

Ayurvedic management of *Koshtashrita Kamala* (Hepatocellular Jaundice) - A Case report

Case Report

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Abstract

Kamala is a type of Liver disorder mentioned in our classics. It is caused by vitiation of *pitta* with the signs and symptoms like *Haridra netra* (yellow eyes), *twak nakha* (yellowish skin and nails) and *Dourbalya* (weakness), based on these clinical features, it can be well understood under the purview of Jaundice. The condition where yellowish discoloration of skin and sclera of the eyes due to high level of serum bilirubin is known as Jaundice. The *pitta* present in the body aggravates due to specific diet and life style, attains *sthana samshraya* in *koshta* due to *kha vaigunya*, further causes *dagdhatwa* of *Rakta* and *Mamsa* this condition is known as *Koshtashrita Kamala*. A case presented with *Peeta Netrata*, *Peeta Varnyata Mutra*, *Aruchi*, *Agnimandhya* etc was diagnosed as *Koshtashrita Kamala* it was intervened successfully with *Shodhana* and *Shamana oushadi* with proper *pathya* for a period of 11 days. The effect of treatment was assessed based on improvement in clinical signs and symptoms along with Liver Function Test. There was significant improvement in the condition by 60% thus *Kamala* can be well managed by Ayurvedic intervention.

Key Words: *Ayurveda*, Jaundice, *Kamala*, Liver, *Pitta*, *Shodana*.

Introduction

Yakrut (Liver) is one among the *Koshtanga* (organs of body) where the *Bhutagni paka* (metabolism at minutest level) takes place. It is the seat of *Ranjaka pitta* and *mula* (origin) for *Raktavaha shrotas*(1). *Kamala* is caused by *pitta prakopakara ahara* and *vihara*. The word '*Kamala*' is composed of 2 words – '*Ka*/'*Kaya* (body) and '*Mala*' (toxins) together forms '*Kamala*', which signifies accumulation of toxins in the body. It is classified into 2 types - *Koshtashrita Kamala* (Hepatocellular jaundice) and *Shakashrita Kamala* (Obstructive Jaundice)(2). The *pitta* present in the body aggravates due to specific diet and life style attains *vridhdhavashta* in *koshta*(3), this condition is named as *Koshtashrita Kamala*. Aggravated *pitta* causes *dagdhatwa* of *Rakta* and *Mamsa*(4) leading to *Kamala*. In *Shakashrita Kamala* there is obstruction to the bile passage by *Kapha*(5).

Jaundice is a condition where there is yellowish discoloration of skin and sclera of the eyes due to high level of serum bilirubin in blood(6). In Hepatocellular Jaundice there will be increased conjugated serum bilirubin and increased urine bilirubin which comes under *koshtagata Kamala*. As the incidence of *Koshtashrita Kamala* is more, the disease is taken up

for the study. *Virechana* is the first choice of treatment for *pitta pradhana* and *rakta pradhoshaja vikara*. *Kamala* is one such disorder mentioned in classics where *mridhu virechana* with *tikta oushadhas*(7) has prime role to play. When *Ranjaka pitta* gets *sthanasamsraya* in *Urdhwajatru pradasha* mainly in *netra*, *jihwa* and becomes stagnant even after the *virechana karma*, *Nasya* is indicated.

Objectives

To evaluate the *Ayurvedic* management of *Koshtashrita Kamla*.

Materials and methods

Medicine source- GMP certified company medicine from Sri Dharmasthala Manjunatheshwara College Pharmacy.

Subject source- IPD of Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka, India.

➤ Subjective Parameters

1. Peeta Netra (yellowish discoloration of sclera)
2. Peeta Mutra (yellowish discoloration of urine)
3. Aruchi (Anorexia)
4. Agnimandya (loss of appetite)
5. Dourbalya (weakness)
6. Klama (giddiness)
7. Angamarda (bodyache)
8. Kandu (Itching)
 - Normal 00
 - Mild 01
 - Moderate 02
 - Severe 03

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➤ Objective Parameters

1. Liver Function Test

Case History

A 70 yrs old male person came to OPD of Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka, India on 26/6/2020. The subject was apparently healthy 7 days back, gradually he developed *Peeta Netrata*, *Peeta Varnyata Mutra*, *Aruchi*, *Agnimandhya*, *Dourbalyata*, *Klama*, *Angamardha* and *Kandu* with these presenting complaints, he approached our institute for further management. So he was admitted under *Panchakarma* Department.

