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SUCCESSFUL AYURVEDIC MANAGEMENT OF KAAMALA (JAUNDICE): A CLINICAL CASE STUDY

Ayurveda

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ABSTRACT

Jaundice, clinically characterized by yellowish discoloration of the skin, sclera, and mucous membranes due to hyperbilirubinemia, is a common manifestation of hepatic dysfunction. In Ayurveda, this condition is described as Kaamala, a Pitta-pradhana vyadhi arising from derangement of Ranjaka Pitta and Rakta dhatu, often following untreated or improperly managed Pa u. Jaundice constitutes a significant global health burden, particularly in developing countries, where viral hepatitis, alcohol-induced liver disease, and metabolic disorders are highly prevalent. In India, jaundice is frequently encountered in clinical practice across all age groups, contributing substantially to morbidity. Ayurveda offers a holistic approach to the management of Kaamala through Pitta-samana, Agni deepana, paachana and Yakrit-vridhi sameekarana therapies, emphasizing individualized treatment strategies, as demonstrated in the present case report. This case study documents the Ayurvedic management of a patient diagnosed with hepatitis B presenting with classical features of hepatic dysfunction. A 37-year-old non-alcoholic, unmarried male from an urban background presented with complaints of yellowish discoloration of sclera, skin, and urine along with reduced appetite, nausea, vomiting, fatigue, generalized weakness, irritability, and upper abdominal pain. The clinical presentation suggested a Pitta-predominant Yakrit vikara, correlatable with Kaamala in Ayurveda. Based on Ayurvedic principles, the patient was managed with a combination of herbal formulations and dietary–lifestyle regimens, focusing on Pitta shamana, Agni deepana, Yakrit-vridhi sameekarana, and Rakta prasadana. The treatment was administered for a duration of three months, with regular follow-up. Progressive improvement was observed in clinical symptoms, including reduction in icterus, improvement in appetite and energy levels, and relief from gastrointestinal complaints. The case highlights the potential role of Ayurvedic management as a supportive and holistic approach in the management of hepatitis B, emphasizing symptom control, improvement in liver function, and enhancement of quality of life.

KEYWORDS

Kaamala, Mootra Pareeksha, Gulardrakam, Erandapallava Kalka, Bhoomyamalaki Kalka

INTRODUCTION

Jaundice is a clinical condition characterized by yellowish discoloration of the skin, sclera, and mucous membranes due to elevated serum bilirubin levels, indicating underlying hepatic or biliary dysfunction. The global burden of jaundice, particularly in its severe forms, remains substantial. Systematic analyses indicate that neonatal jaundice continues to contribute to morbidity and mortality, especially in low- and middle-income regions where healthcare resources are limited.[1] In India, liver disorders-including viral hepatitis A and E, remain significant public health challenges, with jaundice frequently presenting as a prominent symptom in affected individuals.[2] In Ayurvedic literature, jaundice exhibits clinical features comparable to *Kamala Roga* and is primarily attributed to the vitiation of *Pitta doṣha* along with *Rakta dhatu*.[3] The pathological basis of *Kaamala* is described as the derangement of *Ranjaka Pitta* leading to *Dushti* of *Rakta,* thereby classifying it under *Raktaja Roga* as well.[4] Classical texts also consider *Kaamala* to be a *Paittika Vyadhi*, often developing as a complication of inadequately managed *Paṇḍu.*

Clinically, *Kaamala* manifests with characteristic features such as *Haridra Netra, Haridra Tvak-Nakha-Anana, Rakta-Pitta Varṇa Mutra and Shakṛit,* along with *Hatendriya, Avipaka, Daurbalya,* and *Aruchi*.[5] These features closely correlate with the clinical presentation of jaundice described in contemporary medicine. The management of *Kaamala,* as elucidated in Ayurvedic classics, emphasizes the use of *Mridu Tikta Aushadha*, aiming to pacify aggravated Pitta without causing further depletion.[6]

The Therapeutic approach primarily involves *Shamana Chikitsa,* employing drugs possessing *Pittahara* or *Pitta-Rechana*, *Yakrit-vridhi sameekarana*, *Deepana, Paachana, Rakta-Shodhana,* and *Sroto Shodhana* properties. This comprehensive strategy aims to restore equilibrium of *doshas*, enhance *agni*, purify *Rakta Dhatu,* and support the functional integrity of *Yakrit* and associated *srotas,* thereby addressing both the root pathology and clinical manifestations of *Kaamala.*

