



A CONCEPTUAL STUDY OF VIRUDDHAAHARA WITH PARTICULAR REFERENCE TO KUSTHA

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ABSTRACT

The main motto of Ayurveda is the preservation to health of a healthy person and treating ailments while demolishing the causative factors of pathogenesis. For this purpose it is necessary to know about the complete structure of human body and its collaboration with environmental factors before treating the diseases. In day to day life, person consumes an incompatible diet and faulty food habits which leads to most of the diseases, among which skin disorders are prime. According to Ayurveda Viruddhaahara (incompatible diet) is one of the main etiologic factor for all types of Kustha (skin disease). To conduct a conceptual study of Viruddhaahara with special reference to kustha.

KEYWORDS : Viruddhaahara (incompatible diet), Ahara, kustha (Skin disease), Agni

INTRODUCTION

The principles of Ayurveda are based on experimental studies of several years. Acharyas have tested these principles for many years and then these principles have got a place in Ayurvedic Samhitas but now a day one is susceptible to embrace all those things that are harmful to his/her constitution, thereby increasing the incidence of promicity to diseases. In such disease conditions physicians have to use these principles for preventive and curative purpose. In today's fast growing world of globalization where health is a major issue, Ayurveda offers appropriate knowledge of every disease; right from its causes to ill effects and acknowledges the fact of prevention of its causes to the treatment of each of them.

Ahara, which is ingested and thus it includes in itself both diet and drugs. Food is a substance which when taken in the body, is able to build up or repair tissue, protects against ill health as supply materials for the production of health and energy. Wholesome diet is responsible for the growth and development of the body, on the contrary, unwholesome diet causes several diseases. Acharya Sushruta have emphasized that Ahara is responsible for the Preenana of the body. It produces instant strength, increases the lifespan, lustre, happiness as well as normal mental activities like memory power etc. Ahara plays a vital role in retrieval the lost strength during the stage of convalescence. All Acharyas have accepted a vital role of Viruddhaahara the manifestation of many diseases. Diet articles are inimical to the body elements tend to disagree with the body system. The food, which having disclosed the morbid humours but do not eliminate them from the body are to be regarded as unwholesome. Charaka has mentioned 18 types of Viruddhaahara which are Viruddha to Desha, Kala, Agni, Matra, Satmya, Aniladibhi, Sanskara, Virya, Koshtha, Avastha, Kram, Parihara, Upachara, Paka, Samyoga, Hrit, Sampada and Vidhi etc. All types of Viruddhaahara not produce the disease because body elements like Dushya and Deha Bala protect the body from the diseases.

Generally, Viruddhaahara leads to Dosha aggravation &

Dhatu aggravation because Viruddhaahara are nothing but those articles of food, which dislodge the morbid humours Utklesha (aggravation or excitation) of Dosha, but do not eliminate them from the body. So continuous intake of Viruddhaahara lead to vitiation of Agni, which is root (main) cause of every disease. Because Agni is responsible for biotransformation of different materials. So vitiation of Jatharagni leads to vitiation of Dhatvagni and Bhutagni. This vitiated Jatharagni does not digest even the lightest of food substances, resulting in indigestion (Ajirna). This undigested food material turns sour and acts like a poison, which is called Amavisha in Ayurvedic terminology. 'Amavisha' (undigested poisonous food) leads eventually to the breakdown of immune system. Tridosha gets provoked by this type of ingestion. Intake of incompatible Diet vitiates Srotasa as mentioned that general food substances and activities (Vihara) which are similar in quality to body humours and deleterious to the body elements vitiate the body channels and therefore Srotovarodha or Sanga or obstruction in channels is occurs which leads to several diseases of acute to severe nature.

Skin is the mirror of one's health since it is the largest organ of the integumentary system and is first line of defence against pathogens. As it is said that you are what you eat, healthy skin reflects healthy food habits. Ayurveda the holistic science considers Ahara (balanced diet) as one of the pillars that empowers strength, complexion and growth and full span of life.

