



Review Article

UNDERSTANDING THE FEATURES OF MADATYAYA (ALCOHOLISM)

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ABSTRACT

Alcoholism is one of the serious social problems which is rapidly increasing in every year. The fastest growth is being observed in the developing countries of Asia more particularly in India. Drinking of alcohol makes the life of a man very miserable. Alcohol not only degrades the health of the person but also affects his family and society. In *Ayurveda*, the varieties of illnesses caused by the improper use of alcohol are grouped under one heading '*Madatyaya*'.

In this contemporary era every disease is being understood by comparing it with modern parlance. Here is a small effort to understand the features of *Madatyaya* in terms of modern perspective. The disease *Madatyaya* is classified into *Vatika*, *Paittika*, *Kaphaja*, *Sannipataja* (based on *Doshic* predominance), *Panatyaya*, *Paramada*, *Panaajeerna*, *Panavibhrama*, *Dhwamsaka* and *Vikshaya*. The different signs and symptoms mentioned in these types, complications of *Madatyaya* as well as the features of bad prognosis of *Madatyaya* can be understood based on available modern descriptions. By understanding the features of *Madatyaya* we can say that *Madatyaya* is not just an alcohol intoxication, dependence or withdrawal state, but it is the condition where multiple systemic dysfunctions are involved from immediate and acute manifestations to chronic and severe manifestations. Neurological, gastro-hepatic and cardio-pulmonary manifestations are the commonest features seen in the patients of *Madatyaya* which is also similar to the descriptions of alcoholism. Thus we can say that the word alcoholism which is used in broad sense can be said as equivalent to the word *Madatyaya*.

KEYWORDS: *Madatyaya*, Alcoholism, *Panatyaya*, *Sannipataja Madatyaya*.

INTRODUCTION

Alcoholism refers to addiction to alcohol. It is a chronic disorder, in which a person is unable to refrain from frequent and excess consumption of alcohol for physical or psychological reasons. The World Health Organization (WHO) has listed alcoholism as one of the three most deadly killer diseases of the 20th century [1]. The abuse of alcohol results in 2.5 million deaths per year. 32,000 young people between the age of 15 and 29 die out of alcohol related cause, thus resulting in 9% of all death in that age group. At least 20% of the patients in the mental health settings have alcohol dependent or alcohol related disorders, from both the genders and all the socioeconomic backgrounds[2]. Alcoholism is also one of the serious social problems. It often brings poverty and certain amount of crime and results in material unhappiness and broken homes. It also leads to numerous traffic accidents.

When we scrutinize the Ayurvedic texts we get plenty of descriptions related to the disease *Madatyaya*. It is a disease caused due to heavy and prolonged use of alcohol against rules and regulations. Acharya Charaka and Acharya Vagbhata have mentioned 4 types of *Madatyaya* namely *Vataja*, *Pittaja*, *Kaphaja* and *Sannipataja* whereas Acharya Sushruta classifies the diseases caused due to inappropriate use of alcohol as *Panatyaya*, *Paramada*, *Panaajeerna* and *Panavibhrama*. Whenever a person

consumes heavy and prolonged alcohol after a strenuous act or without intake of nutritious food or not having any physical exercise it results in deranged carbohydrate and fat metabolism leading to increased protein catabolism. This results not only in *Dhatukshaya* but also in *Ojokshaya* too.

Aims and Objectives

- To understand the features of *Madatyaya* in terms of modern perspective.

MATERIALS AND METHODS

For the present review article, detailed literary study is performed. The content and references are analysed from Charaka, Sushruta and Vagbhata. Also relevant references are taken from modern texts and research articles.

The patients of *Madatyaya*, generally use to take alcohol before intake of food. When patient becomes addicted and develops dependence, he will be consuming more alcohol and a little food. Due to this minimal intake of food and excessive intake of alcohol, which has no nutritious value, the body will not get sufficient nutrition and there will be depletion of protein due to its increased catabolism as needed carbohydrates and fats are already catabolised. Due to prolonged and heavy intake of alcohol, functions of liver and kidney also will be deranged. It will result in increased production and decreased excretion of

protein end products and by-products of protein metabolism. This deranged metabolism may be the state called the state of 'Ksharatva' of *Annarasa* in the body.

