



## Research Paper

# The Fundamental Study of *Annavaha Srotas* with Etiopathological Study of *Ajirna* and Its Principle Management by Pippali

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Abstract	Manuscript Information
<p>In the current era faulty dietary habits, a sedentary lifestyle, stress, exertion, improper sleep, and less physical activity are crucial factors for diseases. All these causes interrupt the function of digestion and absorption leading to many digestive disorders. <i>Ajirna</i> is one of the digestive disorders. Although <i>Ajirna</i> is not described in <i>Vruhtrayee</i> as an independent disease the description of <i>Ajirna</i> as a disease can be found. <i>Ajirna</i> is a disease as well as symptoms of maximum digestive disorders. In this we discuss about 57(62.64%) are Good, 15(16.48%) are Excellent, 14(15.38%) are Moderate and 05(05.50%) are Poor. It is assessed that the assessment criteria mentioned about the majority of the patients reflects a chronic history of <i>Ajirna</i> as a symptom as well as the disease so for the 100% relief of <i>Ajirna</i> we need a longer duration of medications. Moreover, <i>visham</i> and <i>mand Agni</i> and <i>vata</i> and <i>kapha dosha</i> imbalance hinder normal digestive function. By our observations we can conclude that patients that show good improvement were observed in 57 patients (62.64% of total patients), Excellent improvement was observed in 15(16.48% of total patients), moderate improvement was seen in 14 patients (15.38% of total patients), and poor or no improvement was seen in 05 patients (05.50% total of patients). The overall statistical analysis with the help of the paired t-test, shows a significant effect of Pippali Churna on <i>Ajirna</i>.</p>	<ul style="list-style-type: none"> <li>▪ ISSN No: 2583-7397</li> <li>▪ Received: 28-05-2024</li> <li>▪ Accepted: 24-06-2024</li> <li>▪ Published: 25-08-2024</li> <li>▪ IJCRM:3(4); 2024: 185-191</li> <li>▪ ©2024, All Rights Reserved</li> <li>▪ Plagiarism Checked: Yes</li> <li>▪ Peer Review Process: Yes</li> </ul>
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**Keywords:** *Annavaha Srotas*, *Ajirna*, Pippali Churna, Charak, Vata, Pitta, Kapha

## 1. INTRODUCTION

*Ayurveda* is considered by many learned to be the oldest healing science. *Ayurveda* has great emphasis on prevention and encourages the maintenance of health through close attention to balance in one's life, right thinking, diet, lifestyle, and use of herbs <sup>1</sup>. The word *Ayurveda* is derived from the word *Ayush* meaning life or 'life principle' and the word *Veda* refers to a system of knowledge. According to *Acharya Charak* life itself is

defined as the combination of the body, sense, organs, mind, and soul, the factors responsible for preventing decay and death. Our body consists of three elements called *Dhoshes* – *Vata*, *Pitta*, *Kapha*, Seven *Datu* [constituents of the body], and three *mala* [excretory material]. In the current era faulty dietary habits, a sedentary lifestyle, stress, exertion, improper sleep, and less physical activity are crucial factors for diseases. All these causes

interrupt the function of digestion and absorption leading to many digestive disorders. *Ajirna* is one of the digestive disorders. Although *Ajirna* is not described in *Vvruhtrayee* as an independent disease in the description of *Ajirna* as a disease can be found. *Ajirna* is a disease as well as symptoms of maximum digestive disorders. *Ajirna* is influenced by *Agni*. Malfunction of *Agni* i.e. *Mandagni* causes *Ajirna*-

रोगाः सर्वेऽपि मन्दे अग्नौ । (अ.ह. नि. 12/1) <sup>2</sup>

### **Annavaaha Srotas**

*Acharya Charak* had described *Annavaaha Srotas* in *Vimaan Sthan*

तत्र अन्नवहानां स्रोतसां आमाशयो मूलं वामं च पार्श्वं । (च.वि. 5/7) <sup>25</sup>

Mool of *Annavaaha Srotas* is the Amanshaya and Vaam Parshva. Similarly, *Acharya Sushrut* had described *Annavaaha Srotas* in *Sharir Sthan*-

अन्नवहे द्वे तयोर्मूलमामाशयोऽन्नवाहिन्यशश्च धमन्यः । (सु.शा 9/12)

*Annavaaha Srotas* are two in number and have Mool like *amanshaya* and *annavaahi Dhamneeya*.

