

Pippalyasava and its Indications in Diseases Caused By Poor Digestion

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ABSTRACT

In ayurvedic literature this is strongly proved that derangement of agni (Digestive fire) are root causes of many diseases. In this article Pippalyasav has been taken in account along with its formation and indications. Asav, is a kind of alcoholic preparation which is made by adding the ingredients in water and leave it for a definite period, which has quick action high preserving qualities. Usually herbal remedies lose their potency after some time hence ancient ayurvedic scholars has mentioned these type of preparations(Sandhana Kalpana) by which active principle of the medicinal drugs will be preserved for prolong period in alcoholic media. Most of the drug of this formulation possesses, ushna virya, tikta rasa, katu vipaka, laghu guna and in this way it helps to increase agni i.e. helps to digest ama dosha. As we know that agnimandya and amadosha are the important cause for many disease. by these properties it is a good formulation to pacify ama (main responsible factor for derangement of agni) thus it will improve the status of agni.

Pippalyasav is a very good remedy which cures quickly kshay (Tuberculosis),gulma (abdominal lump), udara (G.I trouble), karsya (emaciation), grahani(IBS), panduta(Anaemia) and arsha(Piles).

Key words: Pippalyasav, Sandhan kalpa, Gulma(abdominal lump), grahani(IBS).

INTRODUCTION

In ayurvedic literatures the preparation which make after fermentation/sandhan is called Asav.

Asav Kalpana is the outcome of sandhan process and asav preparations were used in therapeutic practices from samhita period .(ch.su.25/49)There is sufficient recognizable references of Asav Kalpana in vedic literature like in Atharva Veda, Rigveda, Yajurveda which support the views that the process of Sandhan & the uses of products of Sandhan.

If the liquid substances like sugarcane juice, are mixed with anna, guda, kinva & kept for some time then this procedure is called sandhan. The formulation which is produced by sandhan is called asava and Arishta. Asava is prepared in cold water without boiling the drugs(while arisht is form

after boiling the ingredients). Sandhan denotes the process of acceleration of chemical & biochemical reactions which may be classified from ayurvedic point of view in 2 types 1. Madya sandhan 2.Shukta sandhan.

Asavas are the kind of preparation which has quick action and high preserving qualities. Usually herbal remedies lose their potency after some time hence ancient ayurvedic scholars has mentioned these Kaplan's by which active principle of the medicinal drugs will be preserved for prolong period in alcoholic media. These preparations made by soaking the drugs for a specified period of time during which it undergoes a process of fermentation. During the process of fermentation, formation of alcohol. Alcohol facilitates the dissolution of active principle into the liquid media. Alcohol also serves as a preservative for formulae. Percentage of alcohol should be in range of 8-20%. These preparations are considered highly effective in therapeutic uses

on account of their very long period of potency, quick absorption property.

To start fermentation we require some *Prakshepa dravya* (Fermentation initiators), those provide the inoculum for the fermentation. Dhatki pushp is considered as one of the *Prakshepa dravya* introduced first time by VAGBHAT (6th Century A.D). Dhatki is one of the important *prakshepa dravya* and its dried is used to start the process of fermentation, it is highly tanniferous. Presence of tannin in these flowers produces a conducive environment for yeast growth. Honey or resins are sufficed for initiating the process of fermentation.

Ingredients of pippalyasav

PIPPALI (*Piper longum Linn.*), MARICHA(*Piper nigrum Linn.*), CHAVYA(*Piper retrofractum Vahl.*), HARIDRA(*Curcuma longa Linn.*), CHITRAK(*Plumbago zeylanica Linn.*), GHAN MUSTA(*Cyperus rotundus Linn.*), VIDANGA(*Embelia ribes Burm.*), KRAMUKA(*Areca catechu Linn.*), LODHRA(*Symplocos recemosa Roxb.*), DHATRI(*Embllica officinalis Gaertn.*), PATHA (*Cissampelos pareira Linn.*), ELVALUK (*Prunus cerasoides D. Don.*), USHIR (*Vetiveria zizanioidis Linn.*), CHANDAN (*Pterocarpus santalinus Linn.*), KUSTHA (*Saussurea lappa C.B Clarke.*), LAVANGA (*Syzygium aromaticum Linn.*), TAGAR(*Valeriana wallichii DC.*), MAMSI (*Nordostachys jatamansi DC.*), TWAK(*Cinnamomum zeylanicum Breyn.*), ELA(*Elettaria cardamomum Maton.*), PATRA (*Cinnamomum tamala Nees & Ebern.*), PRIYANGU (*Callicarpa macrophylla Vahl.*), NAGKESARA (*Mesua ferrea Linn.*) GUDA, DHATAKI(*Woodfordia fruticosa Kurz.*), DRAKSHA(*Vitis vinifera Linn.*). Among 23 ingredients nine dravyas are described in *agrya prakrana* (C.Su 25) { Note: *Pippali* and *Chitrak* are evaluated under *agrya* by Acharye P.V Sherma in *Dravyagunasutram*}

As we can see in above mentioned dravyas that most of the drug are ushna virya, tikta rasa, katu vipaka, laghu guna and in this way it helps to increase agni i.e. helps to digest ama dosha and we know that agnimandya and amadosha are the important cause for many disease(Hemadri).

