

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 8, 975-983.

Research Article

ISSN 2277-7105

# EFFECT OF RUTU ON AGNIBALA AND SHARIRBALA WITH SPECIAL REFERENCE TO AGNIPAREEKSHA

1\*Dr. Amol Ramchandra Awalekar and 2Dr. Rakesh Khanderao Nikam

<sup>1</sup>HOD Department of Rog Nidan SSAAH&C, Jath.

<sup>2</sup>Associate Professor Department of Agad Tantra SSAAH&C, Jath.

Article Received on 02 March 2024,

Revised on 22 March 2024, Accepted on 12 April 2024

DOI: 10.20959/wjpr20248-32026



\*Corresponding Author
Dr. Amol Ramchandra
Awalekar

HOD Department of Rog Nidan SSAAH&C, Jath.

#### **ABSTRACT**

Ayurveda is the life science and one out of two aims of Ayurveda is Swasthyarakshana i.e. maintenance of health. As the food is the fuel of the body and ultimately is responsible for the nutrition of body and providing energy to body. So everyone have to know the physiological and environmental changes season to season which effects on the nutrition of body. The aim of this study was to assess the effect of Rutu on Agnibala with the help of Agnibala Pariksha. Sample size of 60 volunteers selected by applying inclsion and exclusion criteria. The 6 Rutu explained in Charak samhita were considered for the research. Agnibala was examined by observing Abhyavaharan shakti and Jaranya Shakti.

**KEYWORDS:** Rutu, Agnibala, Abhyavaharan Shakti, Jaranya Shakti.

#### INTRODUCTION

Human is unable to control environmental changes due to season (rutu). He has no capacity to control the motion of celestial bodies like Sun, Moon etc. They make tremendous impact on human physiology. Considering this, Charaka-Samhita prescribed regimen of every season (rutu) so that a human can stand the changes in the seasons (rutus) with keeping the agni and sharirbala stable. One out of two aims of Ayurveda one is 'Swasthyarakshana' i.e. maintenance of health. In spite of mentioning all these important aspects for keeping human life healthy, Ayurveda always had a big emphasis on maintenance of agni. In present era of competition, everyone is trying to survive the fittest and facing various stressful experiences in life. To achieve the success, human being life style is going to change continuously. He has no time even for taking balanced diet. Thats why person does not get proper nutrition,

due to this immunity of person lowered. In Charak Samhita they have told to follow the daily regimen, regimen according to Rutu and in that thry have described that in which Rutu the digestive fire is strong and in which Rutu the digestive fire is weak. According to this law we in today's era have to follow the regimen according to Rutu and maintain our health. For agniparikashan we have to concentrate on two points viz. 1) Abhyvaharanshakti 2) Jaranshakti i.e. capacity of eating food at a time without any complicatios and time required to digest the food properly consequently. Along with these two points we also have to consider the gunas of aahar, kshudapravrutti, desh, vaya and important is rutu accordingly which Agnibala differs in different rutu. The knowledge of Agnibala helps to maintain the swasthya as well as for the treatment aspect.

#### **AIM**

To study the effect of rutu on agnibala with the help of Ayurvedic literature and modern literature.

#### **OBJECTIVE**

- 1) Study the effect of abhyavaharanashakti and jaranshakti on agniparikshan.
- 2) To study the effect on agnibala from person to person in each rutukala and rutusandhikala.

# **MATERIAL**

#### 1) SAMPLE SIZE

Record of 60 healthy volunteers in each Rutukala and Rutusandhikala are taken.

### 2) RUTU

- 1. Informed permission about performing the thesis work on 60 healthy volunteers in age group 18-22 year from the principal of college.
- 2) The 6 Rutu explained in Charak samhita are considered for the research.
- 3) The particular Lakshanas of each Rutu are taken from the Bruhatrayee.
- 4) The dates of beginning and end of these months will be decided through Marathi Panchanga published by Sholapur by the recognized honorable Mr.Date.
- 5) The Rutukala and Rutusandhikala period of each Rutu is decided according to-A.S.Su.4/61.

#### 3) AGNI

Agni is considered as Jatharagni. Compilation of all the references from Charak samhita, Sushrut samhita, Ashtang Sangrah.