### **Annavaaha Srotos dushti reasons**

*Annavaaha Srotas* gets vitiated due to *akala bhojan* like not taking food in correct time e.g. doing breakfast after 11 am or skipping breakfast, taking lunch and dinner in the wrong time, *ahitkar podarth seven*- not taking proper diet, consuming food which have the low nutritional value of taking food by neglecting the *prakriti* of individual and third by *vikrat Jatharangni* also (*vishamAgnii*, *MandAgni*, *TikshAgni*) *Annavaaharotas* gets distributed and causes various disease related to digestive disorders.

अतिमात्रस्य चाकाले चाहिवस्य च भोजनात् ।  
अन्नवाहीनि दुष्यन्ति वैगुण्यात् पावकस्य चं ।। (च.वि.5/12) <sup>26</sup>

### **Annavaaha Srotos dushti lakshana**

According to *Acharya Charak* vitiated *Annavaaha Srotas* causes - *Anorexia*, lack of desire to consume food, indigestion, and vomiting.

Since my study, I have taken indigestion disease which is mainly caused by the *dushti* of *Annavaaha Srotas*.

प्रदुष्टानां तु खल्वेषामिदं विशेषविज्ञानं भवति; तद्यथा  
अन्नभिलषणमरोचकाविपाकौ छर्दि च दृष्ट्वाऽन्नवहान्यस्य स्रोतांसि प्रदुष्टानीति  
विधात् । (च.वि. 5/7)

According to *Acharya Sushrut* vitiated *Annavaaha Srotas* causes - *adhyaman shoola* (pain), *annadwesh* (lack of desire to consume food), *chardi* (vomit), *pipasa* (thirst), *aandhya* (blindness), *aran* (death).

तत्र विध्दस्याध्मानं शूलोऽन्नद्वेषश्छर्दिः पिपासाऽऽश्च्यं मरणं च । (सु.शा. 9/12)

### **Mool of Annavaaha Srotas**

*Annavaaha Srotas* has mool like

- ❖ Aamashaya
- ❖ Vaamparshva
- ❖ Annabahi Dhamnee

### **Morden Functional Anatomical View of Annavaaha Sroto Mool**

#### 1) **Aamnashaya (Stomach)**

Stomach is a hollow organ that is situated just below the diaphragm on the left side in the abdominal cavity.<sup>36</sup> in empty state its volume is 50 ml and physiologically it can expand up to 1 to 1.5 liters of solids and liquids.

#### **Parts of the stomach**

The stomach has four parts:

- Cardiac region
- Fundus region
- Body region
- Pyloric region <sup>37</sup>

#### **Cardiac Region**

It is the upper part of the stomach where Oesophagus is attached. The opening is guarded by cardiac Sphincter.

**Fundus region** - it is doming shaped small structure and elevated above the cardiac region.

**Body/corpus** - it forms 75 to 80% of the stomach, the largest part. It extends the fundus to the pyloric region.

**Pyloric region**- It has two parts - Antrum and pyloric canal body of the stomach ends in antrum and marked by an angular notch called *incisura angularis*. The Antrum continues as a narrow pyloric canal and opens into the first part of the small intestine called the duodenum. This part is called the pyloric end. The opening of pyloric canal opens towards the duodenum and is guarded by the sphincter called as pyloric sphincter. The stomach has two curvatures one on the right side called lesser curvature and one on the left side called greater curvature.

#### ❖ **Glands of Stomach**

Gastric glands are tubular structures and two or more gastric glands join together and open into stomach cavity through gastric pits. Gastric glands are of 3 types based on their location-

- 1) **Fundus glands** - these are the main gastric glands also called as oxyntic glands, situated in body and fundus of stomach.
- 2) **Pyloric glands** - these are present in pyloric part of the stomach.
- 3) **Cardiac glands** - these are located in cardiac region of the stomach.

#### **Agni**

In *Ayurveda*, the *Agni* concept is one of the matchless concepts. At every second numerous procedures of transportation take

place in the body, these are biochemical or biophysical types of biotransformation. Due to this constant transformation procedure, the body grows, develops, and lastly destroys too. As *Agni* is the medium for any type of transformation, all these events are not possible without *Agni*. In the body, the entire range of digestive and metabolic activity takes place by *Agni*. *Ayurvedic* conceives three components of *Agni* which works at the level of digestion, metabolism, and assimilation in the body. According to *Acharya Chakrapani*, *Agni* is the form of *Pittoshma*.

