

A Case Study on Ayurvedic Management of Kumbhakamala W.S.R to Chronic Liver Disease

Dr. Ch. Bhargavi¹, Dr. A. Swaroopa², Dr. K. Laxmikantham³,
Dr. P. Srikanth Babu⁴

¹Final Year Post Graduate Scholar, Post Graduate Department of Kaya Chikitsa, Dr BRKR Govt. Ayurvedic Medical College & Hospital, Hyderabad, Telangana, India

²Professor & Guide, Post Graduate Department of Kaya Chikitsa, Dr BRKR Govt. Ayurvedic Medical College & Hospital, Hyderabad, Telangana, India

³Professor & HOD I/c, Post Graduate Department of Kaya Chikitsa, Dr BRKR Govt. Ayurvedic Medical College & Hospital, Hyderabad, Telangana, India

⁴Director, Department of AYUSH, Government of Telangana, PG Professor, Post Graduate Department of Kaya Chikitsa, Dr BRKR Govt. Ayurvedic Medical College & Hospital, Hyderabad, Telangana, India

ABSTRACT

BACKGROUND: Chronic Liver Disease (CLD) is a progressive pathological condition associated with significant morbidity and mortality worldwide. It manifests due to sustained hepatic injury leading to portal hypertension fibrosis and cirrhosis. As Chronic Liver Disease (CLD) is a major cause of death in the India. Alcohol-related liver disease accounts for approximately 20–40% of cases, followed by Metabolic Dysfunction–Associated Steatotic Liver Disease (NAFLD/MASLD) contributing 38.6%, and viral hepatitis. Among viral etiologies, chronic Hepatitis B and C together are responsible for nearly 1.3 million deaths, predominantly due to cirrhosis and hepatocellular carcinoma. In Ayurveda, Chronic Liver Disorders are described under *Yakrit Roga*, *Kamala*, and *Kumbhakamala*. *Kumbhakamala*, characterized by persistent yellow discoloration of the skin and eyes, heaviness, anorexia, lethargy, generalized swelling (*Sotha*), itching (*Kandu*), and sometimes ascites (*Udara roga*). These symptoms bear a remarkable resemblance to those seen in Chronic Liver Diseases from a modern clinical standpoint, particularly in cases involving hepatocellular damage, portal hypertension, and impaired bilirubin metabolism. This case study demonstrates that systematically planned Ayurvedic treatment can effectively manage Chronic Liver Disease, as evidenced by improvements in clinical symptoms, laboratory parameters, and quality of life, thereby supporting its role in disease control and functional recovery.

KEYWORDS: Kumbhakamala, Kamala, Chronic Liver Disease, Fibro scan.

INTRODUCTION

Kumbhakamala, a chronic form of *Kamala* has been shown as a disease having greenish yellow colour of eyes as its main symptom in *Rigveda* and *Atharvana Veda* ^[1] *Garuda purana* and *Agni purana* have also mentioned *Kamala*. *Garuda purana* opines *Kamala* as *paratantraja roga of Pandu*.

कालान्तरात् खरीभूता कृच्छ्रा स्यात् कुम्भकामला| ^[2]

By neglecting *Pandu* & indulging in *Apathya ahara* and *vihara*, within the due course of time the disease

Kamala becomes deep seated (*kharibhuta*) resulting in excessive dryness of the body or afflicted tissue and thus becomes difficult to cure. This condition is called *Kumbha Kamala*. In the *Samhita Kala*, *Yakrut* (Liver) is described mainly in the context of *Yakrutodara* and *Udara roga*. *Charaka Samhita* explains *Yakrutodara lakshanas* only, while *Susruta Samhita* provides detailed descriptions regarding *Yakrut utpatti*, *sthana*, *karma*, its role in being the origin of *Raktavaha srotas* along with *Pleeha*, and the location of *Raktadhara kala*. Further elaborations on *Yakrut* are also found in *Astanga Sangraha*, which discusses *Yakrut utpatti*, and *Astanga Hridaya* specifies the anatomical location of *Yakrut*, particularly in the *Daksina parsva* (Right flank). Among the *Laghu trayees* also, the description regarding the embryological origin of *Yakrut* from *Rakta* and formulations for the treatment of *Yakrut rogas* such as *Pippali Prayoga*, *Rasona Kalka*, etc., have been mentioned.

