



REVIEW OF A PATHOGENIC COMPONENT OF KAMALA

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ABSTRACT

Ayurvedic literature correctly addressed the pathogenesis and treatment of kamala vyadhi (jaundice), highlighting the distinctiveness of ayurveda. Pitta that is vitiated is the primary starting factor inside the pathophysiology of kamala. The complex parenchymal cells that make up the human liver, in accordance to fashionable View, are liable for some of crucial capabilities. Raktapradoshaja Vyadhi and pittaj nanatmaj describe Kamala. Vagbhatacharya regarded kamala as a awesome contamination, even though Shushrutacharya concept it might be brought on via difficulties from panduroga The liver isn't vulnerable to malfunction, at the least now not in phrases of its metabolic processes. That is because of the liver's exquisite potential for reserves and its notable capacity for regeneration; only a small part of the liver is necessary to carry out all of its capabilities. Among seventy five and 80 percentage of the liver should be inactive for a take a look at to be high quality. The expression "a silent organ," global, alcoholism, hepatitis B, and hepatitis C are the most not unusual reasons of chronic liver illnesses. As these fields of knowledge are complementary to one another in comprehending various causes of jaundice, the Samprati of Kamala (Pathology of Kamala) have to be studied with regards to Ayurveda and present day.

KEYWORDS: *Pandu roga, Samprati of Kamala, Pathology of Jaundice, Bilirubin.*

INTRODUCTION

Ayurveda is a type of conventional medicine. It provides a thorough explanation of swatthavritta as well as instructions on how to treat various diseases. There are three main bhrihatrayee samhitas that describe the core concepts of ayurveda. In older samhitas, Kamala is briefly mentioned. Jaundice and kamala are related in modern medical science. The Pandu roga's Kamala stage. When a person with panduroga continues to consume pittakar ahar, kamala may develop. According to Ayurveda, Kamala (jaundice) is a raktavahastrotas disease.^[2] Yakrit and Pleeha are Raktavahastrotas' moolasthan.^[3] The compound term kamala (kam+la) denotes lust or desire. There is no desire to eat or drink in Kamala. Jaundice is typically, though not always, a symptom of liver illness. In Southeast Asia, infectious hepatitis, bile duct obstruction from gallstones or tumours, alcoholic liver disease, medications, etc. are the most frequent causes.^[4] Hepatitis B, hepatitis C, and alcohol addiction are the leading causes of chronic liver disorders worldwide.

AIM: To study Kamala's diseased side as it is mentioned in Samhita Granthas.

MATERIALS AND METHODS

- Chakrapani's Ayurvedic Dipika Commentary on the Charak Samhita.
- The Sushruta Samhita with Shri Dalhanacharya's Nibandhsangraha commentary and Shri Gayadasacharya's Nyayachandrika Panjika.
- Ashtang Hriday with the Ayurvedic rasayana of Hemadri and the Sarvangasundara of Arundatta.
- Articles on the topic that have appeared in numerous national and international periodicals.

Review

The phrase "kamala" is specifically defined as "loss of wishes of eating, working on anything, etc." It is regarded as serious. depression or anorexia.

Kamala's literal meaning is the loss of desire to perform any labour, eat, or engage in other activities. Malaise or severe anorexia are two names for it.

Kamala is a term for yellowish colouring of the sclera, skin, face, nails, and urine that is connected to general

symptoms including anorexia, debility, dyspepsia, and lack of physical power.^[5]

About kamala

Acharya Charak and Harita saw the illness as a kind of Panduroga's second stage, whereas Acharya Vagbhat saw it as a distinct illness. Although the panduroga is a significant contributor to the disease's aetiology, pathogenesis can also occur independently.^[6]

Acharya Charak and Harita considered the illness to be a variation of the second stage of Panduroga.

• Rudhaphathakamala and Bahupittakamala are conditions analogous to obstructive and hemolytic jaundice,

respectively. Despite the fact that panduroga is the most significant component, Acharya Vagbhata characterised it as a unique entity/disease.