ज्वालादियुक्तवह्निनिषेधेन पितोष्मरूपस्य वहे : सद्भ्रवं दर्शयति चक्रपाणी की ।  
(च. सू. 12/11)<sup>41</sup>

With the help of *Agni*, the body substance can get nourishment and can perform its functions physically. *Agni* as *Maharishi Acharya charak* says -

शमप्रकोपौ दोषाणां सर्वेषामग्निसंश्रितौ । (च. चि .5/ 136)<sup>42</sup>

According to *Acharya Vagbhata* -

रोगाः सर्वेऽपि मन्देऽग्नौ । (अ.ह. नि. 12/1)<sup>43</sup>

All the diseases are occurred by malfunctioning of *Agni*. Hence preservation and promotion of *Agni* is the first and foremost step to be taken in every therapeutic endeavour and also in the management of patients.

### Pachana - Ayurvedic View

The process of digestion and metabolism of food is well explained by *Charak* and detailed described by *Chakrapani* in *adhaya Vividhasheetapitiya Adhyaya* and *grahani chikitsa Adhyaya* in *chikitsa sthana*.

यदन्नं देहधात्वोजोबलवर्णादिपोषकम् ।  
तत्राग्निर्हेतुराहारान्नं हापकाद् रसादयः ॥ (च.चि.15/5)<sup>66</sup>

Food is essential for *Deha Dhatu*, *Ojas* (immunity), *Bala* (strength), complexion, and development of body. The digestion and absorption of food depend on *Agni* for proper transformation and nourishment.

The given below factors are to be considered in context of *Ayurvedic* principles to understand the process of digestion and metabolism.

विविधमशितं पीतं लीढं खादितं जन्तोहितमन्तरग्निसन्धुक्षितबलेन यथास्वेनोष्मणा  
सम्यग्विपच्यमानं कालवदनवस्थितं सर्वधातु  
कमनुपहतसर्वधातूष्ममारुतस्त्रोतः  
केवलं शरीरमुपचयबलवर्णसुखायुषा योजयति शरीरधातूनूर्जयति च ॥ (च.सू.  
28/3)<sup>67</sup>

*Sheeta*, *pita*, *leeda* and *khadit* are four types of food taken by the body, which is then digested food, provides nutrition to all

*dhatu*, and promotes growth, *Bala* (strength), *barna* (complexion) and gives *sukhayu* to the body.

- **Sandhukshita JatharAgni** - condition of *Jathragni*
- **Swen ushma**- shows *Bhutagni paka*

**Dhatav Agni normal state** - Non-vitiated *Dhatav Agni* is a crucial factor for tissue level metabolism. Ingested food is taken according to the nutritional needs of the particular body.

### Process of digestion

All living organism requires nutritive substance and water for survival. Most of the substances in the foods cannot be utilized as such. This substance must be broken down into smaller particles and converted into absorbable material by process of digestion. The passage of smaller molecules into blood and lymph is termed absorption.

- ❖ **Digestion** - in digestion, cutting, and churning of food particles by teeth and small intestine, catabolic reactions by enzymatic activity are carried out.
- ❖ **Absorption** - absorption of secreted fluid absorption of secreted fluid, small molecules, and product of digestion are carried out by active and passive diffusion.
- ❖ **Defecation**- defecation refers to eliminating the waste products (Formed after digestion) through the anal region.

### Functions of the digestive system

1. Ingestion/intake of food
2. Breaking of food into small particles
3. Transport of these particles through the digestive tract
4. Digestion of food substance by enzymatic secretions through different GI organs
5. Absorption of digested food particles
6. Defecation - removal of waste products from the body.

### अजीर्ण (Ajirna)

Our present era is suffering from an irregular lifestyle. Specifically, the life of urban society is very fast and stressful. These all circumstances lead to indigestion and also indigestion or *Ajirna* is the root of many diseases. It is seen that the ratio of *partantra vikara* has the root cause of *Jathar agni mandya* as a root cause which is frequent in routine clinical practice.

