A CLINICAL STUDY TO EVALUATE THE RASAYANA EFFECT OF ASTHISHRINKHALAGHRITA IN JARA

Kavitha C. K1*, Waheeda Banu2

*1PG Scholar, 2Professor and HOD, Department of Kayachikitsa, Karnataka Ayurveda Medical College, Mangalore, Karnataka, India.

ABSTRACT

Modern medicine has made a great deal of progress in understanding the aging process and in controlling age-associated health issues. The problems of Aged were neglected by Ayurvedic science and recently there started new advancements in this branch of Ayurveda which is insufficient for the current needs. This had led to lack of active longevity with more disability and dependency. Thus, this study was taken up to evaluate the Rasayana (Anti-ageing) effect of Asthishrinkhalaghrita in Jara janya vyadhi (Diseases due to senility). Methods: In present study, 30 subjects were diagnosed with the Jara janya vyadhi, selected randomly and were given with 15 ml of Asthishrinkhalaghrita in the morning for 30 days. The data obtained were recorded, tabulated and statistically analyzed using appropriate statistical methods. Results: Study showed mild improvement in overall treatment. Though no statistically significant results were obtained, there was a good improvement for the patient in Climbing stairs, Sleep disturbance, Shwasa vridhi (Dyspnoea), Malabadhata (Constipation), Agni manda (loss of appetite) and weight gain with p value > 0.05 and Slatha sandhi (laxity of joints) and walking with p value > 0.05. Conclusion: Thus Rasayana chikitsa can improve the longevity, positive health; provide the resistance to fight against the diseases, keeping the excellence in the tissues including mental faculties.

KEYWORDS: Jara, Rasayana, Asthishrinkhala ghrita, Anupana.

INTRODUCTION

The death is inevitable with all unfavorable progressive changes of Ageing with decline in vigor. Current statistics put the number of worldwide elderly population at 962 million in 2017; it is expected to cross 2.1 billion by the year 2050[1]. In Ayurvedic ageing is described of two types: Kalaja (timely) and Akalaj (Untimely)[2]. The Kalaja jara which occurs due to progress of time is Yapya (manageable)[3], this can be stopped or delayed by using the proper measures. As an answer to solve the problems of healthful longevity, the Rasayana Chikitsa is helpful. It prolongs the longevity, develops the positive health, mental faculties and imparts the resistance and immunity against the diseases by keeping the excellence in the tissues[4].

Asthishrinkhala[5] is also known as Cissus quadrangularis L. belongs to family Vitaceae. It is an old Indian medicine. Almost all parts like, Root, Stem, Leaf are most important part used medicinally. The Ghrita in the current study is prepared using this single herb which will impart following properties to the Ghrita such as, Madhura rasa, Laghu and Ruksha guna, Ushna virya with Vrushya in turn Rasayana and Sandhaneeya properties.

As a preventive tool Jara chikitsa has got good scope in the today’s scenario. In the aged Vatadosh is physiologically in a dominant state and Rasadi dhatus are in a deficient state[6]. There are certain rules and regulations mentioned for the same and Rasayana therapy is the best one among them which can act both in physical and mental aspects.

AIMS AND OBJECTIVES

To study the Rasayana effects of Asthishrinkhalaghrita in Jara- the elderly subjects.

MATERIALS AND METHODS

A single group of 30 elderly subjects presenting with the classical signs and symptoms of ageing irrespective of gender, religion, occupation and socio-economic status were included into the study. An elaborative case taking proforma was specially designed for the purpose of incorporating all the aspects of disease on Ayurvedic parlance. For the present study patients who fulfill the inclusion criteria were selected randomly from OPD and IPD of Karnata Ayurveda Medical College Hospital Mangalore irrespective of gender, religion and occupation. Informed consent was taken from each patient.
Inclusion criteria
- Subjects above the age of 60 yrs
- Subjects with classical signs and symptoms of Jara

Exclusion criteria
- Subjects who are suffering from terminal illness.
- Subjects who are completely physically disabled.

Table 1: Intervention

| Intervention         | Dose   | Route | Anupana | Study duration | Time of administration |
|----------------------|--------|-------|---------|----------------|------------------------|
| Asthishrinkhala ghrita | 15 ml  | Oral  | Milk    | 30 days        | Morning before food    |

Intervention

Investigations
Routine blood investigation, Lipid profile, Fasting Blood Sugar.