According to modern medicine ethanol is absorbed from mucous membranes of the mouth and esophagus (in small amounts), from the stomach and large bowel (in modest amounts), and from the proximal portion of the small intestine (the major site) which is also the site of absorption of many of the B vitamins^[3]. It is highly water-soluble and hence rapidly enters the blood stream. It is modestly fat-soluble and is hence neurotoxic. Only 2-10% of ethanol is excreted unchanged through the lungs, kidneys and sweat. The rest is metabolised in the liver, mostly in the cytosol and at high concentrations in the microsomes of the smooth endoplasmic reticulum^[4].

Ethanol rapidly enters the bloodstream and, because of its high solubility in water, is distributed to almost every body system. Because of its modest fat solubility, alcohol is likely to have effects on body membranes rich in fat, including neurons. Alcohol is a potent drug that causes both acute and chronic changes in almost all neurochemical systems. Thus alcohol abuse can produce serious temporary psychological symptoms including depression, anxiety, and psychoses. Long-term, escalating levels of alcohol consumption can produce tolerance as well as such intense adaptation of the body that cessation of use can precipitate a withdrawal syndrome usually marked by insomnia, evidence of hyperactivity of the autonomic nervous system, and feelings of anxiety.^[5]

Chronic alcoholism is responsible for morphologic alterations, primarily in the liver and stomach, but they may occur in virtually all organs and tissues. Chronic alcoholics suffer significant morbidity and have a shortened life span, related principally to damage to the liver, GI tract, CNS, cardiovascular system, and pancreas.^[6]

The liver is the main site of chronic injury. In addition to the fatty change, chronic alcoholism causes alcoholic hepatitis and cirrhosis. Cirrhosis is associated with portal hypertension and an increased risk for the development of hepatocellular carcinoma. In the GI tract, chronic alcoholism can cause massive bleeding from gastritis, gastric ulcer, or esophageal varices (associated with cirrhosis), which may prove fatal. Thiamine deficiency is common in chronic alcoholic patients; the principal lesions resulting from this deficiency are peripheral neuropathies and the Wernicke-Korsakoff syndrome. Cerebral atrophy, cerebellar degeneration, and optic neuropathy may also occur. Alcohol has diverse effects on the cardiovascular system. Injury to the myocardium may produce dilated congestive cardiomyopathy (alcoholic cardiomyopathy). Moderate amounts of alcohol (one drink per day) have been reported to increase serum levels of high-density lipoproteins (HDL) and inhibit platelet aggregation, thus protecting against coronary heart disease. However, heavy consumption, with attendant liver injury, results in decreased levels of HDL, increasing the likelihood of coronary heart disease. Chronic alcoholism is also associated with an increased incidence of hypertension. Excess alcohol intake increases the risk of acute and

chronic pancreatitis. The use of ethanol during pregnancy-reportedly as little as one drink per day-can cause foetal alcohol syndrome. It consists of microcephaly, growth retardation and facial abnormalities in the newborn and reduction in mental functions in older children. It is difficult to establish the amount of alcohol consumption that can cause foetal alcohol syndrome, but consumption during the first trimester of pregnancy is particularly harmful. Chronic alcohol consumption is associated with an increased incidence of cancer of the oral cavity, esophagus, liver, and, possibly, breast in females. The mechanisms of the carcinogenic effect are uncertain. Ethanol is a substantial source of energy (empty calories). Chronic alcoholism leads to malnutrition and deficiencies, particularly of the B vitamins^[6].

According to Ayurveda, inappropriate usage of alcohol for long duration leads to the development of the disease *Madatyaya*. It has been classified into 4 types depending upon the *Doshic* involvement viz., *Vataja*, *Pittaja*, *Kaphaja* and *Sannipataja*.