It is well said that -

रोगा सर्वेऽपि मन्देऽग्नौ सुतरामुदराणि तु ।  
अजीर्णान्मलिनैश्चात्रैजायन्ते मलसचयात् ॥ (AH.Ni 12/1)<sup>1</sup>

*Annavaha Srotas* and *Purishvaha Srotas* are considered adhithana of *Ajirna*. Based on the above-given shloka, the manifestation of *Ajirna* took place in two regions which are held in GI tract. They are *Amashaya* and *Pakvashaya*, which are known as *Udbhavasthana* for *Paratantra vikara*.

### Etiological factors

The specific etiological factors are not described by any *Acharya* but *Ashtang Hridaya* mentioned some of the etiological factors.

द्विष्टविष्टम्भिदग्धामगुरुरुक्षहिमाशुचि।  
विदाही शुष्कमत्यम्बु पलुतं चात्र च जीर्यति॥ उपतप्तेन भुक्तं च शोक क्रोध क्षुदादिभिः । (A.H.548/31-32)<sup>3</sup>

A lot of Hetu of *Ajirna* are compiled here –

1. दिष्टं	→	अप्रियं	→	food which is not liked by individual
2. विष्टम्भी	→	वातावरोधी	→	it causes obstruction in the normal flow of <i>Vata</i> .
3. दग्ध	→	अपिपकम्	→	extra cooked or burnt food.
4. आम	→	अपकम्	→	not properly cooked food
5. गुरु	→		→	heavy for digestion
6. हिम	→	अतिशीत	→	too cold diet food
7. अशुची	→	मलिन	→	contaminated food

उच्छिष्टं केशादि दूषितं च हतच्च अचिन्त्यप्रभावाह आमदोष हेतुः - (AH.su.8 - Arun. dutta 45)<sup>4</sup>

According to *Acharya Arundatta*, the contamination may be using hair, maggots, dust, etc. He also explains the *Achintya Prabhava* as a reason for *Amadosha*

8. विदाही	→	Burning sensation by food
9. रुक्ष	→	Dry food articles
10. शुष्क	→	अद्रव/नीरस → foodstuffs having no/ less amount of liquid in them.
11. अत्यम्बुलूतम्	→	अतिजलेन प्लावितम् । अत्यम्बु पानात् ।

This refers to foodstuffs having excess amounts of liquid in their proportion or excessive drinking of liquid materials creating similar conditions in the stomach. So, this covers the internal and external conditions of food containing large amounts of liquid material.

#### According to *Sushruta*

three types of *Ajirna* with their causes are being explained.

- 1. AmaAjirna**- When kapha dosha combines with our food while digestion then *AmAjirna* occurs.
- 2. VidagdhAjirna**- due to pitta, the food turns to *Amlata* and *vidagdh Ajirna* occurs.
- 3. VishtabdhAjirna**- due to vata dosha, the food is partially digested and causes pricking pain in the stomach, and the normal flow of *vayu* is also vitiated in *vishtabdh Ajirna*.
- 4. RassheshAjirna**- In spite of proper belching, a person doesn't want to take food which means *Anorexia* occurs and heaviness in the heart, mouth full of water, spit, and *Saliva*.

मूर्च्छा प्रलापो वमथुः प्रसेकः सदनं भ्रमः ।  
उपद्रवा भवन्त्येते मरणं चाप्यजीर्णतः ॥ (सु.सू.46/511)<sup>13</sup>

This shloka signifies the main *updrava* (complications) which are caused in our body to *Ajirna Roga*. These are - *Murcha*, *Pralapa*, *vaman*, *lalasrava* *Ango ka tutna*, *Nirbalata*, *glani* and *brahma*. Sometimes *Ajirna* can also cause death.

तत्रामे लङ्घनं कार्यं विदग्धे वमनं हितम् ।  
विष्टब्धे स्वेदनं पथ्यं रसशोषे शयीत च ॥ (सु. सू.46/512)<sup>14</sup>

#### Chikitsa sutra of *Ajirna*-

##### Types of *Ajirna* and their *chikitsa*

<i>AmaAjirna</i>	→	<i>Langhana</i>
<i>VidagdhAjirna</i>	→	<i>vaman</i>
<i>VishtabdhAjirna</i>	→	<i>Swedana</i>
<i>RassheshAjirna</i>	→	<i>Shayan</i>

#### DRUG REVIEW – PIPPALI

##### Pharmacological Actions

Cough suppressor, Anti-inflammatory, antibacterial, insecticidal, antimalarial, CNS stimulant, anti-helminths, anti-tubercular, anti-spasmodic, hypoglycaemic, immunostimulatory, hepatoprotective, antinarcotic, analeptic, antiulcerogenic

**Genus characteristics** - Sh herbs, erect or scandent often glandular, aromatic branches with swollen nodes. leaves entire, unequal sides, and various stipules. Flowers are tiny, dioecious, filament short, anthers 2 called, ovule solitary, short style, 2-5 stigma m Fruit is small ovoid/globose 1 seeded berry.

