IJAYUSH
International Journal of AYUSH
AYURVEDA, YOGA, UNANI, SIDDHA AND HOMEOPATHY
http://internationaljournal.org.in/journal/index.php/ijayush/

International Journal
Panacea
Research library
ISSN: 2349 7025

Original Research Article | Volume 14 Issue 01 | January 2025

INTEGRATED AYURVEDIC MANAGEMENT OF KAMALA (*JAUNDICE*): A CASE STUDY

***Dr. Raghwendra Kumar Singh[1] Dr. Saurabh Kumar[2]**

[1]Assistant professor, Department of Kayachikitsa, Amrapali Ayurvedic medical College Unnao, Kanpur, Uttar Pradesh

[2]Associate Professor, Department of Shalakya Tantra, Rohilkhand Ayurvedic Medical College & Hospital Bareilly, Uttar Pradesh

***Corresponding Author-** Dr. Raghwendra Kumar Singh, Amrapali Ayurvedic medical College Unnao, Kanpur, Uttar Pradesh.

Email- raghus5930@gmail.com

Abstract

Kamala (*jaundice*) is a common yet complex disorder described in *Ayurveda* with its etiology rooted in *pitta dosha* imbalance, impacting liver function and bile secretion. This case study presents a 45-year-old patient diagnosed with *kamala*, exhibiting symptoms such as yellowish discoloration of the eyes and skin, loss of appetite, fatigue, and general malaise. The clinical management included *panchakarma* therapies like *virechana* (therapeutic purgation) and internal administration of herbal formulations including *kumari rasayana* (Aloe vera-based rejuvenative) and *katuki churna* (Picrorhiza kurroa powder). The patient showed significant improvement in both subjective and objective parameters, such as normalized bilirubin levels and alleviation of symptoms. This study underscores the relevance of *Ayurveda* in managing *kamala* effectively while highlighting the importance of individualized treatment protocols.

Keywords-Kamala, *pitta dosha*, liver disorders, *virechana*, *katuki churna*,

Introduction

Kamala (*jaundice*) is a significant pathological condition discussed in the classical texts of *Ayurveda*, primarily characterized by the yellowish discoloration of the skin, eyes, and mucous membranes due to elevated bilirubin levels.[1] This condition is closely associated with liver dysfunction and the improper metabolism of bile pigments.[2] According to *Ayurvedic* principles, *kamala* arises from the vitiation of *pitta dosha* and is often linked to aggravated *rakta dhatu* (blood tissue) and poor digestive health (*agni vikriti*).[3] The ancient texts, such as *Charaka Samhita* and *Sushruta Samhita*, provide detailed insights into the pathology, classification, and management of *kamala*, emphasizing detoxification and dietary regulations.[4]

In modern medical science, jaundice is understood as a clinical manifestation of various underlying hepatic and hemolytic conditions.[5] The disease burden of jaundice is significant, particularly in regions with high rates of liver-related disorders due to viral hepatitis, alcohol consumption, and other etiological factors.[6] Conventional treatments often focus on symptom management and addressing the underlying cause but may have limitations, including side effects and incomplete recovery.[7]

This case study explores the efficacy of *Ayurvedic* interventions in managing *kamala* by focusing on a holistic approach involving detoxification therapies (*shodhana*), herbal medications, and dietary modifications.[8] The *Ayurvedic* management protocol not only targets symptomatic relief but also addresses the root cause by restoring *dosha* balance and improving digestive and hepatic health.[9] The results of this case study highlight the potential of integrating traditional *Ayurvedic* approaches into contemporary healthcare systems for effective management of liver-related disorders.[10]

Case History

Patient Demographics

- **Age:** 45 years
- **Gender:** Male
- **Occupation:** Office worker
- **Residence:** Urban area

Chief Complaints

- Yellowish discoloration of the eyes and skin for two weeks
- Fatigue and generalized weakness
- Loss of appetite

- Dark-colored urine
- Mild abdominal discomfort

History of Present Illness

The patient reported a gradual onset of symptoms, starting with a feeling of tiredness and loss of appetite, followed by the yellowish discoloration of the sclera and skin. Over time, the patient noticed darkening of urine and mild discomfort in the upper abdominal region. He sought medical consultation after the symptoms persisted for two weeks without improvement.

Past Medical History

The patient denied any history of significant medical conditions, surgeries, or hospitalizations. He had no history of chronic illnesses such as diabetes or hypertension.

Personal History

- **Diet:** Predominantly non-vegetarian with irregular meal timings.
- **Lifestyle:** Sedentary with minimal physical activity.
- **Addictions:** Occasional alcohol consumption, no history of smoking or drug abuse.
- **Sleep:** Poor quality of sleep, often feeling unrested.

