

A CONCEPTUAL STUDY OF AHAARA PAAKA WITH ITS CLINICAL IMPORTANCE

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Abstract

Ayurveda is science of life and its main aim is to maintain healthy status of healthy living being i.e. prevention of disease and treatment of disease. To fulfill these purposes, Ayurveda has mentioned various fundamental principles in reference of sharira rachna, sharira kriya, chikitsa etc. Concept of ahaara paaka explained in Ayurvedic texts is one among them. The word ahaara paaka is a broad term and it includes various processes of digestion absorption assimilation and metabolism explained in modern science. As per Ayurvedic texts process of ahaara paaka begins from intake of food i.e. deglutition and ends at bhutagni paaka & dhaatwagni paaka (metabolic transformation). Here agni is the key factor in conversion of consumed ahara i.e. vijatiya dravya (Heterogeneous form) into sajatiya dravya (Homogenous form) i.e. suitable form for formation of different body tissues. During ahaara paaka process, dosha, dhatu and mala are formed and these are basic elementary tissue of body. When these dosha, dhatu, agni & are in equilibrium stage and perform their physiological function in normal way and satisfactory happy state of soul senses and psyche are called as Swasthya. So for having a state of health, it is necessary to have proper functioning process of ahaara paaka. This article tries to highlight the summery based on the concept of ahaara paaka and to validate this theory scientifically.

Keywords: Ayurveda; Ahaara paaka; Bhutagni paaka; Dhaatwagni paaka.

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INTRODUCTION

Ayurveda is science of life and its main aim is to maintain healthy status of healthy living being i.e. prevention of disease and treatment of disease.^[1] To fulfil this purpose Ayurveda has mentioned various fundamental principle in sharira rachna, sharira kriya, chikitsa etc. Concept of ahaara paaka explained in Ayurvedic texts is one among them.

The word Ahaara paaka includes complete chapter of digestion and metabolism. Various different processes such as deglutition, digestion, absorption, assimilation, adsorption and metabolism are collectively explained under the heading of ahaara paaka in classical Ayurvedic texts.^[2] Basic elementary tissues of body such as dosha, dhatu, mala etc are formed during different stages of ahaara paaka.^[3] Ayurvedic Science is based on theory of pancha maha bhoota, theory of tridoshas etc and all these are beautifully explained under ahaara paaka. Here agni is the key factor in conversion of consumed ahara i.e. vijatiya dravya (Heterogeneous form) into sajatiya dravya (Homogenous form) i.e. suitable form for formation of different body tissues.^[4]

During the process of ahaara paaka, three types of agnis act on ingested food in two different stages separately.^[5] In first stage jatharagni acts on ingested food in three different steps and convert them into ahara rasa and kitta bhaga.^[6] This stage is known as avasthapaaka and in second stage bhutagni and dhatwagni act on formed ahara rasa after its absorption in intestine, and this stage is known as nisthapaaka during this stage of metabolic transformation, heterogeneous form of ingested food converts into homogenous form^[7] i.e. suitable for formation of different tissue of body like panchabhautika ansha and sapta dhatus etc.

In Ayurveda the concept of ahaara paaka provides an extensive field of research in the present day.

AIMS AND OBJECTIVES

- To emphasize and discuss the concept of ahaara paaka in Ayurvedic classical literature.
- To evaluate the process of digestion and metabolism in Ayurvedic classical texts and in modern text.
- To validate the theory of ahaara paaka practically in day today clinical practice.
- To study clinical aspect of ahaara paaka.

MATERIAL AND METHODS

This concept is based on a review of Ayurvedic texts and chapter of digestion and metabolism from texts of modern physiology as well as related website and journals. Material related to ahaara paaka and other relevant topics have been collected from various Ayurvedic classical texts. The references were compiled, analysed and discussed for a thorough and in depth understanding concept of ahaara paaka in Ayurveda.