**Species characteristics** - Flowers are subtended by peltate orbicular bracts, males having 2 stamens, females with sessile stigma, usually 3-5 lobes. Leaves with prominent ribs, leaves-fruited spikes about 75 in long, 25 in thick, male spike 1-3 in long, upper leaves ovate, ovate-oblong, acute, often unequal coordinate to base. The slender under a shrub, creeping and rooting below the branches erect and usually sub scandent.

**Habitat**<sup>25</sup>- In India, it is found in hotter parts, from khasi mikir hills, central Himalayas to Assam, the lower hills of Bengal, the evergreen forest of western Ghats, in Car Nicobar Island.

**Root**<sup>27</sup> - Erect, thick, branched and jointed.

**Stem** - Numerous in number, 0.6-0.9 m, much branched ascending/ prostrate, cylindrical, stout, finely pubescent, thickened above nodes.

**Leaves**- Numerous, 6.3-9cm, broadly ovate - lower leaves, very cordate with broadly rounded lobes at base, upper one's oblong oval, al subacute, entire, glabrous, thin bullate with reticulate venation sunk above and raised beneath, petiole 5-7.5cm of lower leaves, stout, of upper leaves short/none, stipule above 1.3 cm, membranous lanceolate, soon falling.

**Flowers**- Unisexual, sessile, minute, bracteate without perianth, densely packed in spikate inflorescences. Both male and female spikes are in separate plants, and female spikes vary from 15-24mm length and 7 mm thick and male spikes are 2.5-7.5 cm.

**Fruit** - Solitary spikes, male slender, pedunculate, female 1.3-2.5cm, flat, peltate, stamens 2, stigma 3-4, short, spreading and persistent, small fruit, ovoid, completely sunk in small fleshy spike is 2.5-3.8cm.

**Chemical constituents**<sup>28</sup>- n - hexadecane, n- heptadecane, 2 alkaloids Piper longumine, n- octadecane, n- nonadecane, n- eicosane, n- heneicosane,  $\alpha$ - thujene, terpinolene, zingiberene, p- cymene, p- methoxy acetophenone, traces of dihydrocarveol, phenylethyl alcohol, 2 sesquiterpenes, piperine, pipartine, triacontane, dihydro- stigmastrol, an unidentified sterol. Reducing sugar, glycosides, sesamin and methyl-3,4,5, tri methoxycinnamate, major alkaloid piperine and sesamin (fruit and stem), sesquiterpene hydrocarbon, caryophyllene, a sesquiterpene alcohol, carbonyl compound (essential oil), N is Obutyl deca -trans- 2 trans -4-dienamide, piperine, pipartine, and alignan d sesamin, two piperidine alkaloids - pipernonaline and piperundecalidine (fruits), sylvatin, sesamin and dieudesmin (seed).

### AIMS AND OBJECTIVES

- 1- To study *Annavahtrotas* and its dushti in detail as per *Ayurvedic* classical text.
- 2- To study correlation between *Annavahtrotas* dushti and *Ajirna*.
- 3- To study *Ayurvedic* and modern literature concerning *Ajirna*.
- 4- To evaluate the efficacy effect of *pippali churna* in *Ajirna*.

### MATERIAL AND METHODOLOGY

According to the Aims and objectives, the research is -

#### Conceptual study (Literary material)

The conceptual and literature materials for this study have been collected from specific *Ayurvedic* classics with their commentaries, specific textbooks of medical science like

physiology and pathology books, authentic journals, published research papers, articles published on previous thesis work, and authentic internet sites used to collect literary materials. For a deep understanding of the conceptual thesis part, relevant thesis references will be compiled, analyzed, revealed, and discussed further. In previous chapters conceptual study was done.

### Clinical Study

**Selection of Patients** - By observing the signs and symptoms and etiology factors of *Ajirna* the study was conducted. With the help of a history of illness, clinically. Diagnosed patients were selected. Irrespective of age, Sex, religion, education etc, patients which are fulfilling the criteria are selected randomly of from OPD of Govt. (Autonomous) Ayurveda College and hospital Gwalior."

