Advances in Bioresearch

Adv. Biores., Vol 12 (6) November 2021: 180-183 ©2021 Society of Education, India Print ISSN 0976-4585; Online ISSN 2277-1573 Journal's URL:http://www.soeagra.com/abr.html CODEN: ABRDC3 DOI: 10.15515/abr.0976-4585.12.6.180183

Advances in Bioresearch

ORIGINAL ARTICLE

Influence of Rutu Haritaki on Kapha Prakopa among The Healthy Individuals in Vasanta Rutu (Spring Season)

Gurubasavaraj. Yalagachin, T.B. Tripathy, Akshay. B. Hiremath

Department of PG studies in Swasthavritta, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka, India.

ABSTRACT

Seasonal vitiation of Dosha manifest certain symptoms in the human body. If such symptoms are more intense and an individual's lifestyle is defective, it may lead to pathogenesis phase and disease manifestation. Haritaki (Terminalia Chebula) with Madhu (Honey) is a recommended combination for oral consumption in Vasanta Rutu (Spring Season) to prevent Kapha Prakopa (Aggravation of Kapha Dosha) which may lead to Kaphaja Vyadhi. To assess the preventive effect of Rutu Haritaki in Vasanta Rutu (Spring season) against Kapha Prakopa among healthy volunteers. 150 apparently healthy subjects were divided into control and trial group of 75 each by convenient sampling method. Haritaki with Madhu was administered in trial group where as other group was kept as control without any intervention. The presence of classical Kapha Prakopa Lakshana were assessed in both groups before and after the completion of Vasanta Rutu (Spring season). Out of 15 classical Kapha prakopa Lakshanas, except Sneha, Shopha and Lavana lakshanas, the P Value is significant in remaining 12 Lakshanas, establishing the efficacy of preventive effect of Rutu Haritaki on Kapha Prakopa Lakshana of healthy participants in Vasanta Rutu. This study reveals the results where preventive effect of Rutu Haritaki in Vasanta Rutu against manifestation of Kapha Prakopa Lakshanas is established.

Keywords: Rutu Haritaki, Kapha Prakopa, Vasanta Rutu.

Received 16.08.2021 Revised 21.09.2021 Accepted 16.11.2021

How to cite this article:

G.Yalagachin, T.B.Tripathy, A.B.Hiremath Influence of Rutu Haritaki on Kapha Prakopa among The Healthy Individuals in Vasanta Rutu (Spring Season). Adv. Biores. Vol 12[6] November 2021: 180-183

INTRODUCTION

Tridosha (Vata, Pitta & Kapha) are referred to as Tristhuna as they are responsible for sustenance of the body like three pillars. When the same pillars (Doshas) get vitiated, may lead to the destruction of the body [1]. Dosha vaishamya is of two types i.e. Dosha Vriddhi & Dosha Kshaya [2]. The three main etiologies for Dosha Vaishamya are Asatmyendriyartha Samyoga (Improper Sensual Combination), Prainaparadha (Intellectual Offence) and Parinama (Time Period/ Season) [3]. Parinama is a time factor where seasonal variation impact the Dosha Vaishamya(Vriddhi) into two stages Chaya & Prakopa followed by normalizing stage of Prashamana (Pacification). Kapha Dosha is known as Soma, Bala, Ojas, Balasa, Balaska and Shleshma [4]. The seasonal Dosha Vaishamya for Kapha Dosha is Chaya in Shishira Rutu, Prakopa in Vasanta Rutu and Prashamana in Greeshma Rutu [5]. During Prakopa of Kapha in Vasanta Rutu, the individual will become symptomatically ill, which if neglected will lead to further progress of Dosha Vaishamya into Shatkriyakala (Six stages of Pathogenesis) [6, 7] causing severity of the diseases Kapha Prakopa Lakshanas mentioned by Ashtanga Hrudaya are Sneha (oiliness), Katinya(Amrudutwam / Hardness or Rigidity), Kandu(itching), Sheeta (feeling of coldness), Gaurava(feeling heaviness), Bandha (Bandhah Srotasam - blockages in the channels), Upalepa (Asthyadinam Upalepanam / Sensation of accretion over bones), Staimitya (Gatra Apatutwam / Alasyam / Laziness), Shopha (Shwayatu / Swelling), Apakti(Indigestion), Atinidra(Excess Sleep), Shweta varna (Paleness in the body), Swadu-Lavana Rasa (sensation of sweet and salt over the tongue) and Chirakarita(Slowness in work) [8]. Rutu Haritaki [9, 10] is advised in each Rutu to keep Doshas in balance, to promote normal health and prevent the diseases. Haritaki with Madhu is recommended in Vasanta Rutu to prevent Kapha Prakopa. To assess the preventive effect of Rutu Haritaki in Vasanta Rutu against Kapha Prakopa among healthy participants.

