

KAMALA (JAUNDICE) – AN AYURVEDIC PERSPECTIVE

Nirmal Kumar^{1*}, Anil Kumar Singh²

1. *Junior resident, Dept. of Dravyaguna, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India.*
2. *Associate Professor, Dept. of Dravyaguna, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India.*

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Abstract

Ayurveda is not only a medical science but also it is a life science, which gives us a message of healthy and better living, since time immemorial. Ancients sages like Caraka, Susruta and Vagbhata have vividly described Kamala roga (Jaundice) disease. The management of Kamala and its complication with drugs, diet and life style have been mentioned in Ayurvedic classics. Caraka has considered it as advance stage of Pandu roga (Anaemia disease) and described Kamala in the 16th chapter of Cikitsa Sthana, along with Pandu roga. The main Dusya (Causitive factor) is Rakta (blood), at the same time both are Pitta predominant disease and Caraka has considered it as a advance stage of Pandu roga; Harita has considered it as a type of Pandu roga, but Susruta has mentioned it as a complication of Pandu roga as well as other disease also where Vagbhata also described it as a separate disease.

Key words: Ayurveda; Kamala; Caraka; Pandu.

***Address for correspondence:**

Dr. Nirmal Kumar,
Junior resident, Dept. of Dravyaguna,
Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University,
Varanasi, Uttar Pradesh, India – 221005.
E-mail: 28.nirmal@gmail.com

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INTRODUCTION

Kamala is one of those clinical entities conceived by Ayurveda; Caraka has considered it as advance stage of Pandu roga and described Kamala in the 16th chapter of Cikitsa Sthana, along with Pandu roga. The main Dusya is Rakta, at the same time both are Pitta predominant disease and Caraka has considered it as an advance stage of Pandu roga.^[1]

Nirukti of Kamala (Etymology)

Kamala is a compound word Kama+la means lust or desire. Kamala is a Pittaja Nanatmaja vyadhi^[2] and a Raktapradosaja vyadhi.^[3]

Historical background

Vedic period (4000-5000 BC)

In Rigveda and Atharvaveda, Vilohita, Harima. Halima terms have been used to depict greenish yellow discoloration of the body. Treatment of Kamala was done by Suka trees.

In Puranas - description of Kamala has been mentioned by word Harima. Agni Purana - Lauha curna with Takra has been advocated in the treatment of Kamala. In Jain literature - Harisa, Hariya roga have been used for Halimaka and Daudure and Udari have been used for Jalodara and Jalodaradi respectively. In Buddhist literature - though Kamala is not found mentioned, but Pandu has been described in Hinayana Buddhist literature. In Tibetan medicine - Yakarta has been denoted by the term Mchin and Jalodara by Dmuchu.

Samhita period

Brihatryi

Caraka has given detailed description about Kamala in the context of Pandu roga., In Susruta Samhita - (1000BC-500AD) - Kamala

is mentioned as synonyms of Pandu roga. In the same context description of the liver and spleen is found. The further stages of Kamala i.e. Panaki, Kumbha Kamala, Halimaka, Lagharaka and Alasaka and the explanation about Raktavaha srotodusti & treatment of Kamala are mentioned., In Astanga Sangraha & Astanga Hridaya -(600AD) - followed by the view of Caraka & Sushruta description of 4 types of Pandu & Kamala are found. In Nidana Sthana 'Lodhra' word is used for Kamala. Explanation of Svatantra and Paratantra Kamala is also found mentioned.

Laghu trayi

Madhava Nidana (700 AD): Followed the view of Caraka, Sushruta and Vagbhata. Full description of Kamala and its stages with nidana, rupa and samprapti were explained. Sarangadhara samhita (1400 AD): Described Kamala in context of Pandu Roga. Bhava prakasa (1600 AD): Kamala described along with Pandu roga in madhyamakhanda., OTHERS: Bhela Samhita (700 AD): Kamala has been described in Pliha Halimaka Cikitsa Adhyaya., Harita Samhita (1400 AD): Eight types of Pandu have been described in which include 2 types of Kamala and Halimaka.