In Ayurveda, Kustha (Dermatosis: etymologically 'which is ugly in nature' is a sort of skin diseases because other types of skin diseases are also mentioned in the different context in the classical text of Ayurveda. But in Kustha the endogenous factors (Tri-dosha & Rakta, Mamsa and Meda, Svedavaha Srotas) which obviously afflicted by exogenous- make an avenue for the pathogenesis as well as manifestation of the disease. So main aims and object to treat the disease and to avoid the exogenous factors as well as to prepare a dietetic regimen. Unhealthy diet and diet habits is one of the key cause of growing global burden of diseases. Ayurveda mentions a

number of factors related to Aahara which leads to formation of Kustha. Present studies emphasise on the proper understanding and identifies these aharaja nidans responsible for Kustha in our diet and interpret these nidanas mentioned in the classics in today's perspective to prevent the disease and maintain a healthy state of body.

AIM AND OBJECTIVES

The present study is planned with the following aim and objectives-

1. To explain and explore the concept of lifestyle and diet according to Ayurveda classics.
2. To assess the role of changed Ahar, Vihar and Agni on the disease Kustha.
3. To find out cause-effect relationship between Viruddhaahara (incompatible diet) and Kustha (skin disease).

MATERIAL AND METHODS

The study is designed as a conceptual study and for this conceptual study Ayurveda Samhitas like Charaka Samhita, Sushruta Samhita, Ashtang Hridaya, Madhav Nidana, internet and modern medical literature have been reviewed

OBSERVATION

Charaka defined viruddhaahara that certain diet and its combinations which interrupts the metabolism of tissue, which inhibits the process of formation of tissue and which have the opposite property to the tissue. The food which is wrong in combination, has undergone wrong processing, consumed in incorrect dose, and/or consumed in incorrect time of the day and in wrong season can lead to Viruddha Ahara. With the help of modern technology and bio-chemistry aspects, it becomes easy to elaborate the effect of Viruddhaahara mechanism of action. The basic meaning of word Viruddha is opposite which means that, food combination of certain type of food may have –

- Opposite properties
- Opposite activities on the tissues
- May exert some unwanted effect on the body form
- May exert undesirable effects, when combined in certain proportion
- May have unwanted effect if consumed at wrong time

In Charaka Samhita Sutrasthana 26, Charaka himself has mentioned 7 types of Viruddha like.

1. Guna Viruddha – Incompatibility on account of their quality.
2. Samyoga Viruddha – Incompatibility of combination
3. Sanskara Viruddha - Incompatibility of preparation
4. Desa Viruddha - Incompatibility of habitat
5. Kala Viruddha - Incompatibility of time
6. Matra Viruddha - Incompatibility of quantity
7. Swabhava Viruddha - In compatibility of nature

Sushruta has enumerated four types of Viruddha (Su. Su. 20/15)

1. Samyoga Viruddha
2. Karma Viruddha (Sanskara Viruddha)
3. Mana Viruddha (Matra Viruddha)
4. Rasa, Virya, Vipaka Viruddha

In Same way, Ashtang Hridaya and Ashtang Sangray have also followed the Charaka Samhita and Sushruta Samhita. They also described Samyoga Viruddha, Matra Viruddha, Sanskara Viruddha, Kala, Desha Viruddha etc. But they have not mentioned any type of Viruddha, which Charaka has stated in verses 86-101. A.S who has emphasized Viruddhaahara more than others by giving name to one chapter as “Viruddhavignaniyama” (i.e. As. Su. 9) has not maintained these 18 types of Viruddhas.

Amongst types of Viruddhaahara between verses 86-101,

some of them are overlapping to each other, viz. Pakaviruddhaahara does not need a separate place; it may be included under Sanskara Viruddha. Similarly Krama Viruddha may also be included under Vidhi Viruddha

So, it is very right to say that these verses (86-101) may not be the original views of Charaka or Dhruhabala but are added later.

Originally, Charaka has mentioned following types of Viruddha

1. Guna Viruddha
2. Matra Viruddha
3. Desh Viruddha
4. Kala Viruddha
5. Samyoga Viruddha
6. Sanskara Viruddha
7. Swabhava Viruddha
8. Prakriti Viruddha
9. Dosha Viruddha

This opinion could be proved more applicable and perfect in brief by the following table where all these Viruddhaahara are incorporated in Ashta Ahara Vidhi Visheshayatana. However Vagbhatta has enumerated seven factors as Saptahara Kalpanavisheshayatana (As. Su. 10/4). He has explained Upayogasamstha and Upayokta together and counted them as “Upayogavyavastha. They are as under-

