CLINICAL STUDY TO EVALUATE EFFICACY OF HARITAKI
(Terminalia Chebula Linn) IN AROCHAK VYADHI.
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ABSTRACT
In ancient time proper lifestyle was the part of almost everyone’s life. People were healthy-wealthy, fit and fine that time. Today’s busy & sedentary lifestyles leads to many diseases also genetic and environmental factors which have altered over the years due to modernization. Arochak is symptom in many diseases and which is presented at tongue. Arochak is narrated as separate disease as well. It is very commonly observed disease in the society. Prevalence of Arochak in India is noted 2.6 % by recent studies. Due to lack of curative treatment for Arochak in modern medicine, it is time to look in the treasure of Ayurvedic texts. Ayurvedic texts has mentioned many Upkrama (therapeutic procedures) and drugs regarding with Arochak. Agnimandya is the root cause of each and every disease. By treating Arochak we can avoid many such future diseases. The drugs taken for this study (Haritaki and Ushnodaka) are easily available, very cost effective and very much easy to consume. Pilot study was carried out in the form of clinical trials in two different groups containing 10 patients each. Test group patients treated with Haritaki (Terminalia Chebula Linn.) along with Ushnodaka have shown better effects than control group patients. Statistical analysis was not performed as sample size was too small. Further researchers may attempt clinical trials in large and representative sample regarding Arochak.

Keywords: Arochaki, Haritaki (Terminalia Chebula Linn.), Ushnodaka, Samprapti bhang.

1. INTRODUCTION
Ayurveda has two motoes in which prime motto is Swasthasya swasthya rakshanam.¹ It includes ideal lifestyle measures related to Ahara, Vihara and Achara e.g. Dinacharya, Rutucharya, Sadvritta, Ahara vidhi vidhana, Trayopstambha, Kam-krodhadi Shad-ripu etc. In ancient time such lifestyle was the part of almost everyone’s life. People were healthy-wealthy, fit and fine that time. Today’s busy & sedentary lifestyles leads to many diseases also genetic and environmental factors which have altered over the years due to modernization. Tongue is considered to be one of the most important sense organs of human body. Ayurveda and Modern medicines, both sciences have their own concepts regarding the diseases of tongue. Arochak² is such disease of Annavaha srotas in which symptoms appear at tongue (Jivha). Though Arochak is symptom in many diseases, it is explained as a separate disease along with its Nidanpanchak (etiopathogenesis) and Chikitsa (management). Origin of Arochak is due to Agnimandya. Arochak is very commonly observed disease in the society. Recent studies have reported that Arochak (Anorexia Nervosa) is present in 2.6 % subjects in India.³ Arochak is commonly found during or after fever, as a complication in some diseases, after consumption of few oral drugs, after irregularity in daily routine and diet etc.

Bhavaprakash has defined Arochak as - the disease in which despite of taking / chewing tasty food item, patient don’t feel any type of taste of that food item.⁴ In other words the state of tastelessness is termed as Arochak. Here patient doesn’t feel any taste. Charaka has described that, Jwara vyadhi

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(Fever/Temperature), Excess eating, Excess heavy food eating, Excess oily food consumption, Eating food successively of same taste, Improper food habits, Late night food eating.  The taste of mouth becomes astringent, bitter or sweet in Arochak along with few mental symptoms.  The treatment of Arochak includes Kavalgraha, Dhooma, Mukhadhawana, Manodnya Annapana (pleasant food or food of liking), Harshan (keep patient happy) and Ashwasan (counselling and promising).  Haritaki (Terminalia Chebula Linn.) is praised by many texts and said to be useful in Arochak by its useful properties like – Pancharasatmak, Ushna, Laghu, Anulom-an, Dipan, Pachan, Triidhoshaguna, Vatanuloman, Indriya prasadan and Santaran. 8,9,10

In this way Haritaki (Terminalia Chebula Linn.) possesses all Hetu-virodhi and Vyadhi-virodhi gunas. Hence it was taken as trial drug in the study on Arochak Vyadhi. Unshodaka or Koshna Jala is commonly used Anupan for many of Ayurvedic drugs. As per Bhavaprakash, ‘the water boiled till it remains a half of earlier is called as Unshnodaka.’11 Ushnodaka being Pachan karma pradhan is useful in Jwara, Kasa Shwasa, Sam Vata-Pitta-Kapha, Medonashan and always pathyakar.12 Considering its easily availability Ushnodak was taken as Anupan for Haritaki (Terminalia Chebula Linn.) and taken for control also.