In the present work 100 patients were registered among them 91 were completed the treatment and 9 patients left against medical advice. This is due to the outbreak of covid-19 pandemic.

**Research Type**- Clinical

**Number of Patients**- 100

**Duration of Study**- 1 year and 6 months

**Study Centre**- Government Autonomous Ayurveda College and Hospital Gwalior.

### Inclusion Criteria

- 1- Patients with classical symptoms of *annavahtrotodushiti* in *Ajirna* like heaviness and stiffness in the body, indigestion, flatulence, anorexia, vertigo, undesired to eat food etc.
- 2- Willing for this study. 3- Either male or female.

### Exclusion Criteria

- 1- A patient suffering from Hypertension, Diabetes mellitus, Neoplasia of the urinary tract, mootraghat, mootrakracha, pregnant women.
- 2- Patients with serious diseases like TB, AIDS, Cancer, Chronic Renal Failure, and Gastric Ulcers.

### Discontinuation Criteria

- Patient not willing to continue.
- Detailed proforma - A specific proforma and questionnaire were prepared based on the signs and symptoms of *Ajirna* to maintain the records of all findings regarding the patients.

### Selected Drugs

*Pippali Churna* for this clinical study was procured, and prepared in the department of Rasashastra and Bhaishaiya Kalpana, Govt. (Auto) Ayurveda College and Hospital, Gwalior.

Drug Dose- 3-6 gm

Anupan- Gud (jaggery)

Period- 1 Month

Follow up -30th day.

**Pathya Apathya**

Patients were allowed to make a normal routine, diet but more spicy, salty, etc foods are avoided which are harmful in *Ajirna*.

**Statistical Analysis** - Various observations are analyzed and results are obtained based on statically computed data to find the

significant values and specific conclusions were made by all observations. All statistical analysis has been done by using paired t-tests. For statistical analysis, statistical formulations were used.

**OBSERVATION**

**Table 1:** Effect of *Pippali Churna* on Subjective Parameters in the Patients of *Ajirna*

Symptoms	Mean Score		Diff	%	S.D. ( ± )			S.E. ( ± )			T value	P value	Results
	B.T.	A.T.			B.T.	A.T.	Diff	B.T.	A.T.	Diff			
<i>Vishtambha</i>	1.64	0.55	1.09	66.40	0.48	0.58	0.44	0.05	0.06	0.05	23.67	0.000	HS
<i>Sadana</i>	1.66	0.70	0.96	57.65	0.76	0.77	0.33	0.08	0.08	0.04	27.60	0.000	HS
<i>Shiroruja</i>	0.21	0.06	0.15	71.43	0.51	0.29	0.41	0.05	0.03	0.04	3.32	0.001	S
<i>Prashtha Katigraha</i>	0.99	0.86	0.13	13.35	0.61	0.69	0.40	0.06	0.07	0.04	3.14	0.002	S
<i>Angmard</i>	0.70	0.10	0.60	85.92	0.46	0.30	0.49	0.05	0.03	0.05	11.73	0.000	HS
<i>Trushna</i>	1.28	0.42	0.86	67.22	0.63	0.56	0.41	0.07	0.06	0.04	19.93	0.000	HS
<i>Jwara</i>	0.40	0.08	0.32	80.56	0.58	0.27	0.48	0.60	0.28	0.05	6.49	0.000	HS
<i>Chardi</i>	0.18	0.04	0.13	75.00	0.38	0.21	0.34	0.04	0.02	0.04	3.70	0.000	HS
<i>Aruchi</i>	2.14	1.11	1.03	48.18	0.75	0.80	0.38	0.08	0.08	0.04	26.03	0.000	HS
<i>Avipak</i>	2.20	1.11	1.09	49.50	0.72	0.81	0.44	0.75	0.09	0.05	23.67	0.000	HS

**Table 2:** Overall effect of *Pippali churna* on *Ajirna*

Class	Assessment	No. of Patients	Percent
1	Excellent	15	16.48
2	Good	57	62.64
3	Moderate	14	15.38
4	Poor	05	05.50

**2. Mode Of Action of Drug Pippali**

**DRUG REVIEW**

Pippali shows various actions on Dosh. In Ardra condition it, turns to be Pittashamana due to Madhur Rasa, Madhur Vipaka, Guru guna and Sheeta Veerya. While in the Sushka stage due to Katu Rasa it turns out to be Kaphashamana, with Snigdha Guna and Madhur Vipaka it has -Vatashamana properties. In classics, Sushka *Pippali* is described as Kaphavata Shamak but due to Anushna Veerya, it does not have Pitarakopa action.