Conceptual study

By the aadaan karma (deglutition process) of prana vayu, ingested food is taken in to kostha (stomach). Here ingested food is acted upon by different liquids and that liquid does sanghaata (hydrolysis) of ingested food material, same time ingested food is also acted upon by some snigdha dravya and softening of food particles occurs. Meanwhile, Samaan vayu flare up the agni situated in abdomen. Thus if a person consume right amount of food on proper time, proper digestion occurs and age of person is increased.^[8]

In above references aadaan karma of prana vayu can be compared with process of deglutition that is both voluntary and involuntary reflexes. When food reaches in stomach, hydrochloric acid acts on bolus and

convert macro particles of food into micro particle, same time mucous also acts on ingested food and make it soft. Further when food reaches in duodenum, by stimulation of aurbach's plexus and Meissner plexus different digestive juices releases in GIT and complete the process of digestion. If a person consume balanced diet at proper timing, proper digestion occurs and person lives healthy life.^[9]

The process of ahaara paaka can be further classified as Avastha paaka and Nistha paaka.

Avasthapaaka is the process of digestion where digestion of food take places in three steps and ahaara rasa and kitta portions are formed in GI Tract. Jatharagni paaka is described as avastha paaka in Ayurveda.

Avasthapaaka is change in state of food substance in the amashaya (small intestine) and pakwasaya (large intestine) in the course of digestive process. The process of ahaara paaka is completed in three steps and these are Madhura Avasthapaaka, Amla Avasthapaaka and Katu Avasthapaaka.

Madhura avasthapaaka

The food consumed by person may include six types of rasas but among six rasas, first digestion of madhura rasa take place. This stage occurs in aamasaya so this stage is also known as aamaavastha. During this stage origin of kapha dosha occurs in form of foam.^[10]

This stage can be compare with digestion of carbohydrate as when we consumed food, firstly digestion of carbohydrate occurs and even it start in oral cavity itself by salivary amylase, and end products of carbohydrate digestion are monosaccharides i.e. glucose, fructose and galactose and these are sweet in taste.

Amla Avasthapaaka

Further food goes in pachyamanasya for digestion, here it becomes vidagdha (acidify) and sour bhava originates, thus pitta which origin place is said to pachyamanasaya, originate here in its pure form.^[11] This stage occurs in pachyamanasaya so this stage is also known as pachyamanaavastha.

This stage can be compare with digestion of proteins as when we consume food, after formation of bolus, it becomes acidify and breakdown into minute particles by the action of HCL and when chyme reach further in second part of duodenum, pancreatic juices and bile juice mixes here and complete digestion of proteins and fats.^[12] Most of amino acids i.e. end product of protein digestion have pH around six means they are slightly acidic,^[13] can be compare with amla bhavta and it can also compare with acidic chyme.

Katu Avasthapaaka

After amla avasthapaaka chyme goes further in pakvasaya and here by the vanhi (fire) situated here watery portion of it get dried up and solid residue convert into pinda roopa (solidify) and during this katu bhava yukta vayu originate.^[14] This stage occurs in pakwasaya so this stage is known as pakwa avastha.

This aspect relates to the acrid and pungent nature of reactions that occur in the large intestine during formation of faeces. All three stages of avasthapaaka reveals complete digestion of food and conversion of food in ahara rasa and kitta bhaga means digestion of carbohydrate, proteins and fat and formation of faeces in its last stage.

Nisthapaaka or Vipaaka

Once ahara rasa is formed, it get absorb in intestine, and the sequence of changes that

occurs in ahaara rasa after its absorption in intestine is known as vipaak.^[15]

In context of vipaak, there are two different conceptual theories. According to aatreya sampradaya vipaka are of three types i.e. madhura vipaaka, amla vipaaka and katu vipaak.^[16] According to Dhanwantary sampradaya there are two types of vipaak i.e. guru vipaaka and laghu vipaaka.^[17]

Here action of bhutagni and dhaatwagni occurs under the name bhutagni paaka and dhaatwagni paaka.