MATERIAL AND METHODS

This was a conveniently sampling, controlled, comparative, Pre & post test designed study. 180 apparently healthy participants were screened for the features of Health. 156 participants were enrolled for study after taking consent. 76 subjects were allocated to control group and 80 to trial group. There was one dropout in control group and 05 dropouts in trial group.

INCLUSION CRITERIA:

- Individuals who have not fallen sick since one month before Vasanta Rutu
- Healthy volunteers aged 20 to 50 years.

EXCLUSION CRITERIA:

- Persons are on chronic medications for systemic illness
- Pregnant and Lactating Women
- Individuals with Low BMI (below 18 Kg/m²)

Duration of the study: 60 days for both study and control groups.

Follow up: Nil

Intervention: The 76 participants of Group-01 (Control group) were kept as control without any intervention. The 80 participants of Group-02 (Trial Group) were advised to consume 06 gms of Haritaki Churna and 12 ml of Madhu at night after food, during 60 days of Vasanta Rutu.

Medicine Name: Haritaki Churna and Madhu

Study Design:

All the participants were assessed for the presence of 15 Kapha Prakopa Lakshanas as mentioned in Classics before study and after the completion of Vasanta Rutu period of 60 days.

Assessment Criteria: The presence of Kapha Prakopa Lakshana was analyzed from dichotomous answer for the presence of Lakshana of Kapha Prakopa as Yes/No type. Software 'Statistical Package for Social Sciences', Version 20 was used for the statistical analysis.

RESULTS AND DISCUSSION

Table-01: Number of participants presenting Kapha Prakopa Lakshana before & after treatment in both the groups with percentage.

	Control Group (N=75)				Trial Group (N=75)				
Sr No	Prakopa Lakshanas	B.T	%	A.T	%	B.T	%	A.T	%
01	Sneha	26	34.66	23	30.66	41	54.66	14	18.66
02	Kathinya	13	17.33	11	14.66	18	24.00	03	04.00
03	Kandu	15	20.00	09	12.00	18	24.00	01	01.33
04	Sheeta	27	36.00	38	50.66	32	42.66	12	16.00
05	Gourava	34	45.33	23	30.66	35	46.66	05	06.66
06	Bandha	13	17.33	17	22.66	19	25.33	03	04.00
07	Upalepa	09	12.00	11	14.66	15	20.00	01	01.33
80	Staimitya	40	53.33	28	37.33	28	37.33	09	12.00
09	Shopha	04	05.33	06	08.00	08	10.66	01	01.33
10	Apakti	23	30.66	15	20.00	32	42.66	04	05.33
11	Atinidra	31	41.33	26	34.66	29	38.66	80	10.66
12	Shweta Varna	18	24.00	13	17.33	06	08.00	03	04.00
13	Swadu	17	22.66	10	13.33	11	14.66	03	04.00
14	Lavana	04	05.33	02	02.66	03	04.00	00	00.00
15	Karye Chirakarita	30	40.00	27	36.00	30	40.00	06	08.00

Sneha Lakshana: The difference between the presence of Sneha Lakshana BT & AT in control group is 03% where as in trial group the difference is 36%. P value of Mann Whitney U test between the groups is 0.057. Hence the preventive effect of Rutu Haritaki with regard to Sneha Lakshana of Kapha Prakopa is not significant.

Kathinya Lakshana : The difference between the presence of Kathinya Lakshana BT & AT in control group is 02.67 % where as in trial group the difference is 20%. P value of Mann Whitney U test between the groups is 0.09. Hence the preventive effect of Rutu Haritaki with regard to Kathinya Lakshana of Kapha Prakopa is significant in comparison with control group.