So important thing is to elevate agni to

avoid disease pathogenesis pippalyasav has many ingredients for their group action but by recent studies it is well known that pippali is a good bioenhancer and broad meaning of bioenhancer is bioavailability / bioefficacy enhancer.

During last 20 years new approach of enhancement of drug bioavailability using drugs in combination with plant based substances or an adjunct was conceptualized and developed at RRL, Jammu. Studies conducted at RRL, Jammu have revealed the important role of pippali among trikatu as a drug bioavailability/bioefficacy enhancer.

Bioavailability/bioefficacy enhancing activity in the present era the term bioavailability or bioenhancing activity is defined as a product at a lower dosage level which in combination with a drug or nutrient, provides more availability of the drug there by reducing the consumption of the drug or nutrient resulting in enhanced efficacy of the said drug.

So we can see among 23 drug of pippalyasava, Pippali is an important one for action facilitation, potentiation of other drugs. This may be the reason behind, that Acharya Sharagadhar placed Pippali as first drug in Pippalyasava.

Pippali has an important alkaloid called piperine. It is proved that it act as an bioavailability enhancer because it enhance the bioavailability of a number of drugs including rifampicin, phenytoin, propranolol & theophylline. The proposed mechanism for the increased bioavailability of drugs co-administered with piperine is attributed to the interaction of piperine with enzymes that participate in drug metabolism. It reduces acid secretion upto 1 hr after administration & prevent degradation of active medicaments by gastric acid. Reduces intestinal motility increase blood flow towards GI tract which results in enhanced absorption of active medicaments.

Now in our ancient texts, reference of Bioenhancer are mentioned as –

1. Most of the formulation of Grahani has Pippali as ingredient in Charak.
2. Concept of yogavahi given by Charak
3. Like ardrak, pippali enhances property of

other drug(if used in combination) given in Madanpala Nighantu

Method of preparation

Fine powder half pala (24gm) of each pippali(fruit), maricha(fruit), chavya(stem), haridra(rhizome), chitraka(root), vidanga(fruit), kramuka(seed), lodhra(stem bark), dhatri(fruit), patha(root), elvaluk(stem bark), usheer(root), chandan(stem bark), kustha(rhizome), lavanga(flower bud), tagara(rhizome), mamsi(rhizome), twak(stem bark), ela(seed), patra(leaf), priyangu(flower), nagkesar(stigma), 3 tulas(4.8kg) of jaggery, ten palas(480gm) of dhataki(flower), 60 palas of draksha(fruit) (2.8kg) are all put into 2 dronas(12.288lit)of water, filled into a mud pot and allowed to ferment for 15-30 days. After keeping asav for fermentation, observation is important step at different stages of process of fermentation.

Observation at the initial stage

In the beginning, the prakshepa dravyas will be floating on the surface of the fermenting media, thicker than water consistency, temperature of room and fermenting media should be 34 °C .

Observation after onset of fermentation

Mild alcoholic odour will appears on close and constant observation, effervescence will be visible, typical sound can be heard, close to the fermentation pot, burning candle was found extinguished, if taken inside the container(due to generation of carbon dioxide), temperature of fermenting liquid will be found about 36-38 °C.

Observation after completion of fermentation

prakshepa dravya will sunk completely, posses alcoholic odour, burning candle continued

to burn if brought near the fermenting media. By above assessment it can be confirmed that fermentation process is completed. Then sieve all preparation and collect into another container. Prepared asav preserved in well stoppered bottles and bottles should not be filled completely. Initially 100 parts of asav contain 40 parts of sugars, 20 parts of honey and 10 parts of flavouring substances on completion of process 4-12% of alcohol, 8.3-33.69% of reducing sugar, 4.6- 20.32% of non-reducing sugar, 1.035 to 1.15% ash contents, 5.9-47.8% total solids. Taken in suitable doses(one pala) after meal, this recipe known as pippalyasav which cures quickly kshay,gulma, udara, karsya, grahani, panduta and arsas.

Summary and Conclusion

All the diseases where pippalyasav is being used are resultant of mandagni (indigestion). Like in grahani roga due to agnimandya there is incomplete digestion of ingested food material results in formation of toxic substances (Ama) and this ama circulates all over body mixed with anna arsa and at last takes place in mahasrotas mainly grahani. In other diseases like yakshma, gulma, arsha, udar roga in which pippalyasav is indicated, there is vitiation of agni as well vata dosha. If we analyse thoroughly we found that most of the drugs which are used in pippalyasav are ushna virya and madhur vipak. Therefore it seems that due to ushna virya this formulation stimulates the digestive fire and helps to control disease process and vata dosha is pacified by madhur vipaka.

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