PATIENT HISTORY

The present case focuses on the Ayurvedic management of Hepatitis B, referred to as *Kaamala*. A 37-year-old, non-alcoholic, unmarried male from an urban area, carpenter by profession, with no prior significant medical history, presented to the outpatient department of Asokalayam Ayurveda Hospital with complaints of yellowish discoloration of the sclera, skin, and urine, accompanied by clay-coloured stools for the past three weeks. also reported fatigue, generalized weakness, upper abdominal discomfort, irritability, reduced appetite, nausea, and vomiting over the past month. On examination, the patient was 5 feet 6 inches tall, weighed 58 kg, and appeared tired and unwell. From an Ayurvedic perspective, the condition was assessed and diagnosed as *Bahu Pitta Kaamala or Ubhayaashrita Kamala.*

The patient initially noticed mild symptoms, which worsened gradually over time. When he visited our hospital, laboratory investigations on 07/08/2025 revealed elevated liver function tests and a positive HBsAg result. Further inquiry revealed that the patient had not received or donated any blood in the past year, had no family history of hepatitis B, and no prior surgical history.

General Examination

On general examination, the conjunctiva appeared dark yellow. The patient was conscious and oriented to time, place, and person. Vital signs revealed a blood pressure of 120/78 mmHg and a feeble but regular pulse of 88 beats per minute, respiratory rate 16 breaths per minute, and temperature 98.9°F. Abdominal examination showed no organomegaly and no signs of ascites. There was no puffiness of the face or peripheral Oedema.

***Trividha pareeksha* (Three-fold examination of the patient)**

1.	*Drasana*	*Pita varṇa netra* (yellowish discoloration of sclera), *ruksha jihwa* (dryness of tongue), *anga sada* (generalized fatigue)
2.	Sparsana	*Twak -Ushna* [Increased body temperature (98.9°F)] & Ruk ha, *Nadi -teekshna, druta nadi, Udara Sparsha*- No organomegaly.
3.	Prashna	*Aruchi, Chardi* (2 episodes), *Klama* (fatigue*), Jwara* (mild fever), *Atipipasa (*excess thirst*).*

***Ashtavidha Pareeksha* (Eight-fold examination of the patient)**

1. Nadi (pulse) - *Pittaja, Druta*

2. Mootra (urine*) Pareeksha* - Initially, the urine exhibits a *rakta-peeta varṇa* (reddish-yellow discoloration); following one week of medication, it becomes clear.

In certain regions of Kerala, a traditional practice involves placing

white rice in the patient's urine every morning and observing the degree of staining of the rice. The intensity of the staining is considered indicative of elevated bilirubin levels in the urine. This observation is repeated daily until the urine returns to its normal color.

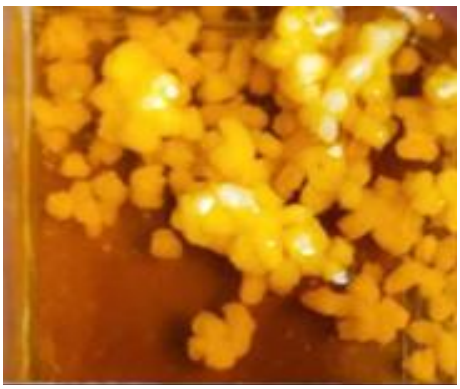

Figure -1 On 08/08/2025: -Total Bilirubin – 10.2 mg/dl,Direct Bilirubin – 7.8mg/dl

Figure -2 On 15/08/2025: - Total Bilirubin – 3.1 mg/dl, Direct Bilirubin – 1mg/dl

3. Mala (faeces) -*Tila Pista Varna* (greyish)
4. Jihwa (tongue) -*Ruksha, Sweta* (whitish)
5. Shabdam (voice) -*Aspashta* (weak)
6. Sparsham (touch) -*Ushna*, *Ruksha*
7. Druk (eyes and vision) -*Haridra Varna* (yellowish discoloration)
8. Akriti (general body built) -*Madhyam* (moderate).