- The etiological factors for the disease have unique aetiologies.
- Bahupitta kamala, an obstruction to hemolytic jaundice that is similar to Rudhaphatha kamala.
- This demonstrates how kamala is a result of pandu or how pandu is a key contributing factor to kamala.^[7] This demonstrates how hemolytic anaemia and jaundice are related. This idea is not actually observed in other types of jaundice. Kamala is possible even without pandu. Su. Utt. 44/9, A. Hri. Ni. 13/15-17

Classification of Kamala

Table no -1

Charak	Sushrut	Vagbhat
Koshthashrit shakhashrit, ubhaya Halimak, Kumbhkamala.	Kamala, Halimak, Kumbhahvaya (kumbha sahva), Laghraka (laghrakaalasaka).	Swatantra, Paratantra, Kumbhakamala, Lodhara, Aalasaka.

Causes of kamala^[8]

Table no 2- showing Causes of Bahupitta kamala.

Dietetic factors	Intake of incompatible foods The excessive intake of alkaline, sour, saline, hot The excessive intake of mutually contradictory foods, The excessive intake of unwholesome food Intake nishpava (a type of pulses), masha, pinyaka (oil cake) and tila oil
Habitual factors	Indulging in day sleep, performing exercise and sex before digestion of the food; Suppression of the natural urges
Psychological factors	Affliction of mind with passion, worry, fear, anger, grief
Other factors	Improper administration of Panchakarma measures (pratikarma vaishamya) and the disobedience of the seasonal regimens (ritu vaishamya)

Table no 3 showing Causes of Ruddhapitta kamala.

Dietetic factors	• The excessive intake of salty ,cold, sweet substances
Habitual factors	Excessive exercise Suppression of natural urges

Pathogenesis

Samprati is the foundation for the two expressions of kamala known as koshtaasrita and sakhaasrita. Despite being present in both forms, vitiated pitta does not reach the koshta in the sakhaasrita kind. Increased vatadosha is a disease that results in sakhagati of pitta and an enlarged kapha stage, which in turn results in srotorodha. The

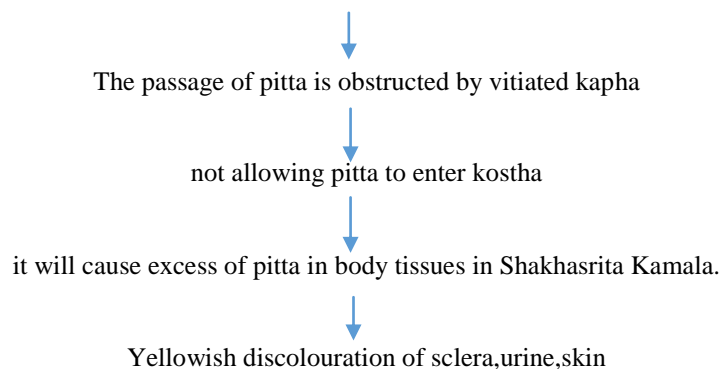
common pitta is therefore prevented from going back to koshta. As a result, sakhaasraya kamala expresses it unambiguously. Kamala unquestionably develops tilapishanibhavarchas as a result of the shortage of pitta in the koshta and the resulting condition of "svetavarchs," which is a partial obstruction.

Shakhashrita Kamala^[9]