Bhutagni paaka

According to this mechanism whole universe is made up of pancha mahabhoota, even constitution of body and universe is same. Body is made up of pancha mahabhoota and food is also made up of pancha mahabhoota. During this stage of nisthapaaka, five different bhutagni by name prithvi agni, aapya agni, vayva agni, tejo agni and akash agni acts on ahara rasa's bhotika ansha respectively and convert its heterogeneous form into homogenous form.^[18]

The process of bhutagni paaka start immediately after absorption i.e. portal circulation to the liver. Hence liver is considered as centre of bhutagni vyapara.^[19]

The five bhutagni, digest their own part of the element present in the food materials. After the digestion of food by the bhutagni, digested materials containing the elements and qualities similar to each bhutas nourishes their own specific bhoutika elements of the body, so all the exogenous substances must be subjected to bhutagni paaka to become endogenous.

Thus cause appropriate nourishment to tissue. Action of bhutagni can be equated with the conversion of digested materials in the liver.

Dhaatwagni paaka

After completion of bhutagni paka only, action of sapta dhaatwagni starts. There are 4 different theories in relation of dhaatwagni paaka.

Among them "ek kaal dhatu poshana paksha" is universal accepted and according to this all 7 dhaatwagni i.e. rasa dhaatwagni, rakta dhaatwagni, mamsa dhaatwagni, meda dhaatwagni, asthi daatwagni, majja dhaatwagni and shukra dhaatwagni acts together on ahara rasa and form their respective dhatus, upadhatus and malas.^[20]

Each dhaatwagni has got speciality to synthesize and transform the constituents suitable to its particular dhatu.

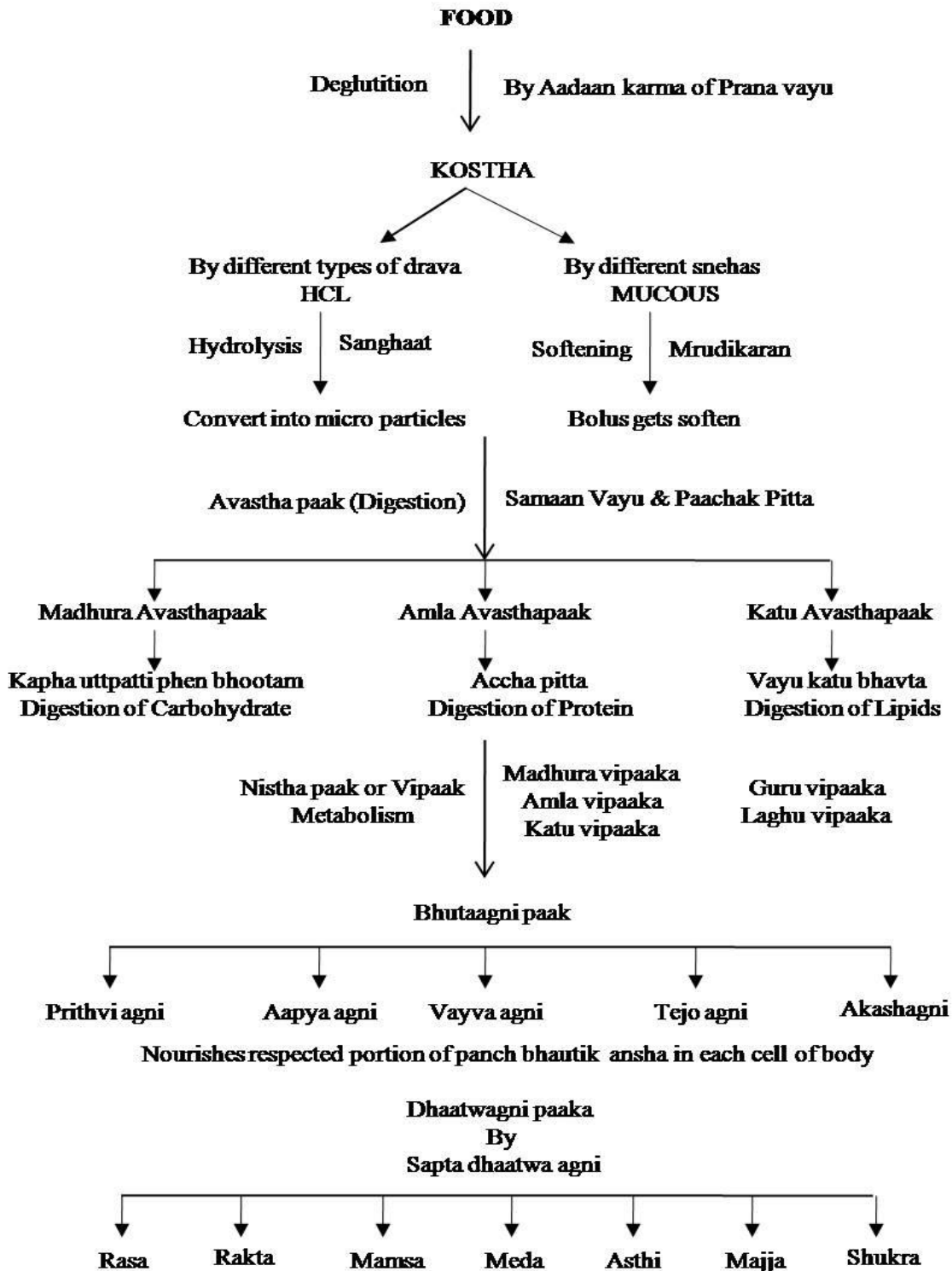
Acharya Charaka has mentioned that various types of dietetic materials are digested by their own agni (Bhutagni), encouraged and enhanced by Jatharagni, which is further digested and metabolized by dhaatwagni to associate the body with the nutritional strength, complexion and happy life along with providing energy to the seven dhatu. (Flowchart 1)