Aahara Visheshayatana Including Viruddha Aahara

No	Ahara Visheshayatana	Level of Viruddha	No. of Viruddha.	Including types of viruddhaahara
1	Prakriti	Prakriti Viruddha	4	Vatadi, Swabhava, Agni, Koshtha
2	Karana	Karana Viruddha	2	Sanskara, Paka
3	Rashi	Rasi Viruddha	1	Matra
4	Desa	Desa Viruddha	1	Desa
5	Kala	Kala Viruddha	1	Kala
6	Samyoga	Samyoga Viruddha	3	Samyoga, Guna, Virya
7	Upayokta	Upayoga	7	Hridaya, Virya, Satmya,
		Vyavastha		Vidhi, Sampada, Krama
8	Upayoga	Viruddha (A.S.)		Upachara, Parihara
	Samsthana			

Mode of Action

Charaka Acharya has stated that regular consumption of certain food items and drugs aggravates Sharirastha Prakruta Doshas but does not eliminate them from body, according to Chakrapani this is the unique characteristics of Viruddha Anna. As these vitiated Doshas stay in body, they interact with Sharirastha Viguna Dhatus and lead to many diseases.

Diseases due to Viruddha Ahara:-From the above information it can be understood that regular consumption of any type of Viruddhaaharacan lead to number of disorders. Acharya Charaka has enlisted them in his Samhita. Some of them are acute while some are chronic diseases. All those can be classified as follows:-

1. Indriyopghatakara – Disease which hampers function of Indriya. e.g. - Andhya, Shandhya, Bhagandara, Jwara, Pinasa,.

2. Dhatu Parinamkar - Diseases which hamper Rasadi Sapta Dhatus .e.g. - Dakodara, Visarpa, Pandu, Amavisha, Kustha, Santandosha, Visphota, Moorchcha, Aadhmana, Galagraha, Kilasa, Grahani, Shotha, Amlapitta, Mrityu.
3. Manasa Vyadhi - Diseases which hampers psychological condition of persone.g. Unmada,

It can be observed from above list that Viruddhaahara leads to disorders up to impotency and infertility thus it has an impact up to Shukra Dhatu Dushti, moreover it can causes Mrityu (death) which means it has impact on Oja also. If the above list of disorders is classified as per the body system according to modern, it can be said that Immune system, Endocrine system, Digestive sys- tem, Nervous system and Circulatory system all get affected by continuous consumption of Viruddha Ahara.

Effect Of Viruddhaahara Agni

The Agni mostly gets vitiated by Viruddha type of Ahara. The vitiated JatharAgni does not digest even the Laghu Ahara (food substance easy to digest), resulting in state of indigestion. This indigested food materials turns sour and acts like a poison, which is termed as Amavisha. Tridosha get provoked by this type of Amavisha.

Effect Of Viruddhaahara Srotas

In general, food substances and activities (Vihara) which are similar in quality to body humors (Doshas) and deleterious to the body elements (Dhatu) vitiate the body channels (Srotas). The vitiation results in Srotodushti i.e. malfunctioning of Srotas. The symptoms of Srotodushti are Atipravritti, Sanga, Siragranthi, and Vimarga Gaman.

Modern Concept of Incompatible food- Concept of Incompatible food does not exist in modern dietetics; as given prime importance in Ayurveda. However in Modern Medicine; role of diet induced changes in the drug activity and exacerbation of certain disease conditions after consumption of particular type of food is well known. Some topics which have similarity with incompatible food are as follows-

1. Agonist and Antagonist
2. Free radicals formation
3. Food Allergies
4. Food poisoning

5. Food additives (preservatives) Agonist: A substance that acts like another sub- stance and therefore stimulates an action. Agonist is the opposite of Antagonist. Antagonist: A substance that acts against and blocks an action. Antagonist is the opposite of Agonist. Antagonists and agonists are key players in the chemistry of the human body and in pharmacology.

6. Food Allergies: These illnesses are sometimes called individualistic adverse reactions to foods because they affect only certain individuals in the population. These individualistic reactions are also termed as Food sensitivities. Food poisoning: This type of illness arises from eating contaminated food. It may be contaminated by bacteria, viruses, environmental toxins or toxins present within the food itself. e.g. mushrooms, seafood. Food additives (preservatives): these are used to preserve the natural characteristics of food and to increase the shelf life of food and inhibit natural ageing and discoloration that can occur during food preparation.