Classification of Kamala

Caraka

1. Kosthashrita, 2. Sakhshrita, 3. Halimaka, 4. Kumbha Kamala.

Sushruta

1. Kamala, 2. Halimaka, 3. Kumbhahvaya, (Kumbha sahva), 4. Lagharaka (lagharaka-alasaka).

Vagbhata

1. Svatantra, 2. Paratantra, 3. Kumbha kamala, 4. Lodhara, 5. Alasaka^[4]

Nidana (etiology)

Kamala is produced by two different ways. - Excessive consumption of Paittika ahara & vihara by Pandu rogi or patient suffering from any disease and radically cured. - Use of excessive paittika ahara & vihara by disease free person i.e. the persons who have aggravation of Pitta.^[1]

Purva rupa

Prodromal symptoms have not been mentioned separately for Kamala, but Acarya Caraka and Sushruta included general Purva rupa of Kamala within the Panduroga. The general prodromal features by Acarya Sushruta - 1.Tvaka sphotanam (cracking of skin), 2.Sthivanam (salivation or spitting), 3.Gatrasada (lassitude), 4.Mridbhakshana (desire for eating clay, pica), 5.Preksana kuta sotha (swelling of eye lids), 6.Pita mutra and vit (yellow urine and stool), 7.Avipaka (indigestion).^[5]

According to Caraka: 1.Nissara (devoid of strength), 2.Alparakta (Anaemia), 3.Alpa medasa (Hypo activity of bone marrow), 4.Gatra vaivarnya (discoloration), 5.Sithilendriya (lack of interest).^[6]

Rupa

1. Haridra netra, tvaka, nakha and mukha (yellow discoloration of eye, skin, nailbed and oral mucosa), 2. Rakta pita purisha and mutra, 3. Bheka varna (toad like color of skin), 4. Hatendriya (blunting of senses), 5. Daha (burning sensation of body), 6. Avipaka (indigestion), 7. Daurbalya (weakness), 8. Sadana (malaise), 9. Aruci (anorexia), 10. Karshana (weight loss); Sushruta quotes – Arati, Tandra, Balakshaya, along with features of Pandu as symptoms of Kamala. ^{[7][8][9]} (Table 1)

Samprapti

Though Kamala shares similarity with Pandu in Nidana and Samprapti, it has its own Samprapti in the evolution of disease.

When Pandurogi, Pitta predominant person or Patient cured of Pandu or any disease, intake of Pitta vardhaka ahara then Excessive aggravation/ vitiation of Pitta occur; this further lead to Kosthashrita Kamala, Kosthasakhashrita Kamala and Sakhashrita Kamala.^[10]

Samprapti ghataka

1. Dosh: Pitta; 2. Dushya: Rakta, Mansa; 3. Adhithana: Kostha (Mahasrotasa – Yakrit) Sakha(Raktadi and tvacha); 4. Srotasa: Rasavaha, Raktavaha, Annavaha, Pureeshvaha; 5. Srotodusti: Atipravritti, Sanga, Vimargagamana^[10]

Sadhyasadyata (prognosis)

Initial stage of Kamala is sadhya. On long standing becomes kricch-sadhya if asadhya lakshana develop it become asadhya (incurable).^[11]

Asadhaya lakshana Kamala roga (Incurable status)

1) Krishna peeta purisha 2) Krishna peeta mutra 3) Sotha 4) Sarakta Netra and Mukha, chardi, pureesha, mutra, 5) Murcha 6) Daha 7) Aruci 8) Trishna 9) Anaha 10) Tandra 11) Moha 12) Nashtagni 13) Nasthagni sangya.^{[12][13]}

Asadhya lakshana of Kumbha kamala

1) Vamana 2) Aruci 3) Hrillasa 4) Jvara 5) Klama 6) Svasa 7) Kasa 8) Vid-bheda^[14]

Table 1: Laksana (Clinical features) of different stages of Kamala

Kosthasakhashrita	Sakhashrita	Halimaka	Kumbha Kamala	Laghraka and Alasa	Panaki
Haridra Netra	Haridra Netra	Harita	Rukshata	Jvara	Santapa
Haridra Tvaka	Haridra Tvaka	Syava	Parva bheda	Angamarda	Bhinna Varcas
Haridra Nakha	Haridra Mutra	Peeta	Krishnapeeta	Sada	Bahirantasca- peetata
Haridra Mukha	Sveta varcas	Kshaya bala	Krisnapeeta	Bhrama	Pandu Netra
Rakta peeta mutra & purisha	Tila-pistha varcas	Kshaya utsaha	Sotha	Kshaya	Netra roga
Bhek varna	Atopa	Kshaya harsha	Sarakta Netra	-	-
Hatendriya	Visthambha	Tandra	Sarakta Chardi	-	-
Daha	Hridaya guruta	Mandagni	Sarakta Purisha	-	-
Avipaka	Daurbalya	Mridu-jvara	Sarakta Mutra	-	-
Daurbalya	Alpagni	Strisvaharsa	Tamyati	-	-
Sadana	Parshva-arti	Angamarda	Daha	-	-
Aruci	Hikka	Svasa	Aruci	-	-
Krishata	Svasha	Trishna	Trishna	-	-
Tandra	Aruci	Aruci	Anaha	-	-
Utsaha-hani	Jvara	Bhrama	Tandra	-	-
Trishna	-	-	Moha	-	-
-	-	-	Nasthagni	-	-
-	-	-	Nasthasangya	-	-
-	-	-	Sopha	-	-

