ISSN: 2322 - 0902 (P)
ISSN: 2322 - 0910 (O)

International Journal of Ayurveda and Pharma Research

Case Study

CLINICAL AND BIOCHEMICAL EFFICACY OF *VIRECHANA KARMA* IN THE MANAGEMENT OF *KAMALA* (JAUNDICE)

Ratnesh Kumar Shukla[1]*, Lokendra Yadav[2]

*[1]MD Scholar, Department of Kaya Chikitsa, [2]MD Scholar, Department of Roga Nidana evam Vikriti Vigyan, PTKLS Govt Ayurveda College and Institute, Bhopal, Madhya Pradesh, India.

Article info

Article History:
Received: 20-06-2026
Accepted: 17-07-2026
Published: 15-08-2026

KEYWORDS:
Kamala, Virechana, Jaundice, Obstructive.

ABSTRACT

In Ayurveda, *Kamala* (jaundice) is classified as a *Pittaja Nanatmaja Vyadhi* and *Raktapradoshaja Vikara* characterized by hepatobiliary dysfunction. *Virechana Karma* (therapeutic purgation) is classically heralded as the premier bio-purification (*Shodhana*) therapy for this condition as emphasized by the dictum *"Kamale Tu Virechanam"*. **Case Description-** A 35-year-old male presented with progressive icterus, reddish urine, generalized weakness, fatigue, and severe anorexia (*Aruchi*). Baseline liver function tests confirmed hyperbilirubinemia with a total bilirubin of 2.9mg/dL and elevated transaminases, including an SGOT of 97.4 U/L and an SGPT of 92.5 U/L, which correlated with *Kamala*. **Methods-** The *Purva Karma* phase involved *Deepana-Pachana* with *Chitrakadi Vati* to digest endotoxins (*Ama*), followed by graduated internal oleation (*Abhyantara Snehapana*) with *Triphala Ghrita* and subsequent sudation (*Swedana*). During the *Pradhana Karma* phase, a *Mridu-Tikta Virechana* formulation was administered, safely yielding a *Madhyama Shodhana* of 16 purgation bouts (*Vegas*). Finally, the *Paschat Karma* phase comprised a strict, graduated dietary regimen known as *Samsarjana Krama*. **Results: P**ost-treatment evaluation revealed a 70.83% mean relief in subjective symptoms, including complete 100% resolution of yellowish skin and sclera discoloration, dark urine, fever, and pruritus. Objective biochemical parameters showed a 59.71% mean improvement. Total bilirubin completely normalized to 0.9mg/dL representing a 68.97% reduction, SGPT completely normalized to 39.9 U/L showing a 56.86% reduction, and SGOT dropped to 40.7 U/L reflecting a 58.21% reduction. **Conclusion-** The structured *Virechana Karma* protocol demonstrated profound efficacy in breaking the pathogenesis of *kamala*. By clearing metabolic channels and eliminating vitiated *Pitta*, it successfully restored hepatobiliary function and normalized liver enzymes. These findings validate the classical therapeutic mandate of *"Kamale Tu Virechanam"*, though large-scale controlled clinical trials are warranted to further investigate the underlying molecular mechanisms.

INTRODUCTION

Jaundice is a clinical condition characterized by yellow discoloration of the skin, sclera, and mucous membranes resulting from elevated serum bilirubin levels (>2–3mg/dL). It is a manifestation of underlying disorders affecting bilirubin metabolism and is broadly classified into pre-hepatic (hemolytic), hepatic (hepatocellular), and post-hepatic (obstructive) jaundice. Common clinical features include icterus, dark urine, pale stools, pruritus, anorexia, nausea, and generalized weakness. Prompt diagnosis and treatment are essential to prevent complications such as liver failure and hepatic encephalopathy.[1]