Kandu Lakshana : The difference between the presence of Kandu Lakshana BT & AT in control group is 08 % where as in trial group the difference is 22.66%. P value of Mann Whitney U test between the

groups is <0.001. Hence the preventive effect of Rutu Haritaki with regard to Kandu Lakshana of Kapha Prakopa is significant in comparison with control group.

Sheeta Lakshana : The presence of Sheeta Lakshana BT was 36% & AT was 50.66 in control group, where as in trial group BT was 42.66% & AT was 16% P value of Mann Whitney U test between the groups is <0.001. Hence the preventive effect of Rutu Haritaki with regard to Sheeta Lakshana of Kapha Prakopa is significant in comparison with control group where the number of participants having Sheeta Lakshanas were increased.

Table-02: Statistical test results in Kapha Prakopa Lakshana between groups after Treatment (AT) {Significant n value - < 0.05}

{Significant p value - < 0.05}											
Sr No	Kapha Prakopa Lakshana	Mann- Whitney U Test BT	Mann- Whitney U Test AT	P value	Significance						
01	Sneha	2011.00	2437.50	0.057	NS						
02	Kathinya	2662.50	2475.00	0.009	S						
03	Kandu	2700.00	2475.00	0.002	S						
04	Sheeta	2719.00	1800.00	< 0.0001	S						
05	Gourava	2550.00	2100.00	< 0.0001	S						
06	Bandha	2400.00	2287.50	0.001	S						
07	Upalepa	2446.00	2437.50	0.003	S						
80	Staimitya	2475.00	2025.00	< 0.0001	S						
09	Shopha	2662.50	2625.00	0.054	NS						
10	Apakti	2287.50	2325.00	0.002	S						
11	Atinidra	2625.00	2175.00	0.001	S						
12	Shweta Varna	2325.00	2250.00	< 0.0001	S						
13	Swadu	2651.50	2550.00	0.043	S						
14	Lavana	2811.00	2737.50	0.156	NS						
15	Karye Chirakarita	2625.00	2100.00	< 0.0001	S						

Gourava Lakshana : The difference between the presence of Kandu Lakshana BT & AT in control group is 14.67 % where as in trial group the difference is 40%. P value of Mann Whitney U test between the groups is <0.001. Hence the preventive effect of Rutu Haritaki with regard to Kandu Lakshana of Kapha Prakopa is significant in comparison with control group.

Bandha Lakshana: The presence of Bandha Lakshana in Control group as BT was 17.33% and AT was 22.66% with the increase of 05.33% where as in trial group the difference of presence of the same Lakshana was is 20.66%. P value of Mann Whitney U test between the groups is 0.001. Hence the preventive effect of Rutu Haritaki with regard to Bandha Lakshana of Kapha Prakopa is significant in comparison with control group.

Upalepa Lakshana: The presence of Upalepa Lakshana in Control group as BT was 12 % and AT was 14.66% with the increase of 02.66 % where as in trial group the difference of presence of the same Lakshana was is 18.66%. P value of Mann Whitney U test between the groups is 0.03. Hence the preventive effect of Rutu Haritaki with regard to Upalepa Lakshana of Kapha Prakopa is significant in comparison with control group.

Staimitya Lakshana: The difference between the presence of Staimitya Lakshana BT & AT in control group is 16 % where as in trial group the difference is 25.33%. P value of Mann Whitney U test between the groups is <0.001. Hence the preventive effect of Rutu Haritaki with regard to Staimitya Lakshana of Kapha Prakopa is significant in comparison with control group.

Shopha Lakshana: The presence of Shopha Lakshana in Control group as BT was 05.33 % and AT was 08.00% with the increase of 02.66 % where as in trial group the difference of presence of the same Lakshana was is 09.33%. P value of Mann Whitney U test between the groups is 0.054. Hence the preventive effect of Rutu Haritaki with regard to Shopha Lakshana of Kapha Prakopa is not significant.

Apakti Lakshana: The difference between the presence of Apakti Lakshana BT & AT in control group is 09.33 % where as in trial group the difference is 37.33%. P value of Mann Whitney U test between the groups is 0.002. Hence the preventive effect of Rutu Haritaki with regard to Apakti Lakshana of Kapha Prakopa is significant.

Atinidra Lakshana : The difference between the presence of Atinidra Lakshana BT & AT in control group is 06.67 % where as in trial group the difference is 28.00%. P value of Mann Whitney U test between the

groups is 0.001. Hence the preventive effect of Rutu Haritaki with regard to Atinidra Lakshana of Kapha Prakopa is significant.