Vataja Madatyaya

Features of *Vataja Madatyaya*^[7] can be understood as follows:

Hikka may be due to gastritis or other gastrointestinal problems leading to irritation of diaphragm, *Shvaasa* may be due to decreased respiratory functions and infections, *Parshvashoola* may be due to cardiac diseases or pancreatitis, *Shirah kampa* may be due to cerebellar degeneration, *Prajagara* and *Bahupralapa* may be due to deranged functions of nervous system and associated psychiatric conditions. All the features of *Vataja Madatyaya* can even be seen in acute alcoholic withdrawal conditions.^[8]

Pittaja Madatyaya

Features of *Pittaja Madatyaya*^[9] can be understood as follows: *Trishna* may be due to dehydration, *Daha* may be due to peripheral neuropathy, *Jvara*, *Sveda*, *Moorccha*, *Vibhrama* may be due to hyperactivity of autonomous nervous system, *Atisara* may be due to acute or chronic gastritis and hyperactivity of autonomic nervous system and green coloration of the body may be due to liver dysfunction. If this *Paittika Madatyaya* is also dominated by aggravation of *Vayu*, then this condition may be cured immediately or may cause instantaneous death. Commenting on this Chakrapani says that association of aggravated *Vayu* in the *Paittika* type of *Madatyaya* manifests instantaneous effects like those of the fire associated with strong wind in the mundane world^[10]. By implication, if effective treatment is done, then the ailment is cured instantaneously, and if such treatment is not provided to the patient, then he may succumb to death instantaneously. This may be the clinical condition known as Alcoholic hepatitis, which occurs after a bout of heavy alcohol intake with fever, jaundice and multiple spider naevi. In this condition, the asparate transaminase is only mildly elevated but patient may be deeply jaundiced. The white cell count is markedly increased and the prothrombin time may be very prolonged. Such patients have a significant mortality and may later develop cirrhosis.

Kaphaja Madatyaya

Features of *Kaphaja Madatyaya*^[11] can be understood as follows: *Chhardi* and *Hrillasa* may be due to autonomic hyperactivity, *Arochaka* may be due to erosion of gastrointestinal mucosa and decreased secretion of gastric juices, *Tandra*, *Staimitya*, *Gaurava* and *Sheetapareeta* may be due to cardiopulmonary dysfunctions.

Sannipataja Madatyaya

The presentations of various symptoms in *Sannipataja Madatyaya*^[12] are as follows: *Shareera dukkham* – It may be suggesting that the person becomes uneasy at times or in places when alcohol is not available. *Balavat sammoha* – This means confusion, ignorance, unconsciousness, bewilderment. It can be even *Indriya moha*. This suggests, the person will be attracted by the alcohol frequently. He tries to control drinking by making rules, like not taking it on weekdays or when he is alone, but often fails to do so. Moreover, if he starts once he finds difficult to control it. *Pratata trishna* – This may be the excessive desire or strong craving for alcohol at times or in places when it is not available. It can be even severe thirst which occurs as a result of the dehydration due to vomiting, diarrhoea or diaphoresis (withdrawal symptoms). *Chhardi*, *Atisara* and *Hrillasa* may be occurring due to the Gastrointestinal upset of withdrawal state. *Hridaya vyatha* – may be agitation, palpitation, perturbation, uneasiness, anguish, fear, or may be pain in the chest produced as a result of gastrointestinal upset all these can be found in withdrawal state. *Bhrama* – giddiness, which may be due to the hypertension owing to excessive consumption of alcohol for prolonged period or due to the deficiency of essential nutrients in the body as a result of negligence in food intake. *Pralapa* may be the condition due to alcohol withdrawal delirium. *Sphuranam*, *Vepanam*, *Shareera kampa* – these are the various degrees of tremulousness caused as a result of the withdrawal from the alcohol. *Sphuranam* may be the fine tremors or horripilation, *Vepanam* may be the coarse tremors and *Shareera kampa* may be the tremulousness of the whole body. *Kasa* (cough), *Hikka* (hiccup) and *Shwasa* (dyspnoea) are the different respiratory manifestations, *Aruchi* - Anorexia. *Jvarah sheetoshna lakshana* (Fever having the characteristics of cold and heat or low grade), *Prajagarah* (Insomnia), *Roopaanaam ashastaanaam darshanam* (Visual hallucinations), *Sveda* (Diaphoresis), *Vyakulaanaam ashastaanaam swapnaanaam darshanaani* (dreaming of terrifying and inauspicious objects) are the other features of withdrawal state. Alcohol withdrawal is the change that the body goes through when a person suddenly stops taking alcohol after chronic alcohol use. Alcohol is centrally acting depressant drug. Hence stoppage of alcohol indeed lead to neural excitation or sudden rise of functions of autonomic nervous system manifesting in term of increase in respiratory rate, increased pulse rate, fine tremors, sleep disturbances, depression, anxiety etc.