Access this article online

Quick Response Code

https://doi.org/10.47070/ijapr.v14i8.4323

In Ayurveda, jaundice is described under *kamala*, a *Pittaja Nanatmaja Vyadhi* and *Raktapradoshaja Vikara*, predominantly involving *Pitta Dosha, Rakta Dhatu, Yakrit* (liver), and *Pittavaha Srotas.*[2,3] *Acharya Charaka* has described *Kamala* as an advanced stage (*Upadrava*) of *Pandu Roga,* while *Acharya Sushruta* and *Vagbhata* have considered it an independent disease entity. Classical signs such as

Haridra Netra (yellow sclera), *Haridra Twak* (yellow skin), *Peeta Mutra* (yellow urine), *Haridra Nakha* (yellow nails), *Aruchi* (loss of appetite), *Daurbalya* (weakness), and *Agnimandya* resemble the clinical manifestations of jaundice described in modern medicine.[4,5]

The clinical features and pathogenesis of *Kamala* closely resemble those of jaundice. The Ayurvedic concept of *Pitta Dushti, Rakta Dushti*, and impairment of *Ranjaka Pitta* can be correlated with disturbed bilirubin metabolism and hepatobiliary dysfunction. *Koshtashrita kamala*, characterized by excessive *Pitta* in the gastrointestinal tract, is comparable to hepatocellular jaundice, whereas *Shakhashrita kamala*, resulting from obstruction to the movement of Pitta, resembles obstructive jaundice. Thus, despite differences in conceptual framework, both Ayurveda and modern medicine recognize liver dysfunction as the central event responsible for jaundice.[6]

Virechana Karma is the principal *Shodhana Chikitsa* indicated for diseases caused by aggravated *Pitta Dosha*. *Acharya Charaka* has specifically stated "*Kamale Tu Virechanam*", indicating therapeutic purgation as the treatment of choice for *Kamala*. *Virechana* helps eliminate vitiated *Pitta* through the lower gastrointestinal tract, restores *Agni*, purifies *Rakta*, clears *Pittavaha Srotas*, and improves liver function. It also reduces symptoms such as yellow discoloration, anorexia, indigestion, and weakness. Modern researchers suggest that therapeutic purgation may enhance biliary excretion and reduce the enterohepatic circulation of bilirubin, thereby complementing the management of jaundice. [7]

Illustration *Samprapti Chakra* [9-12]

Nidana Sevana

(Mithya Ahara & Vihara, Pittakara Ahara, Madya, Krodha, Divaswapa etc.)

↓

Pitta Dosha Prakopa

↓

Agnimandya

↓

Ama Utpatti

↓

Ranjaka Pitta Dushti

↓

Rakta Dhatu Dushti

↓

Yakrit & Pleeha Dushti

↓

Pittavaha Srotodushti

(Sanga + Vimargagamana)

↓

Impaired Bile Metabolism

↓

Bilirubin Accumulation

↓

Kamala

Samprapti Ghataka	**Description**
Dosha	Predominantly *Pitta* (especially *Ranjaka Pitta*); associated involvement of *Vata* and *Kapha* depending on the type of *Kamala.*
Dushya	*Rakta, Rasa, Mamsa* (in chronic cases)
Agni	*Jatharagni Mandya* and *Dhatvagni Vaishamya*
Ama	Present in the initial stage due to *Agnimandya*
Srotas	*Rasavaha Srotas, Raktavaha Srotas, Pittavaha Srotas*
Srotodushti	*Sanga* (obstruction), *Atipravritti* (excessive flow), and sometimes *Vimarga Gamana*
Udbhava Sthana	*Amashaya* (site of origin)
Sanchara Sthana	*Rasavaha and Raktavaha Srotas*
Adhisthana /Vyakta Sthana	*Yakrit* (liver), *Pleeha* (spleen), *Rakta, Twak* (skin), *Netra* (eyes)
Rogamarga	*Abhyantara Rogamarga*
Vyaktalakshana	*Haridra Varna, Peeta Netra, Peeta Mutra, Peeta Purisha* (depending on type), *Aruchi, Daurbalya, Kandu*
Swabhava	Mainly *Ashukari* (acute), but may become *Chirakari* (chronic) if untreated

Case study

History of Present Illness

A 35-year-old male patient presented to our hospital with complaints suggestive of jaundice. He reported yellowish discoloration of the sclera and skin, dark yellow urine, generalized weakness, loss of appetite, and fatigue. The symptoms had developed gradually before presentation, following which he sought medical attention at our hospital for further evaluation and management.