Assessment Criteria

Subjective parameters

I) Sarva Kriya Asamarthata – (Physical disability)

1. Toilet using
   a. Grade 1: Independent without difficulty (0%)
   b. Grade 2: With mild difficulty in sitting and getting up (25%)
   c. Grade 3: With moderate difficulty in sitting and getting up (50%)
   d. Grade 4: With marked difficulty in sitting and getting up (75%)
   e. Grade 5: Needs support (100%)

2. Bathing
   a. Grade 1: Independent without difficulty (0%)
   b. Grade 2: With mild difficulty in bathing (25%)
   c. Grade 3: With moderate difficulty in bathing (50%)
   d. Grade 4: With marked difficulty in bathing (75%)
   e. Grade 5: Needs other help (100%)

3. Dressing
   a. Grade 1: Independent without difficulty (0%)
   b. Grade 2: With mild difficulty in dressing (25%)
   c. Grade 3: With moderate difficulty in dressing (50%)
   d. Grade 4: With marked difficulty in dressing (75%)
   e. Grade 5: Needs other help (100%)

4. Walking
   a. Grade 1: Without difficulty (0%)
   b. Grade 2: Getting fatigue after covering ¾th of distance to cover earlier (25%)
   c. Grade 3: Getting fatigue after covering 1/2 of distance to cover earlier (50%)
   d. Grade 4: Getting fatigue after covering ¼th of distance to cover earlier (75%)
   e. Grade 5: Needs help (others) & cannot even walk ¼th distance to cover earlier (100%)

II) Nidranasha (Insomnia)

1. Disturbance during sleep
   a. Grade 1: No disturbance
   b. Grade 2: 1-2 times disturbance
   c. Grade 3: 3-4 times disturbance
   d. Grade 4: >4 times disturbance
   e. Grade 5: >7 times disturbance

2. Difficulty in initiating sleep
   a. Grade 1: No Difficulty
   b. Grade 2: ½ - 2 hours Difficulty
   c. Grade 3: 2-3 hours Difficulty
   d. Grade 4: 3-4 hours Difficulty
   e. Grade 5: >4 hours Difficulty

3. Sleep time /Duration of sleep
   a. Grade 1: 8 hours sleep
   b. Grade 2: 6-8 hours sleep
   c. Grade 3: 4-6 hours sleep
   d. Grade 4: 2-4 hours sleep
   e. Grade 5: 0-2 hours sleep

III) Shwasa Vruddhi (Exertional Dyspnea)

   a. Grade 1: Dyspnea on unaccustomed exertion
   b. Grade 2: Dyspnea on accustomed exertional work
   c. Grade 3: Dyspnea on routine activities like moving about in the house etc.
   d. Grade 4: Dyspnea on rest
V) Malabaddhata (Constipation)

a. Grade 1: No constipation
b. Grade 2: Regular bowel movement, consistency hard excessive straining and prolonged defecation time

c. Grade 3: 3-6 bowel movements per week, consistency hard
d. Grade 4: 2-3 bowel movements per week, consistency hard.
e. Grade 5: bowel movement once or less than one per week, consistency hard.

V) Shlatha Sandhi (Loosening of Joints)

Leg mobility will be assessed by asking the patient to perform a simple test. The patient sitting on a chair will be asked to get up and walk 20 feet distance and then return to the chair and sit down.

a. Grade 1: Normal L.M.T. \( \leq 15 \) second
b. Grade 2: 15-20 seconds
c. Grade 3: 20-25 seconds
d. Grade 4: 25-30 seconds
e. Grade 5: 30-35 seconds

VI) Agnimandya (loss of appetite)

a. Grade 1: good appetite
b. Grade 2: partial loss of appetite
c. Grade 3: complete loss of appetite (loss of interest)
d. Grade 4: aversion towards food.