***Dasa Vidhi Pareeksha* (Ten- fold examination of the patient)**

1. Pakriti - *Pitta- Vata*
2. Vikriti - *Rakta, Mamsa*
3. Saara - *Madhyama*
4. Samhanana - *Madhyama*
5. Pramana - *Madhyama*
6. Sathmya - Poor tolerance to *ushna, teekshna, katu aahara*
7. Satva - *Madhyama*
8. Aharashakti shakti - avara - *Jarana shakti- madhyama, Abhyavaharana*
9. Vyayamashakti - *Avara*
10. Vayah - *Madhyama*

INVESTIGATIVE APPROACH

LFT test, which was done on August 07, 2025, showed Total Bilirubin – 10.2 mg/dL, Direct Bilirubin- 7.8 mg/dL, SGOT- 1232 mg/dL, SGPT- 2147mg/dL, HBsAg- Positive, Hb%- 10.1 gm/dL. On November 01, 2025- HB% become 15.3 gm/dL, Total Bilirubin- 1.1 mg/dL, Direct Bilirubin- 7.8 mg/dL, SGOT- 32 mg/dL, SGPT- 37 mg/dL & HBsAg test become negative.

MANAGEMENT APPROACH

Initially, *srotorodha* occurs due to *Kapha,* which obstructs the *Pittavaha srotas,* leading to *pravṛtti-vaiguṇya* of *Pitta.* This results in metabolic derangement and ultimately manifests as *Kaamala*, which is considered an advanced stage of *Paṇḍu.* Therefore, in the initial phase, a *kaṣhaya* possessing *pachana* properties is indicated. Accordingly, *Patolakaturohiṇyadi Kaṣhaya* [7] (15 ml) diluted with 60 ml of water was administered with *Saindhava lavana*-rock salt (two pinches), jaggery (a small piece), and one teaspoon of *Sukhavirechana Churṇa* in the morning on an empty stomach. The same *kaṣhaya,* without the addition of *churṇa*, was given in the evening. As *virechana* is the principal line of treatment for *Kaamala, Sukhavirecana Churṇa* was added to facilitate daily *mṛidu virechana. Gulardṛkam* [8] was prepared using 15 g each of ginger and jaggery, and the prepared paste was administered at a dose of 15 gm before lunch and dinner. To facilitate the normalization of urine colour, a paste prepared from the tender leaves of *Eranda* (*Ricinus communis*) [9,10] and *Jeeraka (Cuminum cyminum*), triturated with milk, was administered in a dose equivalent to the size of a gooseberry at around 8:00 a.m. This was followed by the intake of *Yavagu* without added salt. The formulation was administered only during the first week of treatment. All the above medications were initiated on 07/08/2025.

After one week (15/08/2025), the evening *kaṣhaya* was changed to *Vasaguluchyadi Kaṣhaya*[11] (15 ml) diluted with 60 ml of water along with one *Gorochanadi Guṭika*[12] administered in the evening. As the urine became clear after one week, a *kalka* prepared from *Bhoomyamalaki*[13] *(Phyllanthus niruri*) and *Jeeraka*, equivalent in size to a gooseberry, was administered in the morning prior to the intake of *Yavagu.* The morning administration of *Patolakaturohiṇyadi Kaṣhaya* with *Sukhavirecana Churṇa* was continued, and *Gulardṛka* administered before lunch and dinner was also continued for 2 weeks. From 20/09/2025, *Punarnavadi Kaṣhaya*[14] with rock salt (two pinches), a small piece of jaggery, and *Triphala Churṇa* was administered in the morning on an empty stomach. In the evening, *Drakshadi Kaṣhaya*[15] (15 ml) diluted with 60 ml of water along with one *Gorochanadi Guṭika* was given. Additionally, one teaspoon of *Drakṣhadi Lehyam*[16] was administered at night after dinner. *Gulardṛkam* and *Bhoomyamalaki Kalka* were continued for 3 months. At the last follow-up visit on 01/11/2025, the patient was advised to continue *Drakṣhadi Lehyam* and *Gulardṛkam* for a while.

Throughout the entire course of treatment, strict *pathya* was advised. Salt and oily foods were completely avoided, and spicy and fried foods, pickles, and similar items were strictly restricted. *Yavagu* was advised as the primary diet. Bathing was advised to be avoided for the first two weeks, and the patient was instructed to wipe the body with a cloth dipped in warm water. Fruits such as pomegranate, gooseberry, apple, and guava was recommended.