H/O past illness- None

Medicinal history- None

Surgical history- None

Clinical Assessment

Subjective Criteria

Table 1: Assessment of yellowish discoloration of *Twak, Anana, Nakh*

Score	Assessment
0	Absent
1	Mild
2	Moderate
3	Severe
4	Very severe

Table 2: Assessment of Reddish-Black Urine (*Raktiya Mala-Mutra)*

Score	Assessment
0	Absent
1	Yellowish discoloration
2	Reddish-yellow
3	Dark reddish-brown
4	Blackish discoloration

Table 3: Assessment of Whitish Skin Discoloration

Score	Assessment
0	Absent
1	Light yellow
2	Yellowish-white
3	Sesame-paste–like white discoloration

Table 4: Assessment of Loss of Appetite (*Aruchi*)

Score	Assessment
0	Normal appetite
1	Mild loss of appetite
2	Moderate loss of appetite
3	Severe loss of appetite
4	Complete loss of appetite

Table 5: Assessment of Fever (*Jwara*)

Score	Assessment
0	Absent
1	Low-grade fever
2	Moderate fever
3	High-grade fever

Table 6: Assessment of Weakness (*Daurbalya*)

Score	Assessment
0	Absent
1	Able to perform daily activities
2	Unable to perform daily activities
3	Bedridden

Table 7: Assessment of Itching (*Kandu*)

Score	Assessment
0	Absent
1	Mild itching all over the body
2	Moderate itching all over the body
3	Severe itching all over the body

Table 8: Assessment of Constipation (*Mala Vibandha*)

Score	Assessment
0	Absent
1	Mild constipation (once in 7 days)
2	Moderate constipation (once in 2–3 days)
3	Severe constipation (daily)
4	Very severe constipation (after every meal)

Objective Parameters – Liver Function Test

Procedure Review (Clinical Case Analysis) [13-16]

The clinical management of *Kamala* (hepatocellular/obstructive jaundice) revolves heavily around the foundational principle:

Table 9: Interventions

Treatment Step	Intervention	Purpose
1	*Deepana–Pachana (Chitrakadi Vati)*	Improves *Agni* and digests *Ama*
2	*Abhyantara Snehapana (Triphala Ghrita)*	Internal oleation to mobilize *Doshas*
3	*Mridu–Tikta Virechana (*optimal *16 Vegas)*	Therapeutic purgation for elimination of vitiated *Pitta*
4	*Samsarjana Krama* (dietary graduation)	Gradual restoration of digestive power after *Virechana*

This approach was practically evaluated in this case using a structured three-phase protocol to balance metabolic detoxification (*Shodhana*) with patient safety.

Poorva Karma

***Deepana & Pachana*:** The patient was initially administered *Chitrakadi Vati* to address *Agnimandya* (metabolic insufficiency) and achieve *Ama Pachana* (digestion of endotoxins). This ensures that the cellular channels (*Srotas*) are receptive, avoiding *Asamyak Shodhana* (incomplete purification).

***Abhyantara Snehapana* (Internal Oleation):** Graduated internal oleation was performed using *Triphala Ghrita. Triphala Ghrita* serves a dual mechanism: the lipophilic nature of the *Ghrita* mobilizes tissue-bound toxins (*Dosha*) into the gastrointestinal tract (*Koshta*), while the *Tikta-Kashaya* (bitter-astringent) properties of *Triphala* exert a hepatoprotective effect, initiating *Srotoshodhana* without overworking hepatic pathways. After that *Snehana* and *Swedana* for three consecutive days completed.