Nidana (Causative Factors) Of Kustha:

Etiological factors of Kustha as mentioned in different Ayurvedic texts may be classified into following group's viz. Aharaja Hetu, Viharaja Hetu, Acharaja Hetu, and Other Hetu. Aharaja Hetu: The main causative factors of Kustha are Viruddhaaharacan Mithya Ahara

- (a) Viruddha Ahara: "Viruddha" or "Vairodhika" is the

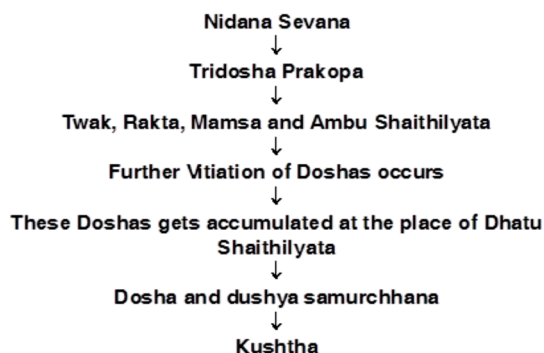
technical terms for incompatible or antagonistic. All substances which act as antagonist to normal Dhatu of the body are to be regarded as 'Viruddha'. Commentator Chakrapani interprets 'Viruddha' as 'Dushana' (vitiating) but Gangadhara takes it in the sense of 'Nashaka' (destroyer). Viruddha Dravyas dislodge the various Doshas but do not expel them out. even death also. But for the causation of the disease 'Shilana' i.e. continuous use must be there. Charaka also mentioned that they can not affect persons who are young, to whom Viruddhaahara Satmya, who takes its small quantity, who have strong digestive power, who has undergone Snehana therapy, or who is of strong physique due to 'Physical exercise'. Charaka has mentioned 18 types of Viruddha Ahara. According to Vagbhatta Viruddhaaharacan sometimes become fatal just like the poison & in some case it

- (b) Mithya Ahara: Mithya Ahara means improper diet. According to Vijayrakshita, the diet opposite to 'Ashta Ahara Vidhi Visheshayatana' is designated as 'Mithya Ahara'. Charaka has described eight factors determining the utility of food they are called as 'Aharavidhi Visheshayatana'. They are Prakriti, Karana, Samyoga, Rashi, Desha, Kala, Upayoga Samstha and Upayokta. Eight factors give rise to beneficial or harmful effects. Habitual intake of things in proper way may more useful but in improper way they are always harmful.

DISCUSSION

Ayurveda is a broad based science of life developed with two-fold objective i.e. to preserve the health of the healthy and to relieve the disease of the ailing. In the present context only the positive health aspect of Ayurveda is being discussed because the remaining aspects of this science are not under the preview of this monograph but discussed elsewhere. Ayurveda puts greater emphasis on the maintenance of positive health although it comprehends well on the study of the nature of ill health and the curative measures for the treatment of different diseases.

Charaka has emphasized the dual part played by Nidana, i.e. simultaneous vitiation of Tridosha and also Shaithilyata in the Dhatus such as Twak, Rakta, Mamsa and Lasika. Thus vitiated Tridosha gains momentum to vitiate Shaithilya Dhatus and hence the disease Kustha gets manifested.



Acharya Sushruta described that due to Doshaja and Karmaja Hetus, aggravation of Pitta and Kapha takes place which produce Avarana of Vata which intum aggravates Vata. Vitiated Vata enters in the Tiryaka Sira with two other vitiated Doshas and their spread leads to further vitiation. After this it reaches to Bahya Rogamarga (Twak, Rakta, Mamsa, Lasika) and spread throughout the body, producing Mandala at the gathering site of Doshas. If these Doshas are not treated properly. After that they enter into the deeper Dhatus of the body.