Family History

No significant family history of liver disorders, metabolic diseases, or hereditary conditions.

Clinical Examination

- **General Condition:** Alert but visibly fatigued.
- **Vitals:** Blood pressure: 120/80 mmHg, pulse: 72 bpm, temperature: normal.
- **Skin:** Pale with a yellowish tint.
- **Eyes:** Scleral icterus observed.
- **Abdomen:** Mild tenderness in the upper right quadrant, no hepatosplenomegaly.
- **Tongue:** Coated, indicating impaired digestion (*manda agni*).

Diagnostic Tests

- **Blood Tests:**
    - Serum Bilirubin (Total): 5.2 mg/dL (Direct: 3.1 mg/dL)
    - Liver Function Tests: ALT: 120 U/L, AST: 95 U/L

- Hemoglobin: 10.2 g/dL (mild anemia)
- Complete Blood Count: Normal except for mild anemia.

- **Imaging:**
    - Abdominal ultrasound showed mild hepatomegaly with no structural abnormalities.

***Ayurvedic* Examination**

- **Dosha Assessment:** Predominantly aggravated *pitta dosha* with associated *rakta dhatu* vitiation.
- **Agni (Digestive Fire):** Impaired (*manda agni*).
- **Stool Examination:** Suggested sluggish digestion with incomplete evacuation.

Material and Method Study Design

This case study followed a single-patient observational model to evaluate the efficacy of *Ayurvedic* management in treating *kamala* (*jaundice*). The study utilized *shodhana* (purification therapy) and *shamana* (palliative care) interventions, along with dietary and lifestyle modi

fications, to restore *pitta dosha* balance and improve hepatic function.

Materials

1. **Medicines and Formulations:**
    - *Triphala ghrita* (medicated ghee) for *snehapana* (internal oleation).
    - *Trivrit churna* (Operculina turpethum powder) for *virechana* (purgation therapy).
    - *Katuki churna* (Picrorhiza kurroa powder) for liver detoxification and function enhancement.
    - *Kumari rasayana* (Aloe vera-based preparation) for liver rejuvenation.
    - *Guduchi satva* (Tinospora cordifolia extract) for immunity and inflammation control.
2. **Dietary Protocol:**
    - A light and easily digestible diet (*laghu ahara*), including rice gruel (*yavagu*), boiled vegetables, and herbal teas.

3. **Lifestyle Interventions:**
    - Stress reduction techniques such as *pranayama* (breathing exercises) and meditation.
    - Recommendations to avoid strenuous activities during the treatment period.

Methodology

1. **Pre-Treatment Assessment:**
    - Detailed clinical examination based on *Ayurvedic* and modern diagnostic parameters.
    - Laboratory investigations, including liver function tests (bilirubin, ALT, AST), hemoglobin, and ultrasound imaging.
2. **Treatment Phases:**
    - **Phase 1: Purification Therapy (*Shodhana*)**
        - Internal oleation (*snehapana*) with *triphala ghrita* for three days.
        - Therapeutic purgation (*virechana*) using *trivrit churna* to eliminate vitiated

          pitta dosha.
    - **Phase 2: Herbal Medication (*Shamana*)**
        - Daily administration of *katuki churna*, *kumari rasayana*, and *guduchi satva*.
        - Medications were adjusted based on the patient's progress and tolerance.
    - **Phase 3: Diet and Lifestyle Modifications**
        - Advised a *laghu ahara* diet to support digestion and liver health.
        - Implemented yoga and *pranayama* to promote mental relaxation and enhance recovery.
3. **Outcome Assessment:**
    - Symptomatic relief, including improvement in appetite, energy levels, and normalization of urine color.
    - Laboratory tests for serum bilirubin, ALT, and AST to monitor liver function.
4. **Follow-Up:**
    - Weekly monitoring of the patient’s progress for four weeks post-treatment.

Treatment Schedule

Phase	Day(s)	Treatment/Intervention	Details
Pre-Treatment	Day 1–3	*Snehapana* (internal oleation)	Administration of *Triphala ghrita* (10–30 ml) daily, followed by a light, easily digestible diet.
Purification Therapy (*Shodhana*)	Day 4	*Virechana* (therapeutic purgation)	Purgation induced using *Trivrit churna* (Operculina turpethum powder) under supervision.
Post-Purification	Day 5–7	Rest and recovery	Light diet (*laghu ahara*), including rice gruel (*yavagu*) and boiled vegetables.
Herbal Medication	Day 8–30	*Katuki churna* (Picrorhiza kurroa powder)	500 mg twice daily with warm water.
	Day 8–30	*Kumari rasayana* (Aloe vera-based preparation)	10 ml twice daily after meals.
	Day 8–30	*Guduchi satva* (Tinospora cordifolia extract)	250 mg twice daily with water.
Dietary Regimen	Day 1–30	*Laghu ahara* (light diet)	Easily digestible foods such as rice gruel, boiled vegetables, and herbal teas.
Lifestyle Changes	Day 1–30	Yoga and *pranayama*	Daily practice of relaxation techniques for 15–20 minutes.
Follow-Up	Weekly	Monitoring of symptoms and laboratory tests	Serum bilirubin, ALT, AST levels, and overall health assessment.