***Pradhana Karma* (Therapeutic Purgation & *Vega* Evaluation)**

Following the appearance of *Samyak Snigdha Lakshanas* (signs of optimal oleation), a *Mridu Tikta Virechana* (mild bitter purgative) formulation was administered, closely monitoring the patient's vital signs and *Bala* (physical strength).

The patient presented with a total of 16 *Vegas* (purgation bouts). In classical therapeutics, *Virechana* is quantified into three distinct categories based on frequency and output:

***Madhyama Shodhana* (Moderate)- 20 *Vegas*- Balanced purification suitable for individuals with average physical strength**

Clinical Analysis of 16 *Vegas*

A count of 16 *Vegas* indicates an optimal *Madhyama Shodhana* (approaching moderate limits). Patients suffering from *kamala* inherently exhibit *Dhatukshaya* (tissue depletion) and secondary hepatic debility. Pushing for a high-intensity *Pravara Shodhana* (>30 *Vegas*) can trigger an acute *Vata* imbalance, resulting in severe dehydration, electrolyte imbalances, or *Klama* (unphysiological fatigue). Achieving 16 *Vegas* confirms that the *Dushita Pitta* and *Mala* were successfully evacuated from the *Raktavaha Srotas* without compromising the underlying vital strength of the patient.

***Paschat Karma* (Post-operative Care & *Samsarjana Krama*)**

Post-procedure, the patient's digestive capacity (*Agni*) is significantly diminished, requiring a structured dietary graduation (*Samsarjana Krama*) to systematically rebuild metabolic strength. The recovery process was initiated with the *Peya* phase, where thin, warm rice water was administered for the first 1–2 meals to provide immediate hydration and baseline caloric intake without imposing a metabolic load on the recovering system. This was followed by a smooth transition into the *Vilepi* phase, incorporating a thick rice soup to safely introduce easily digestible complex carbohydrates and sustain energy levels. Finally, the patient advanced to the *Yusha* phase, which involved the careful administration of *Akrita* (unseasoned) and *Krita* (seasoned with minimal spices) *Mudga Yusha* (green gram soup). This sequence supplied the vital, bioavailable amino acids essential for hepatocyte repair, liver tissue regeneration, and the complete restoration of systemic vitality.

Table 10: Results of subjective Criteria

S.No.	*Lakshana*	Before Treatment	After Treatment	% Relief
1	Yellowish discoloration of *Twak*, *Anana*, *Nakh*	2	0	100
2	Reddish-black urine (*Raktīya Mala-Mūtra*)	2	0	100
3	Whitish skin discoloration	1	1	0
4	Loss of appetite (*Aruchi*)	3	1	66.67
5	Fever (*Jwara*)	1	0	100
6	Weakness (*Daurbalya*)	2	1	50
7	Itching (*Kandu*)	1	0	100
8	Constipation (*Malabaddhata*)	2	1	50

Table 11: Objective Criteria

Parameter	Reference Range	Before Treatment (24-Jan 2026)	After Treatment (09 Feb 2026)	% Relief	Interpretation
Total bilirubin (mg/dL)	0.0–1.2	2.9	0.9	68.97%	Normalized
Direct bilirubin (mg/dL)	0.0–0.3	0.7	0.3	57.14%	Normalized
Indirect bilirubin (mg/dL)	0.0–0.9	2.20	0.60	72.73%	Normalized
SGOT (AST) (U/L)	5–31	97.4	40.7	58.21%	Marked improvement (still mildly elevated)
SGPT (ALT) (U/L)	5–45	92.5	39.9	56.86%	Normalized
Alkaline phosphatase (U/L)	45–129	127.9	71.2	44.33%	Within normal range

DISCUSSION

The therapeutic success of this intervention is rooted in the core Ayurvedic principle of *Samprapti Vighatana* (breaking the pathogenesis), orchestrated through a systematic, multi-stage protocol. The management begins with *Nidana Parivarjana* (avoiding aggravating factors) to halt the further exacerbation of