The intake of drugs leads to the aggravation of one of more *Doshas* (body constituents) like *Vata*, *Pitta* and *Kapha*. In drugs addiction vitiation of *Vata* causes headache, insomnia, vivid dreams, hallucinations, anxiety, depression, restlessness, constipation & tremor and

vitiation of *Pitta* causes gastric up set, excessive sweating, giddiness, aggression & violence and vitiation of *Kapha* cause excessive sleep, lethargy, heaviness in the body, nausea & vomiting while vitiation of *Tridosha* causes combination of the above clinical feature. In general *Vata* predominant *Tridoshaja* pathology will be found in physiological dependence & withdrawal. *Raja dosha* amongst the *Manasa* (Mental) *dosha* will be found for psychological dependence.^[13]

Panatyaya

According to Sushruta, *Vatika Panatyaya* is characterized by *Stambha*, *Angamarda*, *Hridayagraha*, *Toda*, *Kampa*, *Shiroruja*; *Paittika Panatyaya* by *Sveda*, *Pralapa*, *Mukha shoshana*, *Daha*, *Moorccha*, *Vadanalochana peetata*; *Kaphaja Panatyaya* by *Vamathu*, *Sheetata*, *Kaphapraseka*; and *Sannipataja Panatyaya* is characterized by the symptomatology of three *Doshas*^[14]. These are equivalent to the conditions of *Madatyaya* described by Charaka that can be of acute or chronic origin.

Paramada

It is characterized by *Ooshmaanam*, *Angaguruta*, *Virasananatvam*, *Shleshma adhiakatvam*, *Aruchi*, *Mala-mootra sanga*, *Trishna*, *Shiro* and *Sandhi ruja* ^[15]. It may be a special condition where the person suffers immediately from after effects of excessive alcohol consumption or hang over features.

Panajeerna

Adhmanam, *Udgiranam amlarasa*, *Vidahi* and other features of aggravated *Pitta* characterize *Panajeerna* ^[16]. It may be a condition of acute or chronic gastritis leading to acid peptic disorders. Due to insufficient secretion of gastric juices the food substances are not digested properly and that will turn in to *vidagdha avastha* presenting with above symptoms.

Panavibhrama

Panavibhrama is characterized by *Hrit gatra toda*, *Vamathu*, *Jvara*, *Kantha dhooma*, *Moorccha*, *Kaphasravanam*, *Shiroruja*, *Vidahi*, and *Sura*, *Anna vikriteshu dvesha*^[17]. It may be a very chronic and severe condition where multiple systemic involvements can be seen due to heavy and prolonged usage of alcohol.

Dhvamsaka

Dhvamsaka^[18] is characterized by *Shleshma praseka* (excessive salivation), *Kantha aasya shosha* (dryness of the throat and mouth), *Shabda asahishnuta* (intolerance to noise), excessive *Tandra* (drowsiness) and *Nidra* (sleep). It seems that severe nutritional deficiency with deranged functions of vital organs associated with severe debility is involved in *Dhvamsaka*.