DISCUSSION AND CONCLUSION

Concept of ahaara paaka is basic fundamental physiological process that occurs in body by the action of Prana vayu, Samana vayu, Bodhaka kapha, Kledaka kapha and Paachak pitta.^[21]

Ingested food is to be digested, absorbed and assimilated which is unavoidable for the maintenance of life and that occurs under the process of ahaara paaka. Similar to description of chapter of digestion and metabolism, in Ayurvedic texts description of ahaara paka is given so beautifully divided into stage by stage.^[22]

Flowchart 1: Akara paaka step wise



Function of dhaatwagnis are mainly two i.e. one is synthesis of new tissue and second is to yield energy for the function of tissue

AHAARA PAAKA

Each stage has complete correlation with modern texts such as avasthapaak is stage of conversion of food form i.e. similar to digestion i.e. conversion of macro and non suitable form of absorption into micro and suitable form of absorption, similar to stages of carbohydrate, protein and fat digestion, Avasthapaak is also divided in to Madhura avasthapaaka, amla avasthapaaka and katu avasthapaaka and after its absorption simple form is either used for energy production or stored in body. Same way in bhutagni and dhatwagni paaka body basic structural elementary tissues i.e. sapta dhatus are formed and each cell of body is nourished by bhutagni paak. Function of dhaatwagni are mainly two i.e. one is synthesis of new tissue and second is to yield energy for the function of tissue. If dhaatwagni is impaired both of these will impair. Seven categories of agni and dhatus undergo metabolic transformation in two different ways for the sustainers of the body. One is prasada paaka and another is kitta paaka. The prasada paaka is stated to yield the seven kinds of poshaka or asthaya dhatus, kitta paak is the waste products.^[23]

Here each stage of ahaara paaka has clinical importance. If people consume balance diet at proper timing there will be proper digestion and he will live healthy life. So for maintain healthy status of healthy living being its compulsory to have a normal functioning jathragni, bhutagni and dhaatwagni.^[24] As when these agni will be normal functioning, process of ahaara paaka will be proper and all dosha, dhatus will be formed properly and nutrition of basic bhoutika element will be proper and mala will also formed and excreted at proper time from body.

Theory of pancha mahabhoota is universal accepted in clinical practice, as if we are unable to diagnose disease but by proper examination of dosha dusya sammurchana of patients i.e. by symptoms you can apply concept of swa yoni vardhan in kshaya avastha and kshaya in Vardhan avastha.^[25] Likewise in

case of absence of drug of choice of disease you can use drug depending on panchabhautika composition.

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