Pitta, followed by *Deepana-Pachana* to kindle *Jatharagni* (digestive fire), digest *Ama* (metabolic toxins), and correct impaired metabolism. Subsequently, *Snehapana* (internal oleation) and *Swedana* (sudation) work synergistically to mobilize and liquefy vitiated *Doshas* from peripheral tissues, directing them toward the gastrointestinal tract for elimination. As the definitive *Pradhana Chikitsa* (principal treatment) for *Kamala*- famously advocated by Acharya Charaka through the dictum *"Kamale Tu Virechanam"*- *Virechana Karma* effectively expels this accumulated, vitiated *Pitta* through the lower gastrointestinal tract.[17] By executing *Srotoshodhana* (channel purification), *Virechana* directly decompresses the pathological burden on the *Pittavaha Srotas*, corrects the *Pitta-Rakta* vitiation, and restores the physiological equilibrium of *Ranjaka Pitta* and *Yakrit* (liver) function. Improved digestion and metabolism further prevent subsequent *Ama* formation, accelerating systemic recovery.[18] Clinically, this holistic purification manifests as a marked reduction in pathological bilirubin levels, leading to the gradual resolution of classic symptoms such as *Haridra Varna* (yellow discoloration), *Peeta Mutra* (yellow urine), *Aruchi* (anorexia), *Daurbalya* (weakness), and *Kandu* (pruritus). While current clinical evidence strongly associates *Virechana* with favorable changes in liver function tests and objective symptom relief, further well-designed, large-scale clinical trials remain vital to conclusively elucidate its precise molecular mechanisms and long-term therapeutic efficacy. [19]

CONCLUSION

The present case demonstrated a marked clinical and biochemical improvement following the administration of *Virechana Karma* in *Kamala*, in which a mean subjective relief of 70.83% and a mean objective improvement of 59.71% were observed, with marked normalization of bilirubin levels, liver function parameters, and associated clinical symptoms. These findings strongly support the classical Ayurvedic principle of *"Kamale Tu Virechanam"*. By effectively eliminating vitiated *Pitta*, restoring *Agni*, and promoting *Srotoshodhana* (clearing the bodily channels), *Virechana Karma* re-establishes the normal function of the *Yakrit* (liver) and *Pittavaha Srotas*. Ultimately, this therapeutic intervention improves overall hepatobiliary function, leading to the clinical resolution of *Kamala* and the normalization of liver function tests.

Thus, *Virechana* may be considered an effective *Shodhana* therapy in the management of *Kamala*. However, larger controlled clinical studies are required to further validate these findings and establish stronger scientific evidence.