Chronic Liver Disease (CLD) constitutes a major public health burden in India, contributing to over 20% of global liver disease-related deaths and accounting for approximately 1–2% of total mortality. The disease predominantly affects adults aged 31–50 years, with the highest prevalence observed in the 41–50 age group, and shows a marked male predominance, although female diagnosis rates have risen substantially in recent years. Rural populations bear a disproportionate burden ($\approx 68\%$), likely reflecting lower health awareness and limited access to early care. Notably, nearly one-third of patients present at advanced stages with decompensated cirrhosis, underscoring delayed diagnosis and intervention.

In the present study, the clinical assessment was done based on Subjective and Objective parameters. The subjective Parameters taken into consideration are *Peetanetrata* (Yellowish discoloration of eyes), *Peetamutrata* (Yellowish discoloration of Urine), *Daha* (Burning sensation), *Twak peetata* (Yellowish discoloration of skin), *Avipaka* (Indigestion), *Udarashoola* (Pain abdomen), *Aruchi* (Loss of Appetite), *Angasadana* (Generalised Weakness) [3]. The Objective Parameters assessed in this study are serum bilirubin levels, Severity of Hepatomegaly and Fibroscan based liver stiffness measurements.

CASE STUDY

Materials & Methods:

Place of Study: Out-Patient Department of *Kaya Chikitsa*, Dr BRKR Govt. Ayurvedic Medical College & Hospital, Erragadda, Hyderabad. Telangana, India.

This is a descriptive observational clinical study conducted on a diagnosed case of chronic liver disease. Detailed clinical evaluation, laboratory investigations, imaging studies including ultrasonography and Fibroscan, were analyzed.

Chief Complaints: 54 years aged Male patient, XYK visited Dr BRKR Govt. Ayurvedic Medical College & Hospital, Erragadda, Hyderabad with OPD No. 36361 and came to *Kaya Chikitsa* OPD for consultation. Patient complained of pain abdomen on/off, dull-aching in nature with decreased appetite, generalized weakness, since Dec 2024, associated with indigestion, belchings-especially at night time & constipation with an episode of 1-2times/week.

History of present illness: The patient was apparently asymptomatic 1½ years back. Gradually he noticed intermittent abdominal pain associated with a burning sensation in the chest region, which progressively increased in severity within 3-4months. Due to worsening of the symptoms, he was admitted into the hospital, where he was diagnosed with chronic liver disease with calculus cholecystitis, choledocholithiasis, and Non obstructive Right renal calculus. He subsequently underwent Endoscopic Retrograde Cholangio-pancreatography [ERCP] followed by cholecystectomy and was advised Liver transplantation in November 2023. Since January 2025, the patient had severe complaint of the above-

mentioned symptoms, on consulting Gastroenterologist he was advised for Liver Transplantation but as he was not ready for the transplantation, he visited Dr.BRKR Government Ayurvedic college & hospital for Ayurvedic management.

History of Past Illness:

Underwent Cholecystectomy in November 2023 & Right RIRS + DJ Stenting in Jan 2024.

No past H/o HTN/DM/ CAD/CVA/TB/Seizures. No other co- morbidities.

History of immunization: Immunized & Vaccinated for Covid-19

Family History: No relevant history in the family.

Medical history: The patient was managed with conservative allopathic therapy for CLD, including lactulose, diuretics, and hepatoprotective agents.

Personal History:

Table no 1- Showing personal history of patient

Name	XYK
Age/Gender	54years/Male
Marital status	Married
Occupation	Retired employee
Diet	Mixed
Addictions	Chronic Alcoholic
Micturition	Normal
Bowels	Constipated (1-2 times/week)

Nidana panchaka:

Table no-2 showing the Nidana (causative factors) of the Disease

The probable *nidana* in this patient is

<i>Aharaja nidana</i>	<i>Viharaja nidana</i>	<i>Manasika nidana</i>
Intake of spicy, salted incompatible foods, alcohol consumption (<i>kshara, tiksna, lavana, virudha-ahara</i> and <i>asatmya ahara, pinyaka</i> and <i>atimadyapana</i>)	<i>Avyayama</i> (Lack of physical exercises), <i>Divaswapna</i> (Daysleep), <i>Vegavarodha</i> (Suppression of natural urges)	<i>Chintha</i> (excessive worry), <i>Krodha</i> (Anger),

Purvaroop & Roopa: *Daha* (Burning sensation), *Avipaka*(Indigestion), *Dourbalya* (Weakness), *Angasadana* (Lassitude), *Aruchi* (Anorexia), *Udarashoola* (pain Abdomen), these lakshanas has become worsen in due course of time after the manifestation of disease.