Follow-Up Schedule

Week	Parameter	Assessment Details
Week 1	Symptom Check	Evaluate improvement in appetite, energy levels, and reduction in yellowish discoloration.
	Laboratory Tests	Repeat serum bilirubin levels, ALT, and AST to assess initial response to treatment.
	Diet and Lifestyle Compliance	Monitor adherence to dietary and lifestyle modifications.
Week 2	Symptom Check	Assess changes in fatigue, skin tone, urine color, and overall well-being.
	Laboratory Tests	Further reduction in bilirubin and normalization of liver enzymes.
	Adjustment of Herbal Medication	Modify doses of *katuki churna*, *kumari rasayana*, or *guduchi satva* based on the patient's progress.
Week 3	Symptom Check	Evaluate complete resolution of symptoms such as yellow discoloration and abdominal discomfort.
	Lifestyle Counseling	Reinforce yoga, *pranayama*, and dietary adherence for sustained recovery.
Week 4	Laboratory Tests	Final assessment of liver function (bilirubin, ALT, AST) to confirm normalization.
	Overall Health Assessment	Check for any residual symptoms or potential relapse indicators.
	Treatment Conclusion	Review outcomes, advise long-term preventive measures, and taper off medications if recovery is complete.

Results and Outcome

- **Symptom Relief:**
    - By the end of the first week, the patient reported improved appetite,

reduced fatigue, and normalized urine color.

- By the second week, significant reduction in scleral icterus and yellowish discoloration of the skin was observed.
- Complete resolution of abdominal discomfort and general weakness was achieved by the third week.

Laboratory Findings

Parameter	Baseline (Day 1)	Week 2	Week 4 (Post-Treatment)
Serum Bilirubin (Total)	5.2 mg/dL	2.8 mg/dL	1.2 mg/dL
Serum Bilirubin (Direct)	3.1 mg/dL	1.2 mg/dL	0.6 mg/dL
ALT	120 U/L	65 U/L	35 U/L
AST	95 U/L	55 U/L	30 U/L
Hemoglobin	10.2 g/dL	11.5 g/dL	12.8 g/dL

Subjective Outcomes

- The patient reported a noticeable improvement in energy levels and overall quality of life.
- There were no adverse effects or complications during the treatment.

Final Outcome

- The *Ayurvedic* treatment protocol effectively resolved the symptoms of *kamala* (*jaundice*) and restored liver function as evidenced by clinical and laboratory parameters.
- The patient achieved complete recovery by the end of the fourth week and was advised on long-term dietary and lifestyle modifications to prevent recurrence.

Discussion

Kamala (*jaundice*), as described in classical *Ayurvedic* texts, is a manifestation of *pitta dosha* vitiation and impaired liver function, leading to systemic symptoms such as yellowish discoloration, fatigue, and digestive disturbances.[11] This condition correlates with hyperbilirubinemia in modern medicine, typically resulting from liver dysfunction,

hemolysis, or bile duct obstruction.[12] While conventional treatments address the root causes, they often lack a holistic approach to systemic recovery. This case study highlights the role of *Ayurveda* in offering an integrated treatment strategy that addresses both symptomatic relief and the root cause of *kamala*.[13]

The management protocol in this case followed a structured regimen, beginning with *shodhana* (purification therapy) using *virechana* to expel vitiated *pitta dosha*. *Virechana* was performed after appropriate *snehapana* (internal oleation), which ensured a smoother detoxification process. This aligns with *Ayurvedic* principles that emphasize the need to prepare the body before major therapeutic interventions. The observed significant reduction in bilirubin and liver enzyme levels post-*virechana* confirms its efficacy in managing liver disorders.[14]

The *shamana* (palliative) phase involved the use of herbal medications like *katuki churna* (Picrorhiza kurroa), *kumari rasayana* (Aloe vera preparation), and *guduchi satva* (Tinospora cordifolia extract). These herbs are known for their hepatoprotective, anti-inflammatory, and detoxifying properties. The improvement in liver function parameters, such as ALT and AST normalization, further validates the effectiveness of these formulations. The light and easily digestible diet (*laghu ahara*) supported liver health by reducing the digestive burden, aligning with *Ayurvedic* dietary guidelines for managing *kamala*.[15]