REFERENCES

1. Jameson JL, Fauci AS, Kasper DL, Hauser SL, Longo DL, Loscalzo J, editors. Harrison's Principles of Internal Medicine. 22nd ed. New York: McGraw-Hill Education; 2024.
2. Acharya YT, editor. Charaka Samhita of Agnivesha with Ayurveda Dipika Commentary of Chakrapani datta. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2020. Chikitsa Sthana, Chapter 16.
3. Acharya YT, editor. Sushruta Samhita with Nibandha Sangraha Commentary of Dalhanacharya. Reprint ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2021. Uttara Tantra, Chapter 44.
4. Paradkar HS, editor. Ashtanga Hridaya of Vagbhata with Sarvangasundara Commentary. Reprint ed. Varanasi: Chaukhambha Orientalia; 2020.
5. Raheena B, Smita S, Priyadarshini. Conceptual study of Kamala and understanding the concept of Kamale Tu Virechane with special reference to jaundice. J Ayurveda Integr Med Sci. 2022; 7(1): 109-115.
6. Kamala Roga in Ayurveda: A literary review with contemporary correlation to jaundice. Int J Ayurveda Pharm Res. 2026; 14(2): 157-163.
7. Chauhan V, Sharma S. Applicability of Virechana in Kamala: A Literary Review. IRJAY [Internet]. 2022 Jul. 31 [cited 2026 Aug. 13];5(7):197-201. Available from: https://irjay.com/index.php/irjay/article/view/390
8. Acharya YT, editor. Charaka Samhita of Agnivesha with Ayurveda Dipika Commentary of Chakrapanidatta. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2020. Chikitsa Sthana, Chapter 16 (Pandu- *kamala* Chikitsa).
9. Acharya YT, editor. Sushruta Samhita of Sushruta with Nibandha Sangraha Commentary of Dalhanacharya. Reprint ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2021. Uttara Tantra, Chapter 44.
10. Paradkar HS, editor. Ashtanga Hridaya of Vagbhata with Sarvangasundara Commentary of Arunadatta and Ayurveda Rasayana Commentary of Hemadri. Reprint ed. Varanasi: Chaukhambha Orientalia; 2020. Nidana Sthana, Chapter 13; Chikitsa Sthana, Chapter 16.
11. Acharya YT, editor. Charaka Samhita of Agnivesha with Ayurveda Dipika Commentary of Chakrapanidatta. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2020.
12. Paradkar HS, editor. Ashtanga Hridaya of Vagbhata with Sarvangasundara Commentary of Arunadatta and Ayurveda Rasayana Commentary of Hemadri.

Reprint ed. Varanasi: Chaukhambha Orientalia; 2020.

13. Agnivesha, Charaka, Dridhabala. Charaka Samhita, Chikitsa Sthana, Panduroga Chikitsa Adhyaya (Chapter 16, Verse 40). Choukhamba Sanskrit Sansthan, Varanasi.
14. Parauha M, Mishra S. A literary review of Kamala and its treatment. International Journal of Ayurveda and Pharma Research (IJAPR). 2017; 5(8): 42-47.
15. Vagbhata. Ashtanga Hridayam, Sutra Sthana, Shodhanadi Gana Sangraha Adhyaya (Chapter 15) & Shodhana Vidhi Adhyaya (Chapter 18). Choukhamba Krishnadas Academy, Varanasi. (Supports the classification of Shodhana Vegas into Pravara, Madhyama, and Avara categories).
16. Sharma H, Chandola HM, Singh G. Clinical evaluation of Triphala Ghrita snehapana and Virechana Karma in the management of hepatic disorders. Ayu. 2013; 34(3): 264-269. (Clinical validation of Triphala Ghrita as a pre-operative oleation agent for liver pathways).
17. Acharya YT, editor. Charaka Samhita of Agnivesha with Ayurveda Dipika Commentary of Chakrapanidatta. Reprint ed. Varanasi: Chaukhambha Surbharati Prakashan; 2016. Chikitsa Sthana, Chapter 16, Verse 34.
18. Kalburgi N, Patil V, Kulkarni H. Scientific review on Virechana Dravya (Purgative Drugs) of Charaka Samhita. J Ayurveda Holist Med. 2023; 11(11). Doi: 10.70066/jahm.v11i11.1116.
19. V C, Venkatakrishna KV. Treating an acute case of Koshtashrita Kamala (Viral Hepatitis) with Classical Virechana- A case report. J Ayurveda Integr Med Sci. 2025; 9(12): 276-281. Doi:10.21760/jaims.9.12.37

Cite this article as:
Ratnesh Kumar Shukla, Lokendra Yadav. Clinical and Biochemical Efficacy of Virechana Karma in the Management of Kamala (Jaundice). International Journal of Ayurveda and Pharma Research. 2026;14(8):191-197.
https://doi.org/10.47070/ijapr.v14i8.4323
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Ratnesh Kumar Shukla
MD Scholar,
Department of Kaya Chikitsa,
PTKLS Govt Ayurveda College and Institute Bhopal Madhya Pradesh.
Email: drratneshs@gmail.com