WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
Coden USA: WJPRAP Impact Factor 8.63
Volume 15, Issue 22, 986-993. Case Study ISSN 2277–7105

CLINICAL AND BIOCHEMICAL IMPROVEMENT IN KAMALA (JAUNDICE) FOLLOWING AYURVEDIC MANAGEMENT: A CASE REPORT

Sk Motiur Rahaman*[1], Aditi Tiwary[2], Debanshu Sharma[3]

[1]Final Year Post Graduate Scholar, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.

[2]Internee, BAMS, J B Roy State Ayurvedic Medical College and Hospital, Kolkata, West Bengal, India.

[3]Reader, Department of Kayachikitsa, J B Roy State Ayurvedic Medical College and Hospital, Kolkata, West Bengal, India.

Article Received on 15 Oct. 2026,
Article Revised on 05 Nov. 2026,
Article Published on 16 Nov. 2026

https://doi.org/10.5281/zenodo.24300281

***Corresponding Author**

Sk Motiur Rahaman

Final Year Post Graduate Scholar, Department of Kayachikitsa, Institute of Post Graduate Ayurvedic Education and Research at SVSP Hospital, Kolkata, West Bengal, India.

How to cite this Article: Sk Motiur Rahaman*[1], Aditi Tiwary[2], Debanshu Sharma[3] (2026). Clinical And Biochemical Improvement In Kamala (Jaundice) Following Ayurvedic Management: A Case Report. World Journal of Pharmaceutical Research, 15(22), 986–993.
This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Background: Kamala is an important clinical condition described in Ayurveda, primarily associated with Pitta Dushti. It is commonly correlated with jaundice in modern medicine, which is characterized by yellowish discoloration of the skin and mucous membranes due to increased serum bilirubin levels. Various dietary and lifestyle factors may contribute to liver dysfunction and the development of jaundice. **Case Presentation:** An 18-year-old male patient presented with complaints of recurrent abdominal pain, loss of appetite, lethargy, yellowish urine, occasional low-grade fever and general weakness. Liver function tests performed in August 2025 revealed elevated serum bilirubin and liver enzyme levels. **Therapeutic Intervention:** The patient was managed with Ayurvedic Shamana Chikitsa from 2 August 2025 to 18 September 2025. The treatment regimen included Phalatrikadi Kwatha, Arogyavardhini Vati, Liv.52 and Vyoshadi Gutika. Clinical symptoms and liver function parameters were assessed before and after the treatment. **Results:** Following the treatment period, total bilirubin decreased from 5.0 mg/dL to 1.2 mg/dL, direct bilirubin from 2.4 mg/dL to 0.5 mg/dL, SGOT (AST) from 98 U/L to 27 U/L and SGPT (ALT) from

186 U/L to 19 U/L. Along with these biochemical changes, the patient also showed improvement in his clinical symptoms. **Conclusion:** This case showed improvement in both clinical symptoms and liver function parameters during the course of Ayurvedic Shamana Chikitsa. However, being a single case without a control group, it is not possible to establish a direct relationship between the treatment and the observed improvement. Further clinical studies are needed to evaluate the role of this treatment approach in the management of Kamala.

KEYWORDS: Kamala; Jaundice; Liver Function Tests; Phalatrikadi Kwatha; Arogyavardhini Vati; Shamana Chikitsa; Case Report.

INTRODUCTION

In the Modern days, changes in dietary habits and lifestyle have contributed considerably to the increasing prevalence of hepatic disorders. Frequent consumption of high-fat foods, processed and junk foods, alcohol intake, and lack of physical activity are considered important factors associated with impaired liver function. Hepatic dysfunction may present with various clinical features, including loss of appetite, general weakness, fatigue, nausea, and yellowish discoloration of the skin and sclera due to elevated serum bilirubin levels.[1] These manifestations are commonly associated with hepatocellular jaundice.

In Ayurveda, the clinical condition resembling hepatocellular jaundice is described as Kamala, particularly Bahupitta Kamala. It is discussed in the context of Raktavaha Srotas.[2] According to classical Ayurvedic literature, Yakrit (liver) and Pleeha (spleen) are considered the principal roots (Moolasthana) of Raktavaha Srotas.[3] Furthermore, Rakta and Pitta share an Ashraya-Ashrayi Sambandha, indicating their close physiological relationship.