Need for study

Arochak vyadhi is suffered very commonly in society. There is no any exclusively selective & complete curable treatment in modern science. Ayurvedic texts suggested different types of medication and procedures in this regard. Agnimandya and in turn Arochaka is the root cause of each and every disease as per Ayurveda. By treating Arochak we can avoid many such future diseases. The drugs taken for this study [Haritaki (Terminalia Chebula Linn.) and Ushnodaka] are easily available, very cost effective and very much easy to consume.

2. MATERIALS AND METHODS

2.1. Objectives

♦ To study the Arochak mentioned from different Ayurvedic classical literature.
♦ To Study the efficacy of Haritaki (Terminalia Chebula Linn.) Churna in Arochak.

2.2. Research Question

Does Haritaki (Terminalia Chebula Linn.) Churna 3 gm with Ushnodaka 100 ml for 15 days is significantly effective in the treatment of Arochak or not?

2.3. Research Methodology

20 patients suffering from Arochak were selected randomly from OPD of Sant Ekanath Ayurveda Rughalaya of PMT’s Ayurveda College, Shevgaon and a pilot study was carried out. Inclusion and Exclusion criteria were looked after during selection process. The purpose of pilot study was to finalize the topic as dissertation topic. Further those 20 patients were divided into two groups namely Test Group and Control Group. Test Group patients were treated with Haritaki (Terminalia Chebula Linn.) Churna 3 gm with Unshodaka11 100 ml and Test Group patients were treated with Unshodaka11 100 ml only. Duration of treatment to each patient was 15 days and total duration of study was 2 months. Follow-ups were at the interval of 3 days. All data were noted down in case forms designed for trials. None of the patients was dropped out during the study. Informed written consent was achieved from each and every study subject in the language known to them. Ethical clearance for the study was granted by Research Committee and Institutional Ethical Committee.

2.4. Drug Review

Haritaki Churna (Terminalia Chebula Linn)13 and Ushnodaka11 were the drugs used in the present pilot study. Haritaki Churna (Terminalia Chebula Linn.) was purchased from market, authenticated in Dept. of Darvyaguna and Churna was prepared as per Churna Kalpana14 of Sharangadhara Samhita. Every patient was trained and demonstrated the procedure of preparation of Ushnodaka.11 Patients were told to prepare Ushnodaka as per standard procedure at home every time. The properties of both the drugs are mentioned in Table No. 1.

2.5. Method of selection of Study subjects

2.5.1. Inclusion criteria

♦ Age – 18 to 80 years, irrespective of Religion, Occupation, Socioeconomic status etc.
♦ Both male and female.
♦ Patients with symptoms of Arochak.
♦ Patients willing to participate in the study.
2.5.2. Exclusion Criteria

- Age – Below 18 years and above 80 years.
- Patients having Congenital anomalies of Tongue & Mouth organs.
- *Haritaki (Terminalia Chebula Linn.) sevan ayog-ya* conditions. e.g., Pregnant women, patients undergoing *Raktamokshana* procedure, *Ativa Daurbalya*, starvation etc.
- Hypothyroidism, Severe Hypertension, Carcinoma etc.
- Patients having history of Angioplasty and/or Bypass surgery.
- Lactating women.
- Immuno-compromised patients and patients on AKT.
- HIV, HBsAg, VDRL positive
- Other diseases in which *Arochak* is associated symptom. *Arochak* due to other diseases.