History of Past Illness

K/C/O Alcoholic since 45 years

K/C/O Type 2 Diabetic mellitus since 2 years on medication Tab Metformin 0-1-0 and

Tab Glimipride 1-0-1

K/C/O Hypertension since 2 years on medication Tab Amlong 5 mg OD

Physical examination

General appearance - ill look
 Built - moderate
 Pallor - Absent
 Icterus - Present in Sclera
 Cyanosis - Absent
 Clubbing - Present
 Lymphadenopathy - Absent

Ashtavidha Pariksha

Nadi (pulse) - *Manda*, *Vata Pitta*
Mala (Stool) - *Asamyak pravruithi* (irregular)
Mutra (urine) - *Peeta varnyata* (yellowish)
Jihwa (tongue) - *Saama* (coated)
Shabda (sound) - *Prakruta* (normal)
Sparsha (skin) - *Sama shitoshna* (normal temperature)
Drik (eyes) - *Netra peetata* (yellowish sclera)

Dashavidha Pareeksha

• *Prakriti* - *Vata Pitta*
 • *Sara* - *Madhyama*
 • *Samhanana* - *Madhyama*

• *Satva* - *Madhyama*
 • *Satmya* - *Madhyama*
 • *Vyayama shakti* - *Alpa*
 • *Aharashakthi* -
 - *Abhyavaharana Shakti* - *Alpa*
 - *Jarana Shakti* - *Alpa*
 • *Vikruti* -
 - *Hetu* - *Madya*
 - *Dosha* - *Pitta Kapha*
 - *Dushya* - *Rasa, Rakta, Mamsa*
 - *Desha* - *Jangala*
 - *Kala* - *Vyaktavasta*
 - *Vyadhibala* - *Madhyama*

Systemic Examination

Central Nervous System – conscious and well oriented
 Respiratory System – Normal vesicular breath sound
 Cardiovascular System – S1 and S2 heard
 Abdominal Examination –
 • Inspection – normal shape, no scars, umbilicus inverted
 • Palpation – tenderness positive over Right Hypochondrium, Epigastric, Right Lumbar and Iliac region
 • Percussion – Tympanic Sound
 • Auscultation – Bowel sound normal 16/min

Nidhana Panchaka

Nidhana - *Madhya*
Purvarupa - *Klama, Aruchi*
Rupa - *Peeta Netrata, Peeta Varnyata Mutra, Aruchi, Agnimandhya, Dourbalyata, Klama, Angamardha and Kandu*
Upashaya - Nothing significant

Samprapti Ghataka

Dosha - *Pitta*
Dushya - *Rasa, Rakta, Mamsa*
Ama - *Sama*
Agni - *Mandagni*
Strotas - *Rasavaha srotas, Raktavaha srotas, Annavaha srotas and Purishavaha srotas*
Strotodushti - *Sanga, Vimargagamana*
Vyakthasthana - *Twak, Netra, Mutra*
Adishtana - *Yakrut*
 Diagnosis - *Kosthashritha Kamala*

Treatment Schedule

Table 1: Intervention planned with *Shodhana* and *Shamana oushadhis*

Date	Intervention	Dose and Duration
26 th June Onwards	<i>Shirodhara</i> with <i>Dhanyamla</i> (room temperature)	30 mins for 11 days
26 th June -28 th June	Tab <i>Kamadugha Mukta</i>	2 BD before food for 3 days
26 th June Onwards	<i>Patolakaturohinyadi Kashaya</i>	20 ml TID before food with equal quantity of warm water
	<i>Arogyavardhini Vati</i> with <i>Nimba Kalka</i>	2 TID after food 2 gm
26 th June- 1 st July	<i>Avipattikara churna</i>	3 gm BD with warm water before food for 6 days

2 nd July - 7 th July	Combination of: <i>Avipattikara Churna</i> (50gms) + <i>Guduchi Churna</i> (20gms) + <i>Pravala Bhasma</i> (5gms) <i>Avapeedana Nasya</i> with <i>Kumari swarasa</i> <i>Netra Bhandana</i> with <i>Kumari pulp</i> and <i>Guduchi churna</i>	5gm BD with warm water before food 6 drops each nostril evening 30 minutes evening
2 nd July 4 th July 6 th July	<i>Avapeedaka Nasya</i> with <i>Jeemutaka Phala churna</i> 120mg + <i>Go Ksheera</i> 3ml (6 bindu)	3 bindu (1.5ml) in each nostril on empty stomach early in the morning (on alternate days)

Diet Schedule

Table 2: Pathya ahara niyama

Time Duration	Diet	Quantity
8 AM	<i>Laja Manda</i>	200 ml
11 AM	<i>Yava Mantha</i>	200 ml
2 PM	<i>Peya</i>	250 ml
5 PM	<i>Shunti Kashaya</i>	200 ml
8 PM	<i>Peya</i>	200ml

Pathya – Boiled vegetables, Pomegranate

Apathya – Oily spicy food, non veg, curd, bakery food, day sleep and alcohol.

Subject was admitted for 11 days and found relief in generalized weakness, body pain and Icterus was reduced. Appetite and sleep were improved. There were improvements in both Subjective and Objective parameters from Moderate to Mild/Normal.