Kamala is described in Ayurvedic literature among disorders associated with Pitta derangement. Classical descriptions discuss yellowish discoloration and disturbances involving Rakta and Pitta. In contemporary clinical practice, jaundice refers to yellow discoloration of the skin, sclerae and mucous membranes due to increased serum bilirubin. It may occur in pre-hepatic, hepatic or post-hepatic disorders; therefore, clinical examination and appropriate investigations are essential to identify the underlying cause.[4]

The present report documents the available clinical laboratory records of a male patient who developed raised bilirubin and liver aminotransferases in August 2025 and received an

Ayurvedic regimen from 2 August 2025. The report focuses on the serial biochemical findings available before and after treatment.

CASE REPORT

A 18 yr male patients came to J B Roy state ayurvedic medical College and hospital in kaychikitsa dept for complaning of given below.

Chief Complaints

- General weakness for 1 month.
- Yellowish discoloration of urine for 1 month.
- Loss of appetite for 1 month.

An 18-year-old male patient, presented with general weakness, yellowish discoloration of urine (yellow micturition) and loss of appetite for one month. The patient was evaluated through serial investigations. The ultrasound report dated 18 January 2025 described mild hepatomegaly. The correct age has been confirmed by the author as 18 years. Chief complaint.

- Udara shool (pain in abdomen)
- Kshudha mandhya(loss of appetite)
- Daurbalya(weakness)
- Hrullas (Nausea)
- Mutrapitata (yellow discolouration of urine
- Vibhandha(constipation)

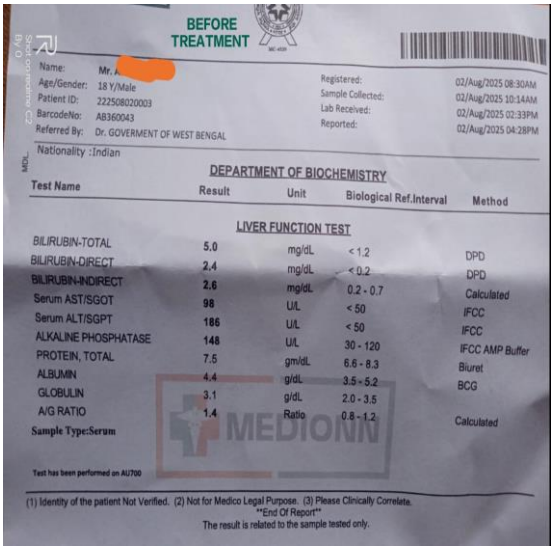
Investigations

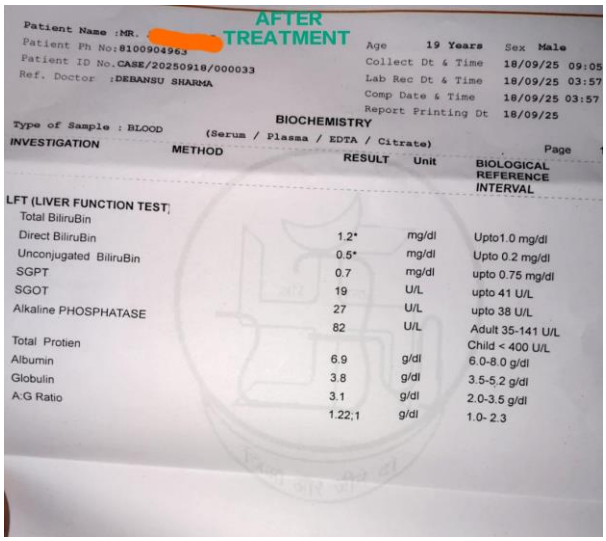
The ultrasound report dated 18 January 2025 described mild hepatomegaly. The liver function test dated 18 January 2025 showed total bilirubin 1.8 mg/dL, direct bilirubin 0.6 mg/dL, indirect bilirubin 1.2 mg/dL, SGOT 31 U/L, SGPT 22 U/L and alkaline phosphatase 86 U/L. The report dated 2 August 2025 showed increased bilirubin and aminotransferases. The follow-up report dated 18 September 2025 showed lower values.

Parameter	18 Jan 2025	2 Aug 2025 (pre-treatment)	18 Sep 2025 (post treatment)	Reference interval (as reported)
Total bilirubin (mg/dL)	1.8	5.0	1.2	≤1.2 / ≤1.0*
Direct bilirubin (mg/dL)	0.6	2.4	0.5	≤0.2
Indirect bilirubin (mg/dL)	1.2	2.6	0.7	0.2–0.7
SGOT / AST (U/L)	31	98	27	≤41 / 30–120*

SGPT / ALT (U/L)	22	186	19	≤38 / 30–120*
Alkaline phosphatase (U/L)	86	148	82	35–141
Total protein (g/dL)	6.7	7.5	6.9	6.0–8.0
Albumin (g/dL)	4.2	4.4	3.8	3.5–5.2
Globulin (g/dL)	2.5	3.1	3.1	2.0–3.5
A/G ratio	1.68	1.4	1.22	1.0–2.3