Vikshaya

Vikshaya^[19] is characterized by *Hritkantha roga* (thoraco-laryngial disorders), *Sammoha* (loss of orientation), *Chhardi* (vomiting), *Anga ruja* (body pains), *Jvara* (fever), *Trishna* (thirst), *Kasa* (cough), *Shirashoola* (headache). It seems that in disease *Vikshaya* the involvement of cardiopulmonary and brain dysfunction with other systemic dysfunctions is present.

The complications of *Madatyaya*^[20]: These can be explained as follows – These complications arise due to

multiple systemic involvements. For e.g., *Hikka* due to gastro-hepatic involvement like chronic gastritis irritating diaphragm or due to rupture of esophageal varices or due to hepatomegaly or due to cardiopulmonary dysfunctions; *Jvara*, *Vamathu*, *Vepathu* are either due to the reason that the alcoholics are more susceptible for infection as they have reduced immune system because of neglecting the nutrition or due to the dysfunction of nervous system or liver or kidney; *Parshvashoola* due to dysfunction of gastro-hepatic system, pulmonary system, dysfunction of pancreas; *Kasa* due to decreased pulmonary capacity and *Bhrama* can be due to severe nutritional deficiency, or cardio-pulmonary or other systemic involvements.

The characteristics of bad prognosis^[21]: These symptoms can be explained as follows - *Heenottar- aushtham* (thinner upper lip) - all the muscles of mouth are innervated by facial nerve. Due to chronic intake of alcohol, degeneration of this nerve takes place by which the loss of motor function of *lavator labii superioris* muscle takes place. That is why the upper lip will be hanging over the lower lip. Remaining symptoms of bad prognosis of *Madatyaya* like *Jihva oshtha dantam asitam vaa neelam* (black or blue tongue, lips and teeth) can be explained as the symptoms due to irreversible dilatation of facial small veins which result in cyanosis of these veins. This discoloration is prominent on the cheeks and nose. *Peete nayana rudhirata* (reddish discoloration of conjunctiva) can be explained as chronic gastritis due to chronic alcohol intake may result in vitamin A deficiency resulting in chronic conjunctivitis with reddish discoloration of conjunctiva. *Atisheetam* (excessive cold) and *Amandadaham* (excessive cold) may be due to the poor circulation or due to over perspiration and severe dehydration.

The above description very clearly indicates that disease state of *Madatyaya* can be considered from immediate and acute systemic dysfunctions to chronic and severe multiple systemic dysfunctions due to heavy and prolonged use of alcohol against rules and regulations. So, in other words we can say that the word alcoholism which is used in broad sense can be said as equivalent to the word *Madatyaya*.

Madatyaya is not just alcohol intoxication, dependence or withdrawal state, but it is the condition where multiple systemic dysfunctions are involved besides those conditions. In modern medicine, other systemic involvements are considered as medical conditions and are treated separately but in *Ayurveda* it is not so. As explained above, symptoms of *Madatyaya* indicate that dysfunction of multiple systems are involved in it. As an alcoholic neglects taking food properly, timely and sufficiently, the unavailability of carbohydrates and fats take place in the body leading to increased protein catabolism for needed energy for bodily functioning. To compensate and supply the food that is needed, to lower the nitrogenous wastes and to counteract the hyper excitability of brain due to decreased alcohol levels in blood, which produces withdrawal symptoms including delirium tremens and withdrawal seizures, administration of alcohol along with other food material is very essential. When alcohol with food is given the food is digested very

easily as it increases the gastric secretions in the stomach, and supplying the needed nutrition as well as tranquilizing effects. That's why in the treatment of *Madatyaya*, mainly administration of food like various dishes prepared of chicken, mutton and other non-vegetarian articles, chutneys etc are advised along with alcohol. Therefore, the *Ksharatva* produced in the body by increased catabolism of proteins due to inappropriate intake of alcohol for a long time, will be counteracted by appropriately administered alcohol. It will help tissue building i.e., *Dhaatu vardhana* there by *Ojovardhana*.