2.5.3. Withdrawal Criteria

- Patients who developed other severe illness during the study.
- Patients who did not attend regular follow ups or patients who did not follow prescribed medication.

2.6. Assessment parameters

Symptoms of *Arochak* were subjective parameters to be assessed before and after treatment in both of the groups. For ease of assessment subjective parameters were graded as follows.

**A. Aruchi**

- 0: No *Aruchi*
- 1: Sometimes feel *Aruchi*, but can have food
- 2: Continuously feeling *Aruchi*, but can eat food
- 3: Continuously feeling *Aruchi*, but can’t eat food

**B. Anannabhilasha**

- 0: No *Anannabhilasha*
- 1: Sometimes not willing to eat, but Take food Regularly
- 2: Sometimes not willing to eat, but don’t take food regularly
- 3: Not willing to eat at all

**C. Kashayasyata**

- 0: No *kashayasyata*
- 1: Occasionally feeling *kashayasyata*
- 2: Most of times feel *kashayasyata*, but other taste also
- 3: Continuously feeling of *kashayasyata*

**D. Madhurasyata**

- 0: No *madhurasyata*
- 1: Occasionally feeling *madhurasyata*
- 2: Most of times feel *madhurasyata*, but other taste also
- 3: Continuously feeling of *madhurasyata*

**E. Foul smell of mouth / Bad breath**

- 0: No Bad Breath
- 1: Occasionally Bad Breath
- 2: Bad Breath after eating food
- 3: Continuous Bad Breath

**F. Stickiness in mouth**

- 0: No stickiness in mouth
- 1: Occasionally stickiness in mouth
- 2: stickiness in mouth after eating food
- 3: Continuous stickiness in mouth

**G. Anga Gaurava (Heaviness in the body)**

- 0: No *Anga Gaurava*
- 1: Occasionally *Anga Gaurava*
- 2: *Anga Gaurava* after eating food
H. Chardi (Vomiting)

- **0**: No Chardi at all
- **1**: Chardi 1-2 times a week
- **2**: Chardi 3-5 times a week
- **3**: Chardi mostly after eating food

### 2.7. Overall Assessment Criteria

Overall assessment criteria were categorized as Excellent, Good, Moderate and Poor. It was based on percent relief in symptom score after treatment.

### 3. RESULTS AND DISCUSSION

#### 3.1. Demographic profile

In the present clinical study out of total 20 patients, 11 patients were below the age of 40 years and 9 patients were above the age of 40 years. Young ones were found more prone to Aochak (Figure No. 1). It is clear that Arochak can occur at any age and is surely not the disease of old age. Out of total 20 patients, 12 patients were male and 8 patients were female. Males were found more prone to Arochak (Figure No. 2). It was due to irregular times of meals, habit of hotel food and junk food. Out of total 20 patients, 15 patients were having Manda agni and 5 patients were having Manda agni (Figure No. 3). None of the patient was observed with Sama and Tikshna agni. It means Arochak is mostly present in the patients with Manda agni which root cause of all diseases. Out of total 20 patients, 15 patients were having Krura koshtha and 5 patients were having Madhyam koshtha (Figure No. 4). None of the patient was observed with Mrudu koshtha. It can be said that, patients with krura koshtha should take care of Ahara-vihara regimens to avoid Arochak and other possible diseases in future.

#### 3.2. Effect on symptoms

In test group, relief in symptoms was as follows - Aruchi 90.91%, Anannabhilasha 90.48%, Kashayasyata 80%, Madhursyata 80%, Bad Breath 86.96%, Stickiness in mouth 85.19%, Anga Gaurav 92% and Chardi 100% (Table No. 3). In control group, relief in symptoms was as follows - Aruchi 63.64%, Anannabhilasha 63.64%, Kashayasyata 55.56%, Madhursyata 50%, Bad Breath 54.17%, Stickiness in mouth 62.96%, Anga Gaurav 58.33% and Chardi 50% (Table No. 3). It is observed that the drug used in test group has shown good effect than the drug used in control group. Hence, it is concluded that, Haritaki (Terminalia Chebula Linn.) Churna along with Ushnodaka is effective than Ushnodaka alone to reduce symptoms in the patients of Arochak vyadhi.