Table no-3 Showing the Asthavidha Pariksha

<i>Nadi</i>	<i>Vata-Kaphaja</i>	<i>Shabda</i>	<i>Prakrutha</i>
<i>Mutra</i>	<i>Prakrutha</i>	<i>Sparsha</i>	<i>Anushna-sheeta</i>
<i>Mala</i>	<i>Vibandha</i>	<i>Drik</i>	<i>Prakrutha</i>
<i>Jihwa</i>	<i>Amayukta</i>	<i>Akriti</i>	<i>Madhyama</i>

Table no-4 Showing the *Dashavidha pariksha*

Prakruthi	<i>Vata-Kaphaja</i>	Satmya	<i>Sarvarasa satmya</i>
Vikruthi	<i>Pitta & Rakta</i>	Satwa	<i>Madhyama</i>
Sara	<i>Mamsa sara</i>	Aharashakthi	<i>Avara</i>
Samhanana	<i>Madhyama</i>	Vyayamashakthi	<i>Avara</i>
Pramana	Ht.: 5.7feet Wt.: 68kg	Vayah	<i>Madhyavastha (54years)</i>

General examination:

Table No. 5 showing the *Samanya Pariksha (General Examination) of the patient*

Consciousness	Conscious/Coherent/Cooperative
Built	Moderate
Nourishment	Well – Nourished
Temperature	Afebrile (98.6 ⁰ F)
Pulse rate	84 beats/minute, Regular in Rhythm, Volume, Character.
Respiratory rate	22 times/minute
Blood pressure	135/80mmHg`
Tongue	<i>Amayukta (Coated)</i>
Height	5.7 feet
Weight in Kg	68 Kg
BMI in kg/m²	22.5 Kg/m ²

Systemic Examination:

- 1. Central Nervous System:** Patient is Conscious, Coherent and Well-Oriented.
- 2. Cardio-Vascular System:** S1, S2 ++ heard. No murmurs or abnormal sounds heard.
- 3. Respiratory System:** Shape and Size of the chest is normal. BAE +.
- 4. Gastro-Intestinal System:**

Inspection	Multiple healed laproscopic port-site scars over the Right Hypochondriac and Epigastric region. Mild Diffuse distension of Abdomen present
Palpation	No Local rise of temperature, Mild tenderness present in Hypogastric region, Liver is palpable 4cm below the right costal margin, firm in consistency.
Percussion	Diffuse Distension of Abdomen.
Auscultation	Bowel sounds are absent.

- 5. Genito-Urinary System:** Normal Micturition (4-5times-Day/0-1time-Night)
- 6. Excretory System:** Constipated bowels (1-2 times/week)
- 7. Locomotor System:** Physiological gait.

Investigations:

Blood investigation revealed raised level of serum glutamic oxaloacetic transaminase (SGOT), serum glutamic pyruvic transaminase (SGPT), Serum bilirubin, etc.

Treatment given:

The *Shamana Oaushadis* prescribed for this patient along with strict *pathyapathya*

1. *Kasisadya Vati*^[4] – 500mg – 2 BID after food with lukewarm water. [Given for nearly 180days]
2. Tab. *Anuloma* -DS – 1tab at Night time after food with lukewarm water [Given for 90days]
3. Tab. *Laghusutasekara ras*^[5] – 250mg- 2BID Before food with lukewarm water [Given for 90days].
4. The patient was kept under regular follow-up at interval of 45days.