Cikitsa siddhanta (Line of treatment)

- A. Sodhana (Purificatory therapy) -
Snehana virecana
- B. Sanshamana (Palliative therapy) -
Kapha pitta haranama cikitsa

As the Kamala is classified into two groups the main line of treatment for Sakhashrita Kamala needs special emphasis because malaranjaka pitta is situated in Sakha therefore Virecanadi karma will not be effective till dosha are not brought to the kostha.^[17]

So Caraka has mentioned especially some measures to bring dosha from kostha to sakha. There are five measures - 1) Vridhyat, 2) Vishyandanat, 3) Pakata, 4) Srotomukhovishodhanata, 5) Vayu nigrhat^[15]

Management of Kamala

In Ayurvedic texts scholars with their treasure of knowledge and experience have scientifically explained the principles of management of Kamala. Acarya Caraka has mentioned “Kamale tu virecanam” i.e. purgation therapy with mridu and tikta dravyas. Acarya Sushruta mentioned drug and dieted regimens. Acarya Vagbhata quoted “Kamalayam tu pittagnam Pandurogavirodiyat” i.e. drugs which pacify Pitta and drugs which do not interfere with Panduroga should be used.^[16]

The principle of management of Kamala can be classified in a broad sense (1) Samshodhana (2) Samshamana.

Samshodhana

Snehana

By using medicated ghrita like Panchagavya ghrita, Kalyanaka ghrita, Draksha ghrita, Mahatikta ghrita, Haridradi ghrita & Dadima ghrita etc. Svedana is contraindicated in Kamala. Virecana should be done by tikta and mridu dravya the following are advised by Caraka in Panduuroga cikitsa.^[17]

1. Aragvadha phanta with sunthi, pippali, marica, bilva, along with the svarasa of ikshu, vidari and amalaki, Gomutra haritaki.^[18]
2. Dantimula kalka and guda with cold water
3. Triphala kwatha with trivrit kalka
4. Triphala kvatha, Guduchi svarasa, Daruharidra kvatha or Nimba patra svarasa with Madhu in the early hours.^[19]

Samshamana

After Virecana karma, Samshamana drugs are to be administered. They can be given as single drugs or compound drugs. Single drugs proved to be very effective and are substantiated by various clinical and experimental trials. (Table 2) The actions of the samshamana drugs were Pitta hara / Tridosahara Pitta recana (Choleratic), Yakrid uttejaka (Liver stimulant), Dipana (Appetiser), Recana (Purgative), Sothahara (Anti-inflammatory), Jvarahara (Anti-pyretic), Rakta shodhana (Blood purifier), Rasayana (Geriatric), Sroto shodhana (Channel purifier).

Treatment of Sakhashrita Kamala

Ruddhapatha Kamala needs different principle of management, since malarupa pitta is in the Sakha and Virecana will not be effective till dosha are brought into kostha (Mahasrotasa). Here Kapha which obstructs the path of Pitta, should be treated primarily thereafter Pitta should be alleviated. The recipes which alleviate Kapha, like katu, ruksha, amla, teekshna and usna drugs have to be

administered. 1. Soup of peacock, teetara (partridge), and cock and sushkamulaka, kulattha, 2. Matulunga svarasa with honey, pippali, maricha and sunthi have to be given, 3. By giving these drugs Pitta is brought in kostha and then Pittahara cikitsa is done.^[20]

Duration of treatment (Mukta Kamala lakshana)

Treatment should be continued till the stool of patient acquires the colour of Pitta and Vayu is alleviated. When Pitta reaches svasthana (kostha) and patient is relieved of upadrava, earlier line of treatment should be resumed.^[21]

Management of Kumbha Kamala

Kumbha Kamala is an Asadhya or Kricch sadhya vyadhi.^[11] Caraka has not mentioned any specific treatment. Sushruta – 1. Mandura with cow's urine + saindhava lavana- 1 month; 2. Mandura bhasma + Bibhitaka phala majja + Sunthi churna in equal propositions with cow's urine.^[22] Vagbhata – 1. Shilajatu with gomutra – 1 month, 2. Svarnamakshika bhasma with gomutra – 1 month.^[23] The snehana, virechana, basti and samshamana dravyas were mentioned in Table 3.^[24] The compound formulations were mentioned in Table 4.