#### **INCLUSION CRITERIA**

- 1. Healthy volunteers in between 18 24 yr age group.
- 2. Volunteers will be irrespective of cast and religion and which belongs to same social and Economical class.
- 3. Volunteers selected from Sadharana desh

#### **EXCLUSION CRITERIA**

- 1. Person suffering from any disease related to digestive system, cardiovascular system etc.
- 2. Mental retarded people.
- 3. Pregnant and lactating women.

#### CRITERIA FOR ASSESSMENT

Agnibala in different rutukala and rutusandhikala as follows-

- 1) For Abhyavaharanashakti -
- I. Time of food intake -
- II. Name of food product -
- III. Quantity of food taken -
- IV. Time and quantity of water intake -
- V. Qualities of food taken (Gurvadi, Rasadi) –

#### Annagrahan matra

Prabhut / Madhyam / Alpa

Kshudha praman -

Atibhuk / Dravyabhuk / Prabhutashan / Alpashan / Alpakshudha

#### On the basis of above factor Abhyavaharanashakti

- i) Uttam
- ii) Madhyam
- iii) Heen
- 2) For Jaranashakti

# **Observing following symptoms**

Clockwise time Time from food taken

- · Udgar shuddhi-
- Utsah- -
- · Sharir laghav-
- · Hunger-
- Thirst-
- Malotsarjana-
- · Mutrotsarjana-
- Vatanulomana-
- · Time from food taken-

For assessment –Normal digestion time -4 yam (8-10 hr.) Astang S.11/61

Tikshnagni - <4 yam

Mandagni - >4 yam

Samagni - 4 yam

Vishamagni - >4 or <4 yam

## **Agnibala**

- 1. Uttam Samagni
- 2. Madhyam-Tikshnagni, Vishamagni
- 3. Heen Mandagni

Agnibala - Time for lakshana observed from food intake

- 1) Uttam-8-10hr,10-12hr.
- 2) Madhyam- 4-6 hr, 6-8 hr, 12-14hr
- 3) Heen Abhove 14 hr.

#### **METHODS**

- 1) Rutu, Rutukala and Rutusandhikala are decided according to the majority of lakshan by Darshan, Sparshan Pareeksha.
- 2) Methods for Agnibala Pareeksha
- a) Method for observation of Abhyavaharanshakti-

For this Prashna Pareeksha is used,

• Time for food intake

- Name of food article
- Quantity of food
- Time and quantity of water intake

Then Guruta and Laghuta of diet is decided.

Gradation for Abhyavaharanashakti-

- 1. Grade 01 (Uttam)
- 2. Grade 02 (Madhyam)
- 3. Grade -03 (Heen)
- b) Methods for observation of Jaranashakti –

This is observed with the help of Prashna Pareeksha.

Gradation for Jaranashakti – 1. Grade – 01 (Uttam)

2. Grade - 02 (Madhyam) 3. Grade – 03 (Heen)

# Gradation for Lakshna of digesion of food

- 1. Grade 01 (4-6 hr.)
- 2. Grade 02 (6-8 hr.)
- 3. Grade -03(8-10 hr.)
- 4. Grade- 04 (10-12 hr)
- 5. Grade-05 (12-14 hr.)
- 6. Grade- 06 (After 14 hr.)

#### **OBSERVATION**

Table No. 1: Effect of Rutu on Agnibala.

Dutu Agni	Shishir		Vasant		Grishma		varsha		Sharad		Hemant	
Rutu-Agni	S	M	S	M	S	M	S	M	S	M	S	M
Uttam(Grade01)	4	9	0	4	2	0	1	6	6	12	30	36
Madhyam (Grade02)	41	40	25	32	19	20	22	20	34	42	22	14
Heen(Grade03)	15	11	35	24	39	40	37	34	20	6	8	10

- (S-Sandhikala, M-Rutukala)
- 1) In Shishirrutu Sandhikala 4 (6.66%) volunteers are of Uttam Agnibala, 41(68.33%) Volunteers are of Madhyam Agnibala and 15 (25%) volunteers are of Heen Agnibala. So there is Madhyam Agnibala in Shishirrutu.