DISCUSSION

Kaamala is a classical *Pitta-pradhana vyadhi* described extensively in Ayurvedic texts and is clinically comparable to jaundice as understood in contemporary medicine. The present case of Hepatitis B manifested with classical features of jaundice, including yellowish discoloration of the sclera, skin, and urine, along with anorexia, nausea, fatigue, and upper abdominal discomfort. These clinical features closely correlate with the *lakṣhaṇas* of *Bahu Pitta Kaamala / Ubhayashrita Kaamala*, characterized by excessive aggravation of *Pitta Doṣha* involving *Ranjaka Pitta* and *Rakta Dhatu*, leading to impairment of normal liver function. The patient demonstrated excellent compliance and co-operation by consuming the prescribed medications strictly in the advised dosage and format, adhering to the recommended *Pathya–Apathya,* attending all scheduled follow-up visits, and actively clarified treatment-related doubts through telephonic consultations.

Mode of action of medicines

Patolakaturohinyadi kashaya[7]

It is specifically indicated for the management of *Kāmalā* in its *Phalaśruti.* The ingredients of this formulation—*Patola, Katurohiṇī, Candana, Madhuśrava, Guḍūcī, and Pāṭhā*—predominantly possess *Tikta rasa,* which facilitates *Āmapācana* and helps in correcting impaired metabolic processes. This action is also *beneficial* in preventing or alleviating the *Jvara* that may be associated with *Kāmalā,* along with the accompanying *Āma* pathology. Owing to these properties*, Patolakaturohinyadi Kaṣāya* effectively addresses both *Kāmalā* and its associated systemic manifestations, thereby justifying its specific indication in the classical texts.

Gulardrakam[8]

The formulation is described to possess *Phalasruti* such as *"Sa Kaamala Shopha Manovikaran"*, indicating its efficacy in alleviating *Kaamala,* associated edema, and mental disturbances. *Ardraka* facilitates the liquefaction of *srotoleena Kapha*, corrects *Pitta pravṛtti*

mandya, and enhances its normal functional activity. *Guḍa*, owing to its *Sara guṇa*, due to which *Kapha vilayana* occurs, facilitating expulsion of aggravated liquified *Kapha* through the faecal matter, supports proper metabolic functioning by regulating *Agni*, and aids in restoring digestive efficiency. Furthermore, considering the importance of *Kaala* (timing of administration), the classical directive "*Annadou vigune apaane*" suggests administration prior to food intake, thereby the *Pratiloma gati* of *Apānavāyu* is corrected, thereby facilitating and enhancing the functional activity of *Pācaka Pitta*.

Eranda pallava kalka [9,10]

This combination has been traditionally practiced and is known to act through *Agni dipana* and *Rakta shodana* mechanisms making it beneficial in the early stages of *Kaamala* and in *Pitta* dominant hepatic dysfunction. The combination of *Eraṇḍa pallava kalka* with *Jīraka* exhibits *Mūtraśodhanakara* and *Mūtra virecana* properties, thereby promoting proper urinary elimination. Since *Mūtra* is considered, the *Mala* formed during *Rakta pariṇāma*, the administration of *Eraṇḍa pallava–Jīraka kalka* facilitates *Vātānulomana*, which in turn corrects impaired *Pācana*. Consequently, the disturbances associated with *Rakta pariṇāma* are alleviated, leading to the restoration of clarity and normalcy of urine.

Vasaguluchayadi kashya [11]

Indicated in *paandu*, helps for regularization of *dhatwagnimandya* & reduces the *panduta* of the *rakta.* It's a special *vyadhivipareeta kashaya*.