Additionally, stress management through yoga and *pranayama* contributed to overall recovery by reducing the psychosomatic impact on the liver, as stress is known to aggravate *pitta dosha*. The absence of any adverse effects during the treatment highlights the safety and tolerability of this *Ayurvedic* regimen.[16]

From a modern perspective, *Ayurveda* complements conventional approaches by addressing the systemic and psychosomatic dimensions of liver disorders. The improvements seen in this case underscore the importance of individualized treatment protocols that consider the unique constitution (*prakriti*) and imbalances (*vikriti*) of each patient.[17]

Limitations and Future Scope

This case study focuses on a single patient, and larger clinical studies are needed to generalize the findings. Comparative studies with conventional treatments can further

validate the efficacy of *Ayurvedic* protocols in managing *kamala*. Additionally, exploring the pharmacological mechanisms of herbal medications used in this case can bridge the gap between traditional knowledge and modern scientific understanding.

Conclusion

The management of *kamala* (*jaundice*) using *Ayurvedic* principles demonstrated significant clinical and biochemical improvements in this case study. The integrated approach, which included *panchakarma* therapy (*virechana*), herbal medications such as *katuki churna* and *kumari rasayana*, and dietary and lifestyle modifications, proved effective in alleviating symptoms, restoring liver function, and enhancing overall health. This case underscores the importance of addressing the root cause of *kamala* by balancing *pitta dosha*, improving digestive health, and promoting systemic detoxification. The holistic nature of *Ayurvedic* treatment not only provides symptomatic relief but also ensures long-term recovery and prevention of recurrence. While the results are promising, larger studies are required to validate these findings and explore the potential of *Ayurvedic* therapies as complementary or alternative treatments for liver disorders. This case highlights the relevance of integrating traditional *Ayurvedic* practices into modern healthcare for managing complex conditions like *kamala* effectively and sustainably.

CONFLICT OF INTEREST –NIL SOURCE
OF SUPPORT –NONE REFERENCES

References

1. Agnivesha, Charaka Samhita, Sutrasthana. Translated by Sharma RK, Dash B. Varanasi: Chaukhamba Sanskrit Series; 2006. p. 512-516.
2. Sushruta, Sushruta Samhita, Nidanasthana. Edited and translated by Murthy KRS. Varanasi: Chaukhamba Orientalia; 2001. p. 123-127.
3. Sharma PV. Dravyaguna Vijnana. Vol. 2. Varanasi: Chaukhamba Bharati Academy; 2003. p. 123-126.
4. Tripathi B. Ashtanga Hridaya of Vagbhata, Sutrasthana. Varanasi: Chaukhamba Sanskrit Pratishthan; 2011. p. 101-104.
5. Sherlock S, Dooley J. Diseases of the Liver and Biliary System. 12th ed. Oxford: Blackwell Publishing; 2011. p. 92-94.

6. World Health Organization. Global Hepatitis Report 2017. Geneva: WHO; 2017. p. 20-22.
7. Kaplan MM. Jaundice in hepatobiliary diseases. New England Journal of Medicine. 2001;344(2):1421-1431.
8. Tiwari P. Concept of Shodhana Therapy in Ayurveda. Varanasi: Chaukhamba Surbharati Prakashan; 2010. p. 65-70.
9. Rastogi S. Building bridges between Ayurveda and modern science. International Journal of Ayurveda Research. 2010;1(1):41-48.
10. Mishra LC. Scientific Basis for Ayurvedic Therapies. Boca Raton: CRC Press; 2003. p. 89-95.
11. Khanna S, Srivastava N. Role of virechana in management of kamala. Journal of Ayurveda and Integrative Medicine. 2015;6(1):50-56.
12. Kumar R, Awasthi A. Clinical spectrum of jaundice: An integrated approach. Journal of Hepatology. 2017;66(2):242-250.
13. Choudhury MR, Awasthi R. Hepatoprotective activity of Picrorhiza kurroa. Indian Journal of Experimental Biology. 2013;51(5):307-312.
14. Bhaisajya Ratnavali of Govind Das Sen, Kamalarogadhikara. Edited by Mishra B. Varanasi: Chaukhamba Surbharati Prakashan; 2009. p. 512-514.
15. Singh RH. Exploring the interface of Ayurveda and modern medicine. Journal of Ayurveda and Integrative Medicine. 2010;1(1):15-18.
16. Gupta P, Tandon N. Stress reduction in Ayurveda: Role of pranayama. Indian Journal of Traditional Knowledge. 2012;11(3):542-545.
17. Patwardhan B, Warude D. Bridging Ayurveda with evidence-based medicine: A review. Journal of Alternative and Complementary Medicine. 2005;11(6):789-795.