#### 3.3. Overall effect

Study was carried out in very less sample size (i.e. 20) and hence statistical analysis was not done. But before and after symptom scores were assessed to find out effect. Overall effect was calculated in the form of percentage in all 20 patients of both groups. In test group one patient achieved 100 % relief while all other patients achieved relief ranging from 80 % to 94.12 % (Table No. 2). In control group we observed less effect as compared to test group. None of patients achieved relief above 72 %. All patients achieved relief ranging from 47.06 % to 71.43 % (Table No. 2). Likewise, overall effect was calculated in the form of percentage in all 8 symptoms in both groups. In test group we observed 100 % relief in case of symptom Chardi while observed relief in all other symptoms was ranging from 80 % to 92 % (Table No. 3). In control group we observed less effect as compared to test group. None of the symptoms was relieved above 64 %. Observed relief in all symptoms was ranging from 50 % to 63.64 % (Table No. 3). After further classification of data, it was observed that, in test group all 10 patients achieved Excellent Improvement i.e. 76% to 100%. In control group 8 patients achieved Good Improvement i.e. 51% to 75% and 2 patients achieved Moderate Improvement i.e. 26% to 50% (Figure No. 5). In test group all 8 symptoms have shown Excellent Improvement i.e. 76% to 100%. In control group 6 symptoms have shown Good Improvement i.e. 51% to 75% and 2 symptoms have shown Moderate Improvement i.e. 26% to 50% (Figure No. 6). As per observed % relief in patients and in symptoms it was concluded that, Haritaki (Terminalia Chebula Linn.) Churna along with Ushnodaka is effective than Ushnodaka alone to reduce symptoms in the patients of Arochak vyadhi.

#### 3.4. Mode of action

To judge the mode of action of any drug we have to consider samprapti ghatak of that specific disease. Arochak is angimandya janya vyadhi of
3.5. Scope and Limitations

Present study was mere a pilot study and carried out in very less sample size (i.e. 20) drawn from limited population hence the observed results cannot be granted. The study in large and representative sample may give definitive and fruitful findings. Only shamana chikitsa with the single drug was selected.

**Arochaka** along with **Ushnodaka** may be tried in future. Being the root cause disease **Arochak** is very less taken into account for research purpose. We expect further researchers to carry out multi-dimensional study on **Arochak**.

4. CONCLUSION

- **Arochak** is caused by various causes of **Ama** and Agnomanjya.
- Males, patients with **Manda agni** and patients with **Krura koshtha** are more prone to **Arochaka**.
- **Haritaki Churna** along with **Ushnodaka** is effective to reduce symptoms of **Arochak**.
- No adverse effects were observed in both groups.
- **Haritaki** is easily available, cost effective and fruitful medicine for **Arochak**.
- **Arochak** can be treated effectively by Ayurvedic drugs.

5. REFERENCES

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7. Ibidem 1, Uttarardha, Chikitsasthana; Trirmarniya Chikitsa Adhyaya: Chapter 26, Verse 204. p. 656.
8. Ibidem 1, Uttarardha, Chikitsasthana; Rasayana Chikitsa Adhyaya: Chapter 1/1, Verse 29-32. p. 8.
13. Ibidem 9, Haritakycladi varga; Latin Name, Chapter 1. p. 7.
6. TABLES AND FIGURES

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Table No 1 Drug Review

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Table No 2 Overall Effect in Patients

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Table No 3 Overall Effect in Symptoms

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Figure No 1 Age wise distribution

Figure No 2 Gender wise distribution

Figure No 3 Agni wise distribution

Figure No 4 Koshtha wise distribution

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