- 2) In Shishirrutukala 9(15%) volunteers are of Uttam Agnibala, 40(66.66%) Volunteers are of Madhyam Agnibala and 11 (18.33%) volunteers are of Heen Agnibala. So there is Madhyam Agnibala in Shishirrutukala.
- 3) In Vasantrutu Sandhikala 0 volunteer of Uttam Agnibala, 25(41.66%) Volunteers are of Madhyam Agnibala and 35 (58.33%) volunteers are of Heen Agnibala. So there is Heen Agnibala in Vasantrutu Sandhikala.
- 4) In Vasantrutukala 4(6.66%) volunteers are of Uttam Agnibala, 32(53.33%) Volunteers are of Madhyam Agnibala and 24 (40%) volunteers are of Heen Agnibala. So there is Madhyam Agnibala in Vasantrutukala.
- 5) In Grishmarutu Sandhikala 2(3.33%) volunteers of Uttam Agnibala, 19(31.66%) Volunteers are of Madhyam Agnibala and 39 (65%) volunteers are of Heen Agnibala. So there is Heen Agnibala in Grishmarutu Sandhikala.
- 6) In Grishmarutukala 0 volunteer of Uttam Agnibala, 20(33.33%) Volunteers are of Madhyam Agnibala and 40 (66.66%) volunteers are of Heen Agnibala. So there is Heen Agnibala in Vasantrutukala.
- 7) In Varsharutu Sandhikala 1(1.66%) of Uttam Agnibala, 22(36.66%) Volunteers are of Madhyam Agnibala and 37 (61.66%) volunteers are of Heen Agnibala. So there is Heen Agnibala in Varsharutu Sandhikala.
- 8) In Varsharutukala 6(10%) volunteers of Uttam Agnibala, 20(33.33%) Volunteers are of Madhyam Agnibala and 34 (56.66%) volunteers are of Heen Agnibala. So there is Heen Agnibala in Varsharutukala.
- 9) In Sharadrutu Sandhikala 6(10%) volunteers of Uttam Agnibala, 34(56.66%) Volunteers are of Madhyam Agnibala and 20 (33.33%) volunteers are of Heen Agnibala. So there is Madhyam Agnibala in Sharadrutu Sandhikala.
- 10) In Sharadrutukala12(20%) volunteers of Uttam Agnibala, 42(70%) Volunteers are of Madhyam Agnibala and 6 (10%) volunteers are of Heen Agnibala. So there isMadhyam Agnibala in Sharadrutukala.
- 11) In Hemantrutu Sandhikala 30(50%) volunteers of Uttam Agnibala, 22(36.66%) Volunteers are of Madhyam Agnibala and 8 (13.33%) volunteers are of Heen Agnibala. So there is Uttam Agnibala in Hemantrutu Sandhikala.
- 12) In Hemantrutukala 36(60%) volunteers of Uttam Agnibala, 14(23.33%) Volunteers are of Madhyam Agnibala and 10 (16.66%) volunteers are of Heen Agnibala. So there is Uttam Agnibala in Hemantrutukala.

#### STATISTICAL ANALYSIS

For testing of hypothesis, "Kruskal – Wallis test" with dunn test as post hoc (if significant difference is observed) has been used. Level of significance has been kept at 5% for all tests.

Rutu * Bala	Kala	Kruskal-Wallis statistic	d.f.	P- Value
Rutu * agnibala	Sandhikala	87.139	5	< 0.001
	Rutukala	94.085	5	< 0.001
Rutu * sharirbala	Sandhikala	46.138	5	< 0.001
	Rutukala	93.996	5	< 0.001

#### **DISCUSSION**

The Visarga period is Somya. The sun moves to south. Its power decreased by clouds, wind and rain. In Hemant Rutu due to cold environment the Dehoshma get obstructed in the body which increases the Jatharagni, So due to the increased Jatharagni body needs more Brahana and Snigdha Ahar. During Adana Kala the digestion become poor which is further disturbed by the Vata disorders etc. during rainy season. Due to earth vapors, humidity of clouds and Amla paka of water the digestive power becomes weak. In this research study the Agnibala is Uttam in Hemant Rutukala and sandhikala, while it is Heen in Grishma Rutukala and Sandhikala majority.