***** The reference intervals differ between the two laboratories/reports.





Ayurvedic Assessment

According to Ayurveda, Kamala is a Pitta Pradhana disorder classified under Raktapradoshaja Vikara, primarily involving the vitiation of Pitta Dosha and Rakta Dhatu. Its pathogenesis (Samprapti) is associated with the aggravation of Pitta, particularly Ranjaka Pitta, resulting in the impairment of Rakta Dhatu and subsequent manifestation of Kamala. Mandagni and Ama may further contribute to disease progression. The condition predominantly involves Yakrit (Liver) and involves the channels of Rasa and Rakta Dhatu (Rasavaha and Raktavaha Srotas). Clinically, Kamala is characterized by Haridra Varna of Netra, Twak and Mutra, along with Aruchi, Agnimandya, Daurbalya and Avipaka. Therefore, the Ayurvedic management focuses on Pitta Shamana, Agni Deepana, Ama Pachana and Yakrit-related functional correction, considering the patient's Bala, Dosha, Dushya and disease stage

Treatment

Ayurvedic treatment was reported to have been started on 2 August 2025. The medicines and doses supplied by the author were as follows.

Sl. No.	Medicine	Dose	Schedule
1	Syp. Phalatrikadi Kwath	20 mL	BDAC with equal amount of water
2	Arogyavardhini Vati	2 tablets	BDPC with usnadaka
3	Liv.52	2 tablets	BDPC with normal water
4	Vyoshadi Gutika	2 tablets	BDPC with water

The available information does not specify the exact duration, batch details, manufacturer, ingredients, or whether any additional dietary or lifestyle advice was prescribed. These details should be added from the treatment record if available. No additional medicine or procedure has been assumed in this draft.

Probable mode of action of medicines

1) Arogyavardhini vati - usually indicated for the treatment of jaundice, and other liver disorders wisely having deepan, paachan, strotoshodhan, yakruta, pleeha shothkar, tridoshashamak properties[5], produces agnivedhan by acting on madagni of yakrit helping in formation of new liver cells which contains Haritaki (Terminalia Chebula Retz.), Bibhitaki (Terminalia Bellerica Roxb.), Amalaki(Emblica Officinalis Gaertn.), Suddha Silajatu (Asphaltum), Shuddha Guggulu (Commiphora wightii Arn.), Eranda (Ricinus communis L.), Katuka (Picrorrhiza kurroa Royleex Benth), Nimba (Azadirachta indica A Juss), with Shuddha Rasa (Purified mercury), Shuddha Gandhaka (Purified sulfur), Lauha bhasma, Abhrak bhasma, Tamra bhasma, this vati is mentioned in Ayurveda formulary[5], Research conducted on it proves its choleretic, anti-inflammatory and antiviral action. Hence this drug is widely used in the hepatic disorders.[6]

2) Liv52(7) contains Himsra (Capparis spinosa) 65 mg, Kasani (Cichorium intybus) 65mg, MandurBhasma (Ferric oxide calx) 33mg, Kakamachi(Solanum nigrum) 32mg, Arjun (Terminalia arjuna) 32 mg, Kasamarda (Cassia occidentalis) 16 mg, bhiranjasipha (Achillea millefolium) 16mg, Jhavuka (Tamarix gallica) 16 mg ,all these drugs are being used to improve functional efficacy of liver with anti-oxidant, stimulant, antibacterial property.

3. Phalatrikadi Kwatha :- is a classical Ayurvedic polyherbal formulation comprising Haritaki (Terminalia chebula), Vibhitaki (Terminalia bellirica), Amalaki (Phyllanthus emblica), Vasa (Justicia adhatoda), Guduchi (Tinospora cordifolia), Katuki (Picrorhiza kurroa), Kiratatikta (Swertia chirayita) and Nimba (Azadirachta indica). The formulation predominantly possesses Tikta and Kashaya Rasa, with Deepana, Pachana, Pitta-Shamana and Srotoshodhana properties. These actions are traditionally considered beneficial in Kamala by pacifying vitiated Pitta, improving Agni and supporting normal liver function. Its ingredients also demonstrate potential antioxidant and hepatoprotective activities in

experimental studies.