**Discussion on clinical study**

**Discussion of the overall effect of pippali on *Ajirna***

In this we discuss about 57(62.64%) are Good, 15(16.48%) are Excellent, 14(15.38%) are Moderate and 05(05.50%) are Poor. It is assessed that the assessment criteria mentioned that the majority of the patients reflect chronic history of *Ajirna* as a symptom as well as the disease so for the 100% relief of *Ajirna* we need a longer duration of medications. Moreover, *visham* and *mand Agni* and *Vata* and *kapha dosha* imbalance hinders the normal digestive function. By our observations we can conclude that patients that show good improvement was observed in 57 patients (62.64% of total patients), Excellent improvement was observed in 15(16.48% of total patients), moderate improvement was seen in 14 patients (15.38% of total patients), and poor or no improvement was seen in 05 patients

(05.50% total of patients). The overall statistical analysis with the help of the paired t-test, shows a significant effect of pippali Churna on *Ajirna*. Hence the result of the hypothesis (the null hypothesis HO) is rejected and the alternative hypothesis (H1) is accepted proving that *Ajirna* patients are effectively treated with *Pippali churna* but longer duration of treatment is needed to cure it from its roots because *Ajirna* is a symptom of various digestive disorders and also a independent disease.

**CONCLUSION**

So by the observational study of all patients and results of *Pippali churna* on them, results are obtained and so the below conclusion is extracted.

- ❖ Srotas are the specific elements in the body that perform the function of *Stravanam* and circulation in the whole body.
- ❖ *Annavaaha Srotas* are the main Channels that help in the process of digestion. Its mool are *Amashaya* and *Vamparshva* according to *Acharya Charak*. And *Amashaya* and *Annavaahi dhamneeya* according to *Acharya Sushrut*.
- ❖ Here we can conclude that *Amashaya* (stomach), *Vamparshva* (left lateral region of abdominal cavity), and *Annavaahi dhamneeya* as oesophagus. So, whole *Annavaaha Srotas* can be compared with hepatic portal system. And it plays a very crucial role in the specific digestion of food, that we intake.

- ❖ The concept of Agni is among the matchless concepts in our *Ayurveda*. The entire range of digestive and metabolic activity takes place by *Agni*. All the digestive disorders occur by an imbalance of *Agni*. Hence prevention and promotion of *Agni* is must.
- ❖ *Ajirna* is a disease in which food is not digested properly and constipation is the main symptom in this disease. It is a disease and also cause of maximum digestive disorders.
- ❖ In maximum patients of *Ajirna*, *mandagni* was found, so by treating *mandagni*, we can cure *Ajirna*.
- ❖ When we put light on the type of diet intake, we conclude that *Vishmasan* is the main factor for *Agni* dushti of patients suffering from *Ajirna*. And so, by making the patients aware of the importance of the *Samshan* diet in their routine we can prevent *Ajirna*.
- ❖ Maximum patients were having *krura koshta*, that signify the prominence of *vata dosha*, which will deviate *Annavaha Srotas*, *Agni*, bowel habit.
- ❖ *Pippali* has *Katu rasa*, *snigdha guna*, *ushna virya*, has *madhur vipak*.
- ❖ *Pippali* has *deepan*, *pachan* and *rasayan Guna* which will help in the treatment of symptoms of *Ajirna*.
- ❖ *Pippali* *churna* was used with *guda* as *anupan*, because *guda* does not increase *kapha dosha* (which causes *mandagni*), increases the volume of urine and feces, *balya*, balances *vata dosha*, and also purifies our blood, so by both *pippali* *churna* and *guda* as *anupan*, it will cure maximum symptoms of *Ajirna*. So, in the end, it can be concluded that in our thesis the Null hypothesis is rejected. The Alternative hypothesis is accepted. Thus, *pippali* *churna* is beneficial in the treatment of *Ajirna*. After analyzing statistically, it was found that excellent improvements were 15(16.48%), Good improvements were 57(62.64%), Moderate improvements were 14(15.38%), and poor improvements were 05(05.50%).

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