.D.	S.E.	t value	p value
B.T.	1.467	0.8338	0.2153	4.000	0.0013
A.T.	0.9333	0.7988	0.2063		0.0013

p<0.005 significant.

Table 2: Difference of Sandhi shool before and after treatment

	Mean	S.D.	S.E.	t value	p value
B.T.	2.067	0.7988	0.2063	4.036	0.0012
A.T.	1.333	0.9759	0.2520		0.0012

p<0.005 significant.

Table 3: Difference of R.A. test before and after treatment

	Mean	S.D.	S.E.	t value	p Value
B.T.	1.000	0.0000	0.0000	1.468	0.1642
A.T.	0.8667	0.3519	0.09085		0.1643

p>0.005 Not Significant.

#### **OBSERVATION AND DISCUSSION**

Every action has an equal and opposite reaction. Muscular contraction and gravity creat opposing forces across the joint surface, known as a joint reaction forces. It is important to spread these forces over the greatest possible joint surface area.

Padmasana, Tadasana, Vajrasana and Pavanmuktasana have the capacity to sublux or take a joint into an incongruent position. In Rheumatoid Arthritis it is important to maintain a balance between sedentary life, which may reduce inflammation and exercise, which may reduce stiffness and weakness. While traditional guidelines have restricted RA patients to only gentle exercise, Therefore Yogasana helps in knee joint for moderate exercise in Rheumatoid Arthritis.

In above study it shows that there is subside in pain and stiffness of knee joint. Padmasana, Tadasana, Vajrasana and Pavanmuktasana these Asana increase the space within knee joints, provides both extension and flexion and strengthen surrounding ligaments. There are 20 patients selected randomly and from all 20 patients 15 patients completed one month trail of selected yogasana with showing significant result in pain and stiffness. from all 15 R.A. reactive patients, 2 patients shows significant result in R.A. test means R.A. test become non reactive. Therefore statistical analysis shows significant result in Sandhi shool (pain) and Sandhi Graha (stiffness) but not in R.A. test.

#### **RESULT**

The result indicates selected Yogic Kriyas are effective in subjective parameters means sandhi shool and sandhi graham but there is no significant changes seen in R.A. test.

## IMAGES DURING SELECTED YOGASANA TRIALS



#### **CONCLUSION**

Yoga Practice is helpful to decrease symptoms in Rheumatoid arthritis (Amvata) of Knee Joint.

#### **ABBREVIATIONS**

- R.A. Rheumatoid Arthritis
- B.T. Before Treatment
- A.T. After Treatment
- S.D. Standard Deviation
- S.E. Standard Error

#### REFERENCES

- 1. Harshmohan. Textbook of Pathology 4<sup>th</sup> Edition, Jaypee publication.
- 2. "Ashtang Hridayam". 8<sup>th</sup> Edition, Chaukhamba Prakashan, Varanasi.
- 3. *Charak Samhita* with Commentary by Chakrapani as "Ayurved Dipika". Edition 2006 Chaukhamba Prakashan Varanasi.
- 4. *Madhav-Nidan* with Madhukosh commentary By Brahmananda Tripathi. Edition 2005, Chaukhamba Prakashan Varanasi.
- 5. Nicholas A.Boon Brain R.Walker. *Davidson's Principles and Practice of Medicine*. 20<sup>th</sup> Edition Elsevier Publication.
- 6. Hatoyog Pradipika. Swatmaram Yogi. Edition 1985. Kshemraj Shrikrishndas.
- 7. *Patanjalyog Darshan*. Swami Shribrahmlin Yogi. Edition 1995. Chaukhamba Sanskrit Prakashana.
- 8. Wikipedia free Encyclopedia.