From the above analysis of it is clear that Ahara plays an important role in maintenance of balance between dosha,

Dhatu and mala. Ahara though doesn't act as immediate cause of Kustha but with regular and excessive use of these nidana hampers the process of proper digestion due to derangement of Agni, formation of ama (endotoxin, free radicals) which has deleterious effect on body (vitiated Tridosha). In long term it causes shithilta (laxity) in Dhatus (Twacha, Rakta, Mamsa, Lasika) where the vitiated dosha gets lodged and causes Kustha. Though in present day we do not eat the food combinations mentioned in Samhitas but it is evident that in this scenario of competitive fast moving life, there has been drastic change in dietary habits. We are consuming mostly fast foods, pre-cooked food, packaged food, food supplements, and beverages both hot and cold simultaneously that interestingly fall under the category of Viruddha Ahara. The unwanted effect of wrong or incompatible combinations of food is not limited up to gastrointestinal tract only but may hamper the major systems of the body.

CONCLUSION

1. Viruddhaahara or incompatible diet is very important contribution discussed by ancient Ayurveda Acharyas, which is known to be the cause of many systemic disorders
2. Any Aahara which is not prepared as per the Astacharavidhi Visheshayatana (dietetic code) does not benefit the body on the contrary, it harms the body by vitiating Doshas and Dhatus, hence any Ahara inducing the above pathology in human body comes under the heading of "Viruddhaahara". It is important to understand the mechanism of how Viruddhaahara a cause of many metabolic disorders. It is essential to know certain food combinations which interact with each other and create many of systemic disorders.
3. Viruddhaahara taken regularly could induce inflammation at a molecular level, disturbing the eicosanoid pathway creating more arachidonic acid leading to increased prostaglandin-2 and thromboxane. This inflammatory effect is an important effect. As these are all the basic pathologies that create Agni Mandya, Ama, and a number of metabolic disorders.
4. The wholesome use of Aahara brings health whereas unwholesome food habits are cause of various diseases. The incompatibility of food is described in Ayurveda under the concept of Viruddhaahara. In Ayurveda, the concept of viruddhaahara is very much pivotal in the pathogenesis of the disease. Acharya Charaka defines viruddhaahara as certain diet and its combinations, which interrupts the metabolism, which inhibits the process of formation of tissue and which have opposite property to that of the tissue are called as viruddhaahara or incompatible diet. Viruddha can be considered as diet which are having mutually contradictory properties, contradictory to tissues, diet capable of producing untoward effect on the body when processed in a particular form or proportion or those food which may produce an unwanted effect when taken at an inappropriate time. Ayurvedic literature has compiled almost 18 types of Viruddha Aahara and has also mentioned complications ranging from skin diseases (kustha), Visarpa (erysipelas), Unmada (insanity) and Marana (death).
5. Ahara and Vihara form the chief foundation upon which life of individual is founded. It is generally thought that diet has no direct relationship with diseases. But Ayurveda has described diet and regimen as the main causes for every disease. Contemporary medicine has less appreciated the role of dietary factors in the pathogenesis, progress and outcome of disease. Nutritional, biochemical and metabolic aspects of diet definitely play an important role in maintaining the normal integrity of skin and also promoting the immunological role of skin.
7. Agni converts food in the form of energy, which is

responsible for all the vital functions of our body. Therefore, Ayurveda considers that Deha Agni is the cause of life, complexion, strength, health, nourishment, lusture, oja, teja (energy) and prana (life energy)

Viruddhaahara causes Agnimandya of patients. Agnimandya leads to incomplete digestion and fermentation. Combining foods improperly can produce indigestion, fermentation, putrefaction and this condition if prolonged can lead to toxemia and disease complex for example Milk with fruits can diminish Agni, change the intestinal flora producing Kled & leads to Amotpatti & Tridoshadushti due to Ashryaashrayi sambandh leads to Mansa dushti, Twak dushti, Lasika dushti and Rakta dushti and causes Kustha.