Bhoomyamalaki kalka [13]

Bhūmyāmalakī Kalka is widely indicated in the initial and moderate stages of *Kāmalā*, especially in conditions dominated by aggravated *Pitta* and hepatic impairment, due to its *Pitta virecaka*, *Raktaśodhaka*, and *Rasāyana* actions. The co-administration of milk (*Kṣīra*) enhances the overall therapeutic effect of the formulation. Milk, endowed with properties such as *Svādu rasa-pāka*, *Snigdha guṇa*, *Ojasyatva*, and *Dhātu vardhana*, functions as a cooling *Pittaśāmaka anupāna*, helping to pacify aggravated *Pitta* and relieve symptoms such as burning sensation. Simultaneously, it nourishes the *Rakta dhātu* and promotes *Ojas*, thereby minimizing tissue depletion during the process of *Virecana*. *Bhūmyāmalakī*, with its *Śīta vīrya*, *Pittaśamana*, and *Raktaśodhana* properties, aids in the purification of vitiated *Rakta* and restoration of normal hepatic function. Furthermore, the *Madhura* and *Snigdha* attributes of milk help counterbalance the predominant *Tikta rasa* of *Bhūmyāmalakī*, enabling mild and effective detoxification without inducing weakness. Hence, this combination exerts a synergistic effect in reducing *Rakta duṣṭi*, improving *Ojo duṣṭi*, enhancing vitality, and providing both *Śodhana* and *Bṛṃhaṇa* benefits, making it highly beneficial in *Kāmalā* patients associated with fatigue, anorexia, and generalized weakness.

Punarnavadi kashaya [14]

exerts its therapeutic action through *Pittaśamana*, *Yakṛt rakṣaṇa*, *Śothahara*, and *Mūtrala* properties, making it particularly beneficial in *Kāmalā* associated with edema, hepatomegaly, fatigue, and impaired digestion. Although *Punarnavādi Kaṣāya* is classically indicated in *Pāṇḍu*, *Kāmalā* is considered an advanced stage in the *samprāpti* of *Pāṇḍu*. Therefore, this formulation can be effectively administered during the second or third stage of treatment, especially when complications such as *Śotha*, weakness, and hepatic dysfunction become more prominent.

Drakshadi kashaya [15]

is considered beneficial in the management of *Kāmalā* due to its *Pittaśamana*, *Rakta prasādana*, *Yakṛt balya*, and mild *Dīpana* properties, which help improve appetite, reduce debility, and alleviate residual fatigue associated with the disease. The *Phalaśruti* of *Drākṣādi Kaṣāya* specifically mentions "*pipāsāṃ kāmalāṃ api*," indicating its utility in conditions of excessive thirst and *Kāmalā*. However, this formulation is generally not administered during the initial stage of the disease, but is preferred in later stages where weakness, diminished digestive power, and post-disease exhaustion predominate. When combined with *Gorochanādi guḷika* [12], the therapeutic efficacy is further enhanced, as the combination aids in pacifying aggravated *Pitta*, improving hepatic function, correcting *Rakta duṣṭi*, and restoring normal complexion, energy levels, and digestive strength, thereby facilitating better recovery in *Kāmalā.*

Drakshadi lehyam [16]

Drakshadi Lehyam is especially useful in the recovery phase of *Kaamala* where debility anorexia and fatigue persist It helps rejuvenate the body improve strength and restore digestive and hepatic balance while maintaining *Pitta* equilibrium

CONCLUSION

The present case study demonstrates the effective role of Ayurveda in the management of jaundice (*Kāmalā*) through a patient-specific, principle-based therapeutic approach. *Kāmalā*, being a *Pitta-pradhāna Yakṛt vikāra*, requires correction of the underlying metabolic derangement involving *Rañjaka Pitta, Rakta Dhātu,* and *Agni*. In this case, a comprehensive Ayurvedic management strategy focusing on *Pitta-śamana*, *Agni-dīpana, Yakṛit-uttejana,* and *Rakta-prasādana* resulted in significant clinical improvement.

The individualized selection of medicines, along with strict adherence to Pathya–Apathya and appropriate dietary and lifestyle regimens, facilitated restoration of normal metabolic functions of the liver, reflected by reduction in icterus, improvement in appetite, enhanced energy levels, and normalization of urinary discoloration. The patient's excellent compliance with treatment and regular follow-up further contributed to the favorable outcome.

This case highlights that timely and judicious application of Ayurvedic principles not only aids in symptomatic relief but also plays a crucial role in metabolic correction of Yak it vikāra, thereby preventing progression toward pathological liver damage.

Informed consent

was obtained from the patient after explaining the nature and purpose of the study, and permission was granted for publication of the clinical data.

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