Shweta varna Lakshana: The difference between the presence of Shweta varna Lakshana BT & AT in control group is 07.66 % where as in trial group the difference is 04.00%. P value of Mann Whitney U test between the groups is 0.0001. Hence the preventive effect of Rutu Haritaki with regard to Shweta varna Lakshana of Kapha Prakopa is significant.

Swadu Lakshana: The difference between the presence of Swadu Lakshana BT & AT in control group is 09.33 % where as in trial group the difference is 10.66%. P value of Mann Whitney U test between the groups is 0.043. Hence the preventive effect of Rutu Haritaki with regard to Swadu Lakshana of Kapha Prakopa is significant.

Lavana Lakshana: The difference between the presence of Lavana Lakshana BT & AT in control group is 02.67 % where as in trial group the difference is 04.00 %. P value of Mann Whitney U test between the groups is 0.156. Hence the preventive effect of Rutu Haritaki with regard to Lavana Lakshana of Kapha Prakopa is not significant.

Karye Chirakarita Lakshana : The difference between the presence of Karye Chirakarita Lakshana BT & AT in control group is 04.00 % where as in trial group the difference is 32 .00%. P value of Mann Whitney U test between the groups is <0.0001. Hence the preventive effect of Rutu Haritaki with regard to Karye Chirakarita Lakshana of Kapha Prakopa is significant.

CONCLUSION

Haritaki is having Lavana varjita Pancha Rasa and it's *In vitro* and in vivo studies have established antioxidant, antibacterial and antiviral property of the drug. A review of 63 clinical studies on Honey in otiorhinolaryngyology have proven efficacy of honey in respiratory infections. As Vasanta Rutu is a season of bacterial and Viral infection outbreak leading to respiratory infections, the combination of Haritaki and Madhu act as preventive tool in keeping away the possibility of respiratory infections. Kapha Prakopa Lakshanas depict the symptoms of various upper and lower respiratory conditions. As this study establish the significance of Rutu Haritaki in prevention of Kapha Prakopa in Vasanta Rutu among healthy participants.

REFERENCES

- 1. Ambikadatta Shastri, (2003). Sushruta Samhita with Ayurveda Ttwa Sandeepika Hindi Commentary, Reprint edition, Chaukhamba Sanskrit Sansthan; p.86.
- 2. Tridosha Theory, V.V. Subrahmanya Sastri, (2002). 4th Reprint edition, Arya Vaidyashala, kottakal, p-185.
- 3. Brahmananda Tripathy, (2016). Charaka Samhita with Charaka Chandrika Hindi commentary, Reprint edition, Chaukhamba Surabharati Prakashan. p.244.
- 4. Ravidatta Tripathy, (1992). Ashtanga Sangraha with Saroja Hindi Commentary, Reprint edition, Chaukambha Sanskrita Pratishthana, p 375.
- 5. Anna Moreswar Kunte, (1995). Ashtanga Hridaya with Sarvanga Sundara & Ayurveda Rasayana Commentary, Reprint edition, Krishnadas Academy, p.196
- 6. Concept of Shatkriyakala as mentioned in Sushruta Samhita, Journal of Advance Research in Ayurveda, Yoga, Unani, Siddha & Homeopathy. 2014; 1(1): 10-12.
- 7. Sangita Maharjan, Ajantha, Arun Raj M.N, Anjana- An Appraisal On Kapha Dosha Vaishamya Lakshanas, International Ayurvedic Medical Journal, September, 2017, 5(9).
- 8. Bhava Prakasha Nighantu: edited by Sri Brahma Shankara Mishra , edition:2013, Varanasi: Chaukhambha Sanskrit Bhavan, Purvardha, Haritakyadi Varga, PP-04,05.
- 9. Prakashchandra Gupta- Biological & Pharmological Properties of Terminalia Chebula Retz (Haritaki)- An Overview.International Journal of Pharmacy & Pharmaceutical science.2012. 4/3.
- 10. Tharakan T, Bent J, Tavaluc R. Honey as a treatment in otorhinolaryngology: a review by subspecialty. Annals of Otology, Rhinology & Laryngology. 2019 Mar;128(3):193-207.

Copyright: © **2021 Society of Education**. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.