Objective parameter

Weight

a. Grade 1: 0kg.
b. Grade 2: 0-1kg.
c. Grade 3: 1-2kg.
d. Grade 4: 2-3kg.
e. Grade 5: 3kg and above

OBSERVATION

In the sample taken for the study, 50% of males were registered in comparison to 50% of females. Analysis of age incidence of 30 patients suffering from Jara showed more number of patients between the age group of 60-69 years i.e. 80%. 73.33% of the patients were Samyak and 26.67% of the patients were Asamyak in Mutra Pravrutti. Out of them 33.33% of patients were Housewife. 90% patients were married and 10% patients were unmarried. In the study as whole maximum patients in Mala Pravrutti were Asamyak (70%). Out of 30 patients’ maximum patients Diet were mixed (86.67%). Out of 30 patients’ maximum patients were Pittakapha (33.33%) followed by Vatapitta Prakruti (30%). Maximum patients Education were High School (60%). Maximum patients habit were NS (66.67%). Out of 30 patients' maximum patients Nadi were Pittakapha (43.33%). Most of the patient's jihwa were sama (63.33%). Maximum patients Akruti were Madhyama (63.33%) and Socio Economic Status were Middle class (46.67%). Maximum patients Vikruti were Vatakapha (50%). Out of 30 patients' maximum patients Shabda were Prakrutha (100%) and most of the patients Sparsha were Prakrutha (100%). Maximum patients Drik were Vaikru (100%) and Sara were Madhyama (96.67%). Out of 30 patients' maximum patients Satwa were Madhyama (96.67%) and Premana were Madhyama (96.67%). Out of 30 patients' maximum patients Satmya were Madhyama (100%). Maximum patients Vayya were Madhyama (100%).

RESULTS

Table 2: Effect of treatment on walking and stairs coming under Sarvakriya asamartha

| Symptom    | Measures | %     | S.D (+) | S.E (+) | t value | p value |
|------------|----------|-------|---------|---------|---------|---------|
| Walking    | BT       |       |         |         |         |         |
|            | AT       | 1.30  | 0.00    | 0.254   | 0.00    | >0.05   |
|            | AF       | 1.23  | 0.07    | 0.430   | 0.080   | 0.58    | >0.05   |
| Stairs     | AT       | 1.60  | 0.13    | 0.498   | 0.093   | 1.01    | <0.05   |
|            | AF       | 1.13  | 0.60    | 0.346   | 0.064   | 5.26    | <0.05   |
Table 3: Effect of treatment coming under Nidranasha

| Symptom                      | Measures | %     | S.D (+) | S.E (+) | t value | p value |
|------------------------------|----------|-------|---------|---------|---------|---------|
| Disturbance during sleep     | BT       | 1.50  | 1.33    | 0.17    | 11.11   | 0.504   | 0.094   | 1.09    | >0.05   |
|                             | BT       | 1.40  | 1.37    | 0.03    | 2.38    | 0.535   | 0.099   | 0.24    | >0.05   |
| Difficulty in initiating sleep |        | 1.10  | 1.07    | 0.43    | 28.89   | 0.254   | 0.047   | 3.50    | <0.05   |
| Sleep time/Duration          |         | 2.10  | 1.07    | 0.30    | 21.43   | 0.305   | 0.057   | 2.57    | <0.05   |

Table 4: Effects of treatment on other parameters

| Symptom          | Measures | %     | S.D (+) | S.E (+) | t value | p value |
|------------------|----------|-------|---------|---------|---------|---------|
| Shwasa Vruddhi   | BT       | 1.50  | 1.40    | 0.10    | 6.67    | 0.479   | 0.089   | 0.77    | >0.05   |
|                  | BT       | 1.93  | 1.30    | 0.63    | 32.76   | 0.640   | 0.119   | 4.38    | <0.05   |
| Mala Baddhata    |          | 1.10  | 1.10    | 0.00    | 0.00    | 0.000   | 0.000   | 0.00    | >0.05   |
|                  |          | 1.60  | 1.20    | 0.40    | 25.00   | 0.498   | 0.093   | 3.41    | <0.05   |
| Shlatha Sandhi   |          | 1.00  | 1.00    | 0.93    | 48.28   | 0.000   | 0.000   | 0.00    | >0.05   |
| Agni Mandya      |          | 1.10  | 1.10    | 0.00    | 0.00    | 0.000   | 0.000   | 0.00    | >0.05   |
| Weight Gain      |          | 1.60  | 1.20    | 0.40    | 25.00   | 0.498   | 0.093   | 3.41    | <0.05   |

Table 5: Overall effect of treatment

| Overall Effect of Treatment | Relief in Percentage | Relief in Patients |
|-----------------------------|----------------------|--------------------|
| No Improvement              | 0-25 %               | 18                 |
| Mild Improvement            | 26-50 %              | 12                 |
| Moderate Improvement        | 51 - 75 %            | 0                  |
| Marked Improvement          | 76 – 100 %           | 0                  |