The gradings of the Subjective Parameters considered in the present case study are as follows:

Sno	Lakshana	Grade 0	Grade 1	Grade 2	Grade 3
1	<i>Peeta Netrata</i>	Absent	Slight yellowish tint visible under sunlight.	Visible yellowing especially in daylight.	Noticeable yellow sclera.
2	<i>Peeta Mutrata</i>	Light yellow (Normal)	Dark yellow/ Amber	Tea or cola colored	Brown (Dark Beer-like)
3	<i>Daha</i>	Absent	Occasional burning sensation of abdomen	Burning sensation relieved by food and water	Continuous burning sensation of abdomen.
4	<i>Twak peetata</i>	Absent	Mild with yellowish discoloration of face	Yellowish discoloration of chest, abdomen, arms and legs	Deep yellow to orange discoloration of entire body, including palms and soles.
5	<i>Ajeerna</i> (Indigestion)	Normal digestion with normal stools	Indigestion with heaviness of Abdomen	Indigestion with hard stools in 3-5 times a week.	Indigestion after every meal having hardstools in 2 times a week
6	<i>Udarashoola</i>	Absent	Mild (Do not disturb routine activities relieves with rest)	Moderate (Disturbs routine activities)	Severe (Disturbs routine activities, does not relieve with rest, but relieves with medication)
7	<i>Aruci</i>	Normal desire for food	Eating timely without much desire	Desire for food, only after long interval of time.	No desire for food at all.
8	<i>Angasadana</i>	No weakness	Weakness not disturbing the daily routine work	Weakness disturbing the daily routine work	Weakness requiring complete bed rest.

The objective parameters taken into consideration are

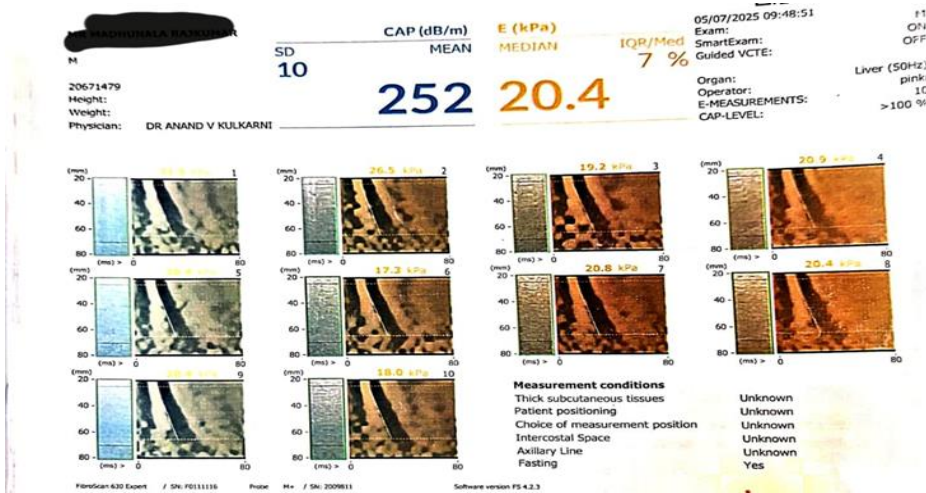
SNO	LAKSHANA	GRADE 0	GRADE 1	GRADE 2	GRADE 3
1.	Bilirubin	Total bilirubin <1.2mg/dl	Total bilirubin <2mg/dl	Total bilirubin 2-3mg/dl	Total bilirubin >3mg/dl.
2.	<i>Yakrit vrididi</i> (Hepatomegaly)	Absent	Mild <4cms below the right subcostal margin.	Moderate 5-7cms below the right subcostal margin.	Severe >7cms below the right subcostal margin.
3	Fibroscan	2kpa-7kpa [Normal or Minimal scarring]	7kpa- 9.5kpa [Moderate scarring]	9.5kpa-12.5kpa [Severe scarring]	>12.5kpa [Advanced scarring/ Cirrhosis]