4. Vyoshadi Gutika, comprising Shunthi (Zingiber officinale), Maricha (Piper nigrum), Pippali (Piper longum), Chavya (Piper chaba), Chitraka (Plumbago zeylanica), Jeeraka (Cuminum cyminum), Twak (Cinnamomum verum), Ela (Elettaria cardamomum), Talisapatra (Abies webbiana), Patra (Cinnamomum tamala), Amlavetasa (Garcinia pedunculata), Tintidika (Rhus parviflora) and Guda (jaggery), possesses Deepana, Pachana and Agni-Deepana properties. In Kamala, it is traditionally considered to support Agni and improve digestion and metabolism; however, its specific hepatoprotective efficacy in Kamala requires further clinical evidence.

OBSERVATIONS AND RESULTS

Between 2 August and 18 September 2025, total bilirubin decreased from 5.0 mg/dL to 1.2 mg/dL (76.0% reduction). Direct bilirubin decreased from 2.4 mg/dL to 0.5 mg/dL (79.2% reduction), while indirect bilirubin decreased from 2.6 mg/dL to 0.7 mg/dL (73.1% reduction). SGOT decreased from 98 U/L to 27 U/L (72.4% reduction), and SGPT decreased from 186 U/L to 19 U/L (89.8% reduction). Alkaline phosphatase decreased from 148 U/L to 82 U/L. These are descriptive comparisons; no statistical analysis is applicable to a single case.

DISCUSSION

The patient's August 2025 report documented hyperbilirubinaemia with elevated SGOT and SGPT. The subsequent report dated 18 September 2025 showed a reduction in total, direct and indirect bilirubin and in both aminotransferases. The ultrasound report available from January 2025 had described mild hepatomegaly. The biochemical trend is compatible with improvement in the measured liver-function parameters during the period in which the Ayurvedic medicines were reportedly administered.

In Ayurvedic terms, Kamala is traditionally discussed in relation to Pitta and Rakta. The medicines used in this case were selected by the treating physician. Nevertheless, the present records do not provide sufficient clinical details to explain the individual contribution or mechanism of each formulation. The report also does not document viral hepatitis markers, other aetiological investigations, imaging during the acute episode, or a detailed medication and exposure history. Consequently, the cause of the jaundice cannot be determined from the supplied documents.

The improvement cannot be attributed solely to the Ayurvedic regimen because this is an uncontrolled single case. The natural course of the illness, supportive care, dietary changes, unrecorded treatments and other confounding factors may have contributed. The records supplied do not contain systematic adverse-event monitoring; therefore, safety cannot be concluded from the absence of reported events.

CONCLUSION

This case report documents a reduction in serum bilirubin and aminotransferase levels between 2 August and 18 September 2025 during a period of Ayurvedic treatment with Phalatrikadi Kwath, Arogyavardhini Vati, Liv.52 and Vyoshadi Gutika. The findings are descriptive and hypothesis-generating only. A single case cannot establish causal efficacy or safety. Further evaluation with complete diagnostic work-up, clearly documented clinical features and appropriately designed clinical studies is required.

Patient Consent and Ethical Considerations

Written informed consent for publication, including publication of clinical details and investigation reports was obtained from the patient or the legally authorised guardian. Written informed consent was obtained before enrolment in the study. Confidentiality of patient information was maintained throughout the study.

ACKNOWLEDGEMENT

The author acknowledges the guidance of Dr. Debanshu Sharma , Reader, Department of Kayachikitsa, J bRoy state ayurvedic medical College and Hospital, Kolkata.

Conflict of Interest

there is no conflict of interest regarding the publication of this article.

Funding

No external funding was received.”

REFERENCES

1. Brian R walker, Nicky R colledge, Stuart H. Ralston, et.al., Davidson- principles and practice of medicine, edition 22; 481p.
2. Ravidatta Tripathi, Charak Samhita, Sutrasthan 28, Vividhashitapitiya adhyay, edition reprinted 2009, published by Chaukhamba Surbharti prakashan Varanasi, 430p.
3. Ravidatta Tripathi, Charak Samhita, Viman sthana 5, strotovimaniya adhyay, edition

reprinted 2009, published by Chaukhamba Surbharti prakashan Varanasi, 588p.

4. Deshmukh NA, Ade V, Supare SS. Management of Kamala (Jaundice) through Ayurved – A Case Report. International Journal of Ayurvedic Medicine, 2020; 11(1): 128-130.
5. Anonymous. Ayurved Formulary of India. Controller of publications. Ministry of Health and Family Welfare, Government of India, New Delhi, 2005.
6. Ashish Chhaganlal Zanwar et.al., Management of hepatitis B (Carrier stage) through Ayurved –A Case report, IJAM, 2019; 10(4): 342-344.
7. Malik K. K., M. B. Pal Role of Liv.52 in hepatitis and Cirrhosis of the liver, Current Medical Practice, 1979; 23, 5.