CONCLUSION

Drinking of alcohol makes the life of a man very miserable. Alcohol not only degrades the health of the person but also affects his family and society. When consumed it is quickly absorbed in the bloodstream and is distributed to all body tissues. Because alcohol is uniformly dissolved in the body's water, tissues containing a high proportion of water receive a high concentration of alcohol. Prolonged use of alcohol physically proves to be toxic to liver and brain. Apart from the disorders of liver and the nervous system, the alimentary disorders, pancreatitis, cardiopulmonary manifestations, nutritional disorders, reduced immune system and hence susceptible to the infections etc are also very common. The multisystem involvement of the alcoholism has been identified by our great sages of Ayurveda and they have classified the disease *Madatyaya* accordingly depending upon the *Doshic* predominance. It is quite obvious after analysing the symptoms of *Madatyaya* that the disease state of *Madatyaya* can be considered from immediate and acute systemic dysfunctions to chronic and severe multiple systemic dysfunctions due to heavy and prolonged use of alcohol against rules and regulations. So, in other words we can say that the word alcoholism which is used in broad sense can be said as equivalent to the word *Madatyaya*.

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REFERENCES

1. Natural supplements for Alcoholism cure – Symptoms, causes and home remedies; Planet Ayurveda; c2013; [cited 2017 August 3]; Available from: <https://curefordiseases.wordpress.com/2013/02/23/natural-supplements-for-alcoholism-cure-symptoms-causes-and-home-remedies/>
2. Ashok J, Shetty Suhas Kumar, HP Savitha, Efficacy of Mrudveekadi Kashaya in the management of *Madatyaya* (Alcohol withdrawal symptoms); Journal of Biological and Scientific Opinion, 2016 4(4), p. 108 – 111.
3. Shuckit Marc A.; Alcohol and Alcoholism; Harrison's principles of Internal Medicine, 17th edition; New Delhi, McGraw Hill companies; 2008; p. 2724.

4. Channabasavanna; Substance abuse; API Textbook of Medicine; 6th edition; Mumbai, Associations of Physicians of India; 1999; p. 721.
5. Sadock Benjamin James, Sadock Virginia Alcott, Ruiz Pedro; Alcohol related disorders; Kaplan and Sadock's Synopsis of Psychiatry, Behavioral Sciences / Clinical Psychiatry; 11th edition; Philadelphia, Wolters Kluwer; 2015; p. 624.
6. Abbas Kumar, Mitchell Fausto; Effects of Alcohol; Robbins Basic Pathology; 8th edition; Amsterdam, Elsevier; 2007; p.290-292.
7. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 637.
8. Sheokand Anjali, Jain Rekha and Sharma Anita, Efficacy of Ashwagandhadyarishta in Vataja Madatyaya w.s.r. to alcohol withdrawal symptoms, International Ayurvedic Medical Journal, 2017.
9. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 637.
10. Chakrapanidatta, Ayurveda Deepika commentary, Madatyaya Chikitsa, Charaka Samhita, 5th edition (New Delhi, Munshiram Manoharlal Publishers Pvt Ltd., 1992).
11. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 637.
12. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 639-640.
13. Porte Sharad M., Ayurvedic concept of Addiction, Withdrawal and its solution; International Journal of Pharmacology and Toxicology; 2014, 2(2), p. 41 – 45.
14. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.
15. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.
16. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.
17. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.
18. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 650.
19. Kushawaha Harish Chandra Singh; Charaka Samhita 2nd Part (Chikitsasthana Chp.24); 1st edition; Varanasi, Chaukhambha Orientalia; 2009; p. 650.
20. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.
21. Acharya Vaidya Yadavji Trikamji; Dalhana's Nibandha Sangraha commentary, Sushruta Samhita (Uttaratantra Chp.47); 6th edition; Varanasi, Chaukhambha Sanskrit Sansthan; 1997.

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