8. In Ayurveda, the term Nidana has been used for cause. Karana (cause) is defined as that which produces the Karya (effect). There is no effect without cause; both cause and effect are closely related. According to the concept of the disease formation, Nidana (cause) is main culprits of many diseases. Ayurveda attaches the greater importance to Nidanans and describes them in details as causes of diseases in diseases.
9. These faulty diets & lifestyle is Nimitta Karana for disease, yet it is very potent causative factor for several diseases. In Kustha, due to continuous intake of etiological factors, the physiological structure of skin is disturbed (e.g. Dosh, Dushya, Srotasa etc.) and formulates various skin pathogenesis.
10. Aahara plays an important role in maintenance of balance between dosha, Dhatu and Mala. Ahara though doesn't act as immediate cause of Kustha but with regular and excessive use of these nidana hampers the process of proper digestion due to derangement of Agni, formation of ama (endotoxin, free radicals) which has deleterious effect on body (vitiated Tridosha). In long term it causes shithilta (laxity) in Dhatus (Twacha, Rakta, Mamsa, Lasika) where the vitiated dosha gets lodged and causes Kustha.
11. Viruddhaahara shows its effects from rasa level Dhatu to Sukra Dhatu i.e., it effects all the Dhatus which shows its severity of consequences which leads to many systemic disorders and it also acts at gene level which reveals that it is cause for many diseases of unknown etiology (idiopathic) and also cause for carcinogenesis.
12. Dietary interventions have traditionally been an underappreciated aspect of dermatological therapy. Dietary interventions may be recommended as therapy, as in acne. Dietary change may help to prevent skin disease, as in aging of the skin or skin cancer. Dietary change may also be an important aspect of prevention of associated systemic disease, as in psoriasis.
13. So it is concluded that Viruddhaahara an important aspect of today's improper dietary habits. This can lead to several hazardous diseases most commonly skin diseases. Majority of people are not aware about these incompatible diets. If people avoid these faulty dietary intakes, then production of most of the diseases will be controlled up to some extent.

REFERENCES

AHARA

- Shabdakalpadruma, Page.58
- Shabdakalpadruma, Page.58
- Shabdastoma Maha nidhi
- Vaidyaka shabda Sindhu
- Vachaspathyam
- Cha. su. 28/85, Chakrapani
- Cha. su. 11/15, Gangadhara
- Shabdakalpadruma, Page.58

VIKRAMAHARA

- S. su. 9/17, Indu
- Cha. vi. 1/4; A. H. su. 9/24
- Cha. chi. 1/21
- Cha. su. 25/40
- Cha. su. 25/40
- Cha. su. 17/77
- Cha. su. 26

- Cha. vi. 1/29
- Cha. vi. 1/29
- Cha. vi. 1/7-8
- Cha. vi. 1/29
- Su. su. 35/40, Dalhana
- Cha. vi. 1/20
- Cha. vi. 1/20
- Cha. su. 26

KUSHTA

- H. ni 14/3, Arunadatt
- Rigveda, 8-91-7
- Rigveda, 1,1/7-7
- Yajurveda, 1-23, 1-4, 1-24, 10-13/30, 8-10
- Aushadha dhani, 120/3
- Cha. chi. 12/5,6
- Cha. su. 23/6

BOOKS

- 1- Charaka Samhita by Agnivesha-.Revised by Charaka and Dridhabala with Vidyotini Hindi Comm. By Kasinatha Shastri, Dr. Gorakha Nath Chaturvedi, Edited, Pt. Rajeshwaradatta Shastri, Pub. Choukhamba bharati academy, Varanasi, Part 1,2005
- 2- Charaka Samhita by Agnivesha, Revised by Charaka and Dridhabala with Vidyotini Hindi Comm. By Kasinatha Shastri, Dr. Gorakha Nath Chaturvedi, Edited, Pt. Rajeshwaradatta Shastri, Pub. Choukhamba bharati academy, Varanasi, Part 2,2007
- 3- Charaka Samhita by Agnivesha, Revised by Charaka and Dridhabala with Ayurveda Deepika of Charakapanidatta. Edited – Vaidya Jadavaji Trikamaji Acharya, Pub. By Choukhamba Sanskrit Sansthan, Varanasi, 5th edition reprint 2007.
- 4- Charaka Samhita, Ayush Teeka, by Narishchandra Singh Kushwaha, Choukhamba Orientalia, First edition, Varanasi, 2005
- 5- Charaka Samhita, Chakrapani's Ayurveda Dipika, (Text with English translation and Critical exposition based on Chakrapani Datt's Ayurveda Dipika)by R.K. Sharma Bhagwana Dash, Choukhamba Sanskrit Series Office, Varanasi, Vol-1 Reprint 2007.
- 6- Charaka Samhita, Jalpa Kalpa Taru Vyakhya of Gangadhara raya by Sengupta Narendranath., Sengupta Balaichandra., Vol.III, 2nd ed., Varanasi:Choukhambapublishers,2002
- 7- Charaka Samhita,by P.V.Sharma Vol. I,9th eddition Pub. Choukhamba bharati academy, Varanasi.2005