#### Effect of Rutu on Agnibala

**a) Sandhikala-** For sandhikala, there is significant difference between agnibala of various Rutus as suggested by Kruskal- Wallis test (P-value < 0.001). The dunn test for pairwise comparison provides following result-

	Agnibala (S	Sandhikala)			
Rutu	Mean Median		Significantly different agnibala than		
	grade	grade			
Shishir	2.2	2.0	Vasant, Greeshma, Varsha, Hemant		
Vasant	2.6	3.0	Sharad, Hemant, Shishir		
Greeshma	2.6	3.0	Sharad, Hemant, Shishir		
Varsha	2.6	3.0	Sharad, Hemant, Shishir		
Sharad	2.2	2.0	Vasant, Varsha, Greeshma, Hemant		
Hemant	1.6	1.5	Shishir, Vasant, Greeshma, Varsha, Sharad		

Post Hoc test: Dunn test for Rutu \* Agnibala (Sandhikala)

Pairwise comparison (P-values)	Shishir	Vasant	Greeshma	Varsha	Sharad
Vasant	< 0.001				
Greeshma	< 0.001	0.340			
Varsha	< 0.001	0.418	0.418		
Sharad	0.286	0.002	< 0.001	0.001	
Hemant	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

#### b) Rutuakala

For Rutukala, there is significant difference between agnibala of various Rutus as suggested by Kruskal- Wallis test (P-value < 0.001). The dunn test for pairwise comparison provides following result-

Rutu	Agnibala (	(Madhykala)	Significantly different agnibala than			
Kutu	Mean grade   Median grade		Significantly different aginbala than			
Shishir	2.0	2.0	Vasant, Greeshma, Varsha, Hemant			
Vasant	2.3	2.0	Sharad, Greeshma, Hemant, Shishir			
Greeshma	2.7	3.0	Vasant, Sharad, Hemant, Shishir			
Varsha	2.5	3.0	Sharad, Hemant, Shishir			
Sharad	1.9	2.0	Vasant, Varsha, Greeshma, Hemant			
Hemant	1.6	1.0	Shishir, Vasant, Greeshma, Varsha, Sharad			

Post Hoc test: Dunn test for Rutu \* Agnibala (Madhyakala)

Pairwise comparison (P-values)	Shishir	Vasant	Greeshma	Varsha	Sharad
Vasant	0.009				
Greeshma	< 0.001	0.004			
Varsha	< 0.001	0.121	0.067		
Sharad	0.151	< 0.001	< 0.001	< 0.001	
Hemant	< 0.001	< 0.001	< 0.001	< 0.001	0.017

#### **RESULTS**

- 3) Rutu affects on Agnibala in each rutukala and sandhikala.
- 4) The majority of Uttam Agnibala is observed in Hemant rutu Sandhi and Rutuakala.
- 5) The majority of Madhyam Agnibala is observed in Sharadrutukala and Shishirrutu Sandhikala.
- 6) While majority of Heen Agnibala is observed in Grishma rutukala and Varshasandhikala.

#### **REFERANCES**

- 1. Amarakosh-Pandit Harigovind Shastrina-4th 1968-Choukhmbha Prakashana varanasi.
- 2. Ayurved Shabdakosh Veni Madhav Shastri-1968 -Maharastra Rajaya Sahitya mandal, Mumbai.
- 3. Charak samhita -part1-Vidyadhar shukla, Rvidatta Tripathi- 8th 2004-Choukhmbha Prakashana varanasi.
- 4. Charak samhita part 2 -Vidyadhar shukla, Rvidatta Tripathi -8th 2004. Choukhmbha Prakashana varanasi.
- 5. Sushrut samhita part1 Ambikadatta Shastri -9th 2005 -Choukhmbha Prakashana varanasi.

- 6. Sushrut samhita part2-Ambikadatta Shastri -9th 2005 -Choukhmbha Prakashana varanasi.
- 7. Ayurved Dipika Commentar by Chakrapanidatta.- Vaidya Yadavji Trikamji ACarya, 4th 1981 Munshiram Manoharlal- Publication Pvt. Ltd.
- 8. Madhav Nidan -Shri Yadunandopadhyaya -2005- ChoukhmbhaPrakashana, varanasi.
- 9. Textbook of Practical physiology -C L Ghai, 5th 1999 Jaypee Brothersmedical publishers (p) LTD, Delhi.

983