Table 3: Laboratory Investigations

Date	27/6/2020	30/6/2020	7/7/2020	11/8/2020 (Follow up)
Total Bilirubin	14.7 mg/dl	16.8 mg/dl	11 mg/dl	2mg/dl
Direct Bilirubin	9.6 mg/dl	9.8 mg/dl	6 mg/dl	
Indirect Bilirubin	5.1 mg/dl	7 mg/dl	5 mg/dl	
Total Protien	6.1 mg/dl	5.1 mg/dl	6.4 mg/dl	
Albumin	3.0 mg/dl	2.9 mg/dl	2.7 mg/dl	
SGOT	917 U/L	1220 U/L	351.7 U/L	
SGPT	728.1 U/L	920 U/L	278 U/L	
ALT	298 U/L	205 U/L	164 U/L	

Since the results were satisfactory along with improvement in the general condition of the subject, hence discharged and *Shamana aushadi* was prescribed for a period of 1 month as mentioned below-

Table 4: Discharge Medicine

Medicine	Dose
<i>Avipathikara Churna</i> (50 gms) <i>Guduchi Churna</i> (50 gms) <i>Pravala Bhasma</i> (5gms)	5 gms TID B/F with warm water
<i>Patolakaturohinyadi Kashaya</i>	30 ml TID A/F with warm water
<i>Arogyavardhini Rasa</i>	2 TID B/F
Aloevera Juice	15 ml BD B/F with water

Results and Discussion

Kamala is a *Pitta pradhana Tridoshaja vyadhi*, where *Rakta* and *Mamsa dhatu* are involved. *Ishat sneha guna* of *pitta* will be aggravated in the body,

thus *Rukshana* with *deepana* will help to relieve the condition. *Tikta, Kashaya and Madhura rasa Dravya* helps in this perspective. Hence, *Trivrut (Operculina terpehthum (Linn.) Silva Manso), Patola (Tricosanthes dioica(Roxb)) and Katuki (Picrorhiza kurroa (Royle ex Benth))* are drug of choice for *Ruksha virechana*. These are the main ingredients in formulations such as *Avipattikara churna, Patolakaturohinyadi Kashaya* and *Arogyavardhini Vati* which have been administered in the above case. Even though *Bahudoshavasta* of *Pitta* is seen in *Kamala, Tikshna Shodhana* cannot be administered due to *Ojokshaya* and *Dourbalya*. Hence, *Acharya Vagbhata* has advised to take out *dhushiya pitta* in *Alpa Pramana* but repeatedly. On this note, *Avipattikara Churna* is administered as *Nitya virechaka (Cholegogue)*.

Pravala Bhasma (Coral calx) possess *Kshariya* and *Madhura rasa*, it is *Laghu* and *sheeta guna*. mitigates *Tridosha*, good appetizer and digestive stimulant. It also helps to improves physical strength and kills many infectious organisms in the body (8).

Guduchi (Tinospora cordifolia (Willd.) Miers) is *Tikta Rasa Pradhana dravya*(9), prevents fibrotic changes and promote regeneration of Parenchyma tissue. It has membrane stabilizing effect and modulation of kuffer cell activities(10).

Nasya- Ranjaka pitta gets *sthanasamsraya* in *Urdhwajatru pradesha* mainly in *netra, jihwa* and becomes stagnant even after the *virechana karma*, hence *Nasya* is indicated.

- *Jeemuthaka Nasya* - When *Nasya* was administered, intense yellow Rhinorrhoea was observed and patient had 3 episodes of vomiting on first day. There was sufficient reduction in Icterus.
- *Kumari Swarasa Nasya- Kumari* possess *Tikta madhura rasa* and *sheeta virya*(11).

Dhanyamla Shirodhara and *Kumari Netra bandhana* was effective in *Anidrata*.

Arogyavardhini vati contains *Katuki* as main ingredient which has *tikta rasa* and *kaphapittahara karma* and Purgative property(12). This formulation is considered as a potent digestive stimulant, anti inflammatory and anti viral property. Extremely effective in treating various liver problems like hepatitis, jaundice and fatty liver. *Nimba (Azadirachta Indica(A.Juss))* has Antioxidant, remove toxins and Anti viral(13). *Kamadugha Muktha* has *sheeta veerya* and *Pittahara property*(14). *Patolakaturohinyadi Kashaya* acts as *mrudu tikta virechaka*(cholagogue), removes toxins from blood and liver, hepatoprotective.

Conclusion

Koshtashrita Kamala is *Pitta Pradhana Tridoshaja vyadhi*, where *Ojas Kshaya* is also seen. Hence even though *Virechana* is a classical line of management for *Prakupita Pitta*, *Tikshna Shodhana* cannot be administered. Thus, it is successfully managed by *Nitya Virechana*, *Nasya* and other *Pittahara Shamanaushadi* along with proper *pathya* and *Apathya*.

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