OBSERVATION & RESULTS

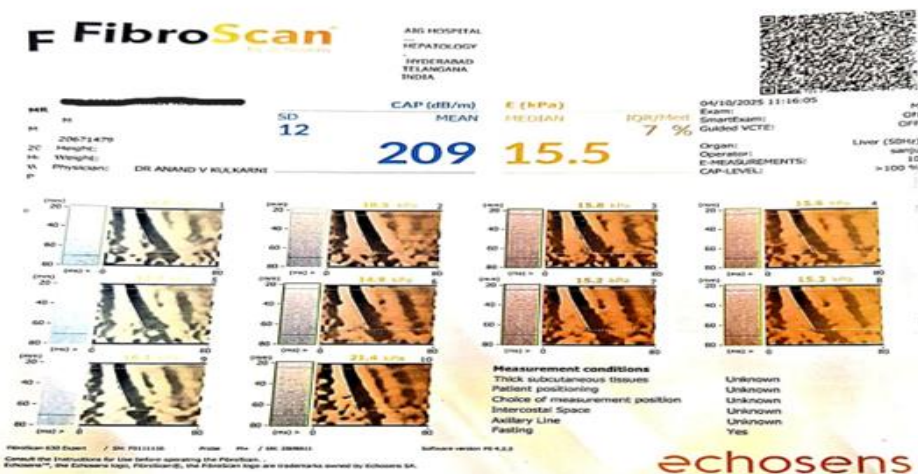
	17-04-2025 (Before)	04-07-2025 (After)	3-10-2025 (followup)
Sodium	138mEq/L	142mmol/L	135.0mEq/L
Potassium	3.6mEq/L	4.1mmol/L	3.9mEq/L
Chloride	100.4mEq/L	106mmol/L	97.9mEq/L
Urea	10.27mg/dL	13.93mg/dl	15mg/dL
Uric acid	4mg/dL	4.9mg/dL	5.9mg/dL
S.Creatinine	1.22mg/dL	0.95mg/dl	1.0mg/dL
HbA1c	6.1%	-	6.3%
T.Bilirubin	1.4mg/dL	1.2mg/dl	0.9mg/dl
Direct bilirubin	1.1mg/dl	0.7mg/dl	0.6mg/dl
Indirect bilirubin	0.3mg/dl	0.5mg/dl	0.3mg/dl
ALP	129U/L	105U/L	80 U/L
ALT/SGPT	35.6U/L	37U/L	35 U/L
AST/SGOT	64.6U/L	57U/L	33 U/L
Total protein	6.8 g/dl	6.2g/dl	7 g/dl
S.Albumin	4.7 g/dl	4.7g/dl	4.7g/dl
Haemoglobin	14.6g/dl	13gm/dl	14g/dl
RBC	4.26 mil/cumm	4.0mil/cumm	5.2mil/cumm
Platelet count	150000cells/cumm	136000cells/cumm	148000cells/cumm
CUE	-	-	Normal study
Fibroscan	28.9kpa	20.4kpa	15.5kpa
Ultrasound abdomen (11/4/2025)	Liver normal in size with coarse parenchymal echo texture is noted with irregular surfaces s/o Chronic liver parenchymal disease	Liver normal in size with coarse parenchymal echo texture is noted with irregular surfaces s/o Chronic liver parenchymal disease	Liver normal in size with coarse parenchymal echo texture is noted with irregular surfaces s/o Chronic liver parenchymal disease



Pre-study fibroscan findings



During the study
[4-7-2025]



Follow-up [4-10-2025]

Grades of the subjective and objective parameters before and after treatment.

Sno	Clinical feature	Before treatment	After treatment
1.	Total. Bilirubin	Grade 1	Grade 0
2.	<i>Yakrutvridi</i>	Grade 1	Grade 1
3.	Fibroscan	Grade 3	Grade 3
4.	<i>Peeta netrata</i>	Grade 0	Grade 0
5.	<i>Peeta mutrata</i>	Grade 0	Grade 0
6.	<i>Daha</i>	Grade 0	Grade 0
7.	<i>Twak peetata</i>	Grade 0	Grade 0
8.	<i>Avipaka</i>	Grade 3	Grade 0
9.	<i>Udarashoola</i>	Grade 1	Grade 0
10.	<i>Aruchi</i>	Grade 3	Grade 0
11.	<i>Angasadana</i>	Grade 3	Grade 0

Discussion

Kumbhakamala is primarily a *Pittaja nanatmaja Vyadhi*, *Raktapradoshaja vyadhi* with associated vitiation of *Kapha*. The *Yakrut*(liver) is identified as the root of the *Raktavaha Srotas* and the principal site of *Ranjaka Pitta*, which transforms plasma (*Rasa*) into blood (*Rakta*). When the normal function of *Yakrut* is compromised, it results in improper *Rakta* formation, accumulation of *Pitta* in the blood and tissues, and manifestation of systemic symptoms to those observed in Chronic Liver Disease.

Mode of action of drug

Kasisadya Vati is a classical Ayurvedic