DISCUSSION

The drug Asthishrinkhala is explained in all the Nighantus (the dictionaries). The drug Asthishrinkhala has wide range of uses; including the Vrishya property, in turn the Rasayana effect and when used in Ghrīta medium can have an exaggerated effect. It has property of Madhura rasa (sweet taste). The qualities of Madhura rasa are Tarpaayathi, Shlesmanamabhivardhayati. Because of Ushana veerya (hot potency) it acts as Vata hara. It also contains anabolic steroid hormone, vitamin-c, carotene, protein, fat etc. By its analgesic property it will help in the reducing pain and inflammatory condition. Cissus also leads to much faster increases in bone tensile strength and very much helpful in degenerative condition of bone. All these properties are useful in treating the Jarajanyavyadhis where the Vatadosha is the predominant one.

In this study maximum patients were Vata-Pitta and Kapha- Pitta predominant. It is clearly mentioned in our texts that lifestyle and various activities should be planned opposite to Prakriti for the maintenance of health. As Vata is the predominant Dosha during Jara, Vata prakriti people tend to suffer more due to Jara janya vyadhis. In this present study it is noticed the same that the patients with Vataprakriti are more afflicted. And the treatment with Ghrīta made good changes in them physically and mentally.

The Ushna and Vatakaphahara property of Asthishrinkahala can act as a pain reliever with
**CONCLUSION**

Jara chikitsa in Ayurveda is a method to control or slowdown the process of ageing in human being. There is a need for extensive research on the subject, owing to its influence on the quality of life. The progressive nature of Jara can affect the patient’s daily life. Such conditions require more preventive line of management.

The main purpose of Rasayana therapy is to impede the ageing process and to delay the degenerative process in the body. All the Rasayana drugs are different from one another having different properties & actions like Medhya, Balya, Dhatupushtikara, Brimhaniya, Jivaniya, Agnivardhaka etc. Proper understanding and application of this concept in practice of Ayurveda would only lead to perfect and precise treatment. Though the results obtained showed mild improvement in overall treatment statistically, there was a good improvement for the patients suffered from Malabadhata, Agni mandya, difficulty in walking and weight gain.

**REFERENCES**

1. Issues of ageing. United Nations, Department of Economics and Social Affairs. Available from: https://www.un.org/development/desa/ageing/issues.html
2. Agnivesha, Charaka Samhita, with Ayurveda Dipika Commentary of Chakrapanidatta. In, Acharya YT (ed). Reprint edition. New Delhi: Rashtriya Sanskrit Sansthana.; 2006. p. 97.
3. Agnivesha, Charaka Samhita, with Ayurveda Dipika Commentary of Chakrapanidatta. In, Tripathi B (ed). Reprint edition. Sharira sthana Ch. 1 Ver.115.Varanasi: Chowkhambha Orientalia; 2009. p. 824.
4. Agnivesha, Charaka Samhita, with Ayurveda Dipika Commentary of Chakrapanidatta. In, Tripathi B (ed). Reprint edition. Chikitsa sthana Ch.1, Ver. 7. Varanasi: Chowkhambha Orientalia; 2009. p. 5.
5. Lucas DS. Dravya Guna Vijnana. 1st edition. Volume 2. Varanasi: Chaukhamba visvabharati Orientalia; 2012. p. 513-4.
6. Suresh S. Geriatrics in Ayurveda. 1st edition. Varanasi: Chaukhambha Orientalia; 2001.p.8.
7. Bargale SK, Shashirekha HK, Umapati C Bargal. Anti-aging effects of Amalaki Rasayana in healthy elderly subjects. Journal of Ayurveda and Holistic Medicine. 2014; 2(1):10-18.

**Cite this article as:**
Kavitha C.K, Waheeda Banu. A Clinical Study To Evaluate The Rasayana Effect of Asthishrinkhalaghrita In Jara. International Journal of Ayurveda and Pharma Research. 2020;8(10):65-69.

**Source of support:** Nil, **Conflict of interest:** None Declared

*Address for correspondence*
Dr Kavitha C. K
PG Scholar,
Department of PG Studies in
Kayachikitsa, Karnataka Ayurveda
Medical College, Mangalore, Karnataka
Email: kavithanambiar013@gmail.com
Mob: 8086763930

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.