Pathya – Apathya^[25]

Pathya

1. Vamana, virecana, purana sali, yava and godhuma, mudga, masura, adaki-sushka, jangala mansa rasa, 2. Patola, Kooshmanda (ripe), unripe kadali, jivanti, ikshu, guduchi, tanduliyaka, lauha bhashma, 3. Punarnava, vartaka, lashuna, palandu, ripe mango, haritaki, amalaki, gomutra, haridra and nagkesara, 4. Buttermilk, souviraka, tushodaka, navanita and chandana, 5. Daha/ Agni karma – 2 inches below umbilicus, between stana and kaksha, hastamula, forehead.^[25]

Table 2: Samshamana (Preventive) drugs

Sl.No.	Sanskrit	Latin name
1	Katuki	<i>Picrorrhiza kurroa</i> Royale ex Benth.
2	Kiratatikta	<i>Swertia chirata</i> (Wall.) C. B. Clarke.
3	Kalmegha	<i>Andrographis paniculata</i> Nees.
4	Nimba	<i>Azadirachta indica</i> A. Juss.
5	Daruharidra	<i>Berberis aristata</i> DC.
6	Amrita	<i>Tinospora cordifolia</i> Miers.
7	Bhumyamlaki	<i>Phyllanthus niruri</i> L.
8	Triphala	<i>Embllica officinalis</i> Gaertn., <i>Terminalia bellerica</i> Roxb., and <i>Terminalia chebula</i> Retz.
9	Vasa	<i>Adhatoda vasica</i> Nees
10	Kumari	<i>Aloe vera</i> (L.) Burm.f.
11	Bhringaraja	<i>Eclipta alba</i> Linn.
12	Punarnava	<i>Boerhavia diffusa</i> Linn.

Table 3: Management of Halimaka

Sl.No.	Treatment	Medicines
1	Snehana	Buffalo's ghee processed with Guduchi svarasa
2	Virecana	Trivrit with Amalaki svarasa
3	Basti	Yapana Basti with madhura dravya described in Siddhithana
4	Samshamana	Drakshavaleha, Abhayavaleha, Milk processed with pippali, madhuka and bala according to dosha and bala of the patient

Table 4: Compound drugs

Sl.No.	Dosage form	Medicines
1	Churna	Svarnakshiryadi yoga, ^[26] Svarnamakshikadi yoga, ^[27] Yogaraja, ^[28] Navayasa churna, ^[29]
2	Gutika	Mandura vataka, ^[30] Shilajatu vataka ^[31]
3	Bhashma	Mandura bhasma ^[32]
4	Svarasa	Triphala, Guduchi, Daruharidra, Nimba patra svarasa
5	Kvatha	Phala trikadi kvatha, ^{[33][34]} Vishaladi phanta ^[35]
6	Aristha	Bijakaristha, ^[36] Dhayaristha ^[37]
7	Avaleha	Darvyadi leha, ^[38] Dhattrayavaleha ^[39]
8	Lauha	Nisha lauha, ^[40] Dhatri lauha, ^[41] Vidangadi lauha, ^[42] Navayasa lauha ^[43]
9	Rasa	Sindurbhushana rasa, ^[44] Kamalanta rasa ^[45]
10	Nasya	Karkota mula nasya ^[46]
11	Anjana	with Nisha (Turmeric), Gairika & Amla ^[47]

Apathya

1. Rakta mokshana, dhumapana, veganirodha, svedana, sexual intercourse. 2. Shimbi dhanya, hingu, masha, excess drinking of water, tambula, sarshapa, sura. 3. Eating mud, divasvapana, intake of lavana water of Sahya, Vindhya mountain areas, 4. Amla rasa, guru-vidahi padartha, contaminated water, non congenial, un-hygienic diet, 5. Residing in hot climates and exposure of radiant sun, anger, vyayama and strenuous physical and mental activities.^[25]

DISCUSSION

Earlier scholars worked on the Kamala, Tomar GS^[48] A review of Ayurvedic Hepatology and inferences from a pilot study on Kalmegha (*Andrographis paniculata*) intervention in hepatic disorders of variable etiology. Singh Madhu et al^[49] reported that Kamala is a condition where the skin, eye and mucous membrane take yellow discoloration. In modern science jaundice is considered as symptom of liver disorder whereas in Ayurveda Kamala is taken as disease. All

worked before shows that it is a disease related with liver in which yellow appearance of body is found.

CONCLUSION

In the Ayurvedic literature kamala is described a Pitta dominating liver disease. Charaka describes that Kamala is a predominant stage of Pandu. Harita has considered it as a type of Pandu roga, but Susruta has mentioned it as a complication of Pandu roga as well as other disease also where Vagbhata also described it as a separate disease. Due to a Pitta dominant disease Pitta shamak treatment is given. In modern refers to the condition which effects the luster of the body due to discoloration excessive bile pigmentation and which impairs the complexion of skin, resulting in yellowish discoloration of the bile (Pitta) into blood, so in the treatment hepatoprotective drug along with Virechana therapy is given.

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