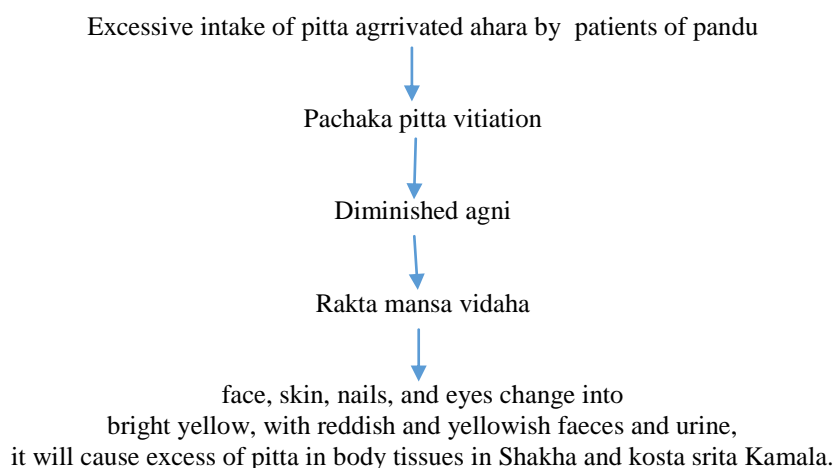
{Synonym- Alpa pitta, Dhatu ashrita}
Excessive intake of pitta vitiated diet



Diminished agni



2. Kostha Shakhshrita Kamala/bahu pitta (Maha Srotasashrita)^[10]



The main similarities between Bahupitta Kamala and Kostha-shakhshrita Kamala and pre-hepatic and hepatocellular jaundice are present. Haemolysis-causing agents can result in pre-hepatic jaundice. Severe malaria, some genetic disorders such as sickle cell anaemia, spherocytosis, thalassemia, pyruvate kinase deficiency, and glucose 6-phosphate dehydrogenase (G6PD) deficiency, which enhance red cell oxidation and hence produce hemolytic jaundice, are examples of pre-hepatic causes. Acute or chronic hepatitis, hepatotoxicity, cirrhosis, drug-induced hepatitis, and alcoholic liver disease are all potential causes of hepato-cellular jaundice. Obstructive diseases at the hepatic circulation are involved. Clay-colored stools result because the pitta cannot enter the gastrointestinal tract.^[11] Pale stools are caused by bilirubin, which cannot reach the gut in obstructive jaundice. The fact that they described the stools as being clay-colored but the urine as being yellow indicates that they were very familiar with the modern-day physiopathology of obstructive jaundice, especially hepatocellular ones, in which the conjugated bilirubin, which is a water-soluble fraction, is filtered and excreted into the urine as a result of the bile's inability to pass into the gastrointestinal tract. Additionally, the idea that pitta is a byproduct of rakta is quite similar to the idea that bile is created as a result of the breakdown of red blood cells. Gallstones in the common bile duct are the main culprit. The most frequent causes are pancreatic cancer at the head of the pancreas and gall stones in the common

bile duct. Additionally, liver flukes, a genus of parasites, can dwell in the common bile duct and cause obstructive jaundice. The obstruction of bile flow into the duodenum can be brought on by biliary atresia, cholangiocarcinoma, pancreatitis, cholestasis during pregnancy, and pancreatic pseudocysts.^[12]

Kumbha Kamala

The term "kumbha kamala" refers to an advanced form of Kostha-shakhshrita kamala in which the gastrointestinal tract serves as the primary site of pathology. One of the synonyms for koshtha¹³ is kumbha. One of the crucial clinical characteristics of kumbha kamala is edoema, according to Su. Utt. 44.

If left untreated, both varieties of kamala develop into skin that is difficult to treat and has hardened. Kumbha kamala may also refer to a patient's appearance with a swollen belly, or ascitis, which is a significant clinical characteristic of liver illnesses, the primary cause of which is jaundice.

Haleemaka

Pandu has a stage after that called haleemaka. Depletion of strength and labour capability is brought on by the blood's reduced ability to carry oxygen (reduced jeevan karma). Body pain and a loss of desire are the results of this. Cholestasis-like symptoms are seen. Bile stasis and back pressure cause liver failure, which causes halimaka

or sclerosing cholangitis symptoms as a result. It is characterised by cirrhosis, portal hypertension, hepatomegaly, severe weariness (bala utsaha hani), jaundice (harita pita meda), dark urine, and cirrhosis.

Panaki

The condition of malabsorption, particularly of fat, due to a shortage of bile juice in digestion due to obstruction, which results in steatorrhoea (bhinna varcha), is explained by panaki, another disease in the same context as halimaka. Fat-soluble vitamins including A, D, E, and K become deficient as a result of decreased fat absorption.

DISCUSSION

In Ayurvedic literature, Kamala is referred to as pittaj nantmaja and raktapradoshaj vyadhi. Although it is a problem that Acharya Sushruta has mentioned because of pandu roga and other ailments that Acharya handled, Acharya Charaka describes the kamala advance stage of pandu roga. Vaghata also described it as a unique disease. All of the signs and symptoms of jaundice are much more comparable. according to ayurveda, to a number of kamala illnesses. The vitiation of Pitta caused by exposure to dosha-vitiating stimuli, especially its ushna-tikshnaguna, disrupts the saumya, sneha nature of ojas that is already in circulation with raktadhatu. Along with this, the raktadhatu's sposhakras, which are essential for raktadhatu formation, are also reduced. The Kamala is divided into groups based on her origin and pathology. There are mainly two categories. Koshtashkhashrita Kamala Kamala Shkhashrita. The occurrence of Koshtashkhashrita Kamala is caused by an increased rate of erythrocyte disintegration. Due to the fact that it causes more pitta to be produced, it is also known as bahupittakamala. Because intrahepatic cholestasis is the sole known cause of kamala in this instance, Shkhashrita Kamala develops. Alpapitta kamala, or decreased bilirubin excretion, is the only cause of kamala in this situation. According to current medical studies, both types of jaundice closely resemble hemolytic and hepatocellular jaundice.^[14] Since the liver is the largest gland and the main site of metabolism and detoxification, the meal should be simple to digest and waste products are better evacuated from the gut sooner during a jaundiced state. In order to help the kidney and intestines clear waste and provide you immediate energy, Ayurvedic medicine contains these components. Treatment for koshtashkhashrita kamala must begin with purgation therapy. Virechan therapy is suggested since the basic premise is that the liver shouldn't be overworked. Jaundice develops as a result of unhealthy amounts of bilirubin. increases the synthesis of stercobilin Virechan therapy is suggested since the basic premise is that the liver shouldn't be overworked. Too much bilirubin is produced when jaundice develops, which leads to increased stercobilin synthesis. The virechana with the prior snehana helps to minimise hyperbilirubinemia and, eventually, jaundice in addition to eliminating superfluous stercobilinogen. As a result of

excessive stercobilinogen clearance, increased bilirubin diffusion boosts stercobilinogen formation. Therefore, excess bilirubin can diffuse into stercobilin and urobilinogen before being removed once more by the virechana karma process. Thus, in cases of jaundice, the nitya virechana helps rid the body of superfluous bile. The management of Shkhashrita Kamala is ineffectual since Malarupa Pitta is in the shakha state. As a result, a new management idea is necessary.

CONCLUSION

In depth research has been done on kamala vyadhi in Ayurvedic literature. It significantly advances our understanding of the disease's pathophysiology. The Shkhashrita kamala chikitsa sutra's treatment section has an explanation of the mruvu virechana karma by Acharya Charaka. Recent studies have shown that vivechan karma dramatically reduces total bilirubin levels and helps the body get rid of excess stercobilinogen. Modern science has only a limited ability to treat kamala vyadhi (jaundice), however Ayurvedic literature extensively defined the aetiology and therapy of kamala vyadhi, highlighting the specialty of Ayurveda. Virechana is ineffectual for shkhashrita Kamala, though; it needs a unique management philosophy. The disorders connected to Pitta dosha are known in Ayurveda as Kamala. Kamala can be treated with Ayurvedic medicine to prevent recurrence. In order to diminish kapha and bring pitta into koshta with the use of medication, pitahara chikitsa should be given. The Samprati (Pathology) of Kamala of Jaundice is beneficial for management as well and should be studied in relation to Ayurveda and Modern since these two wisdoms are complementary rather than incompatible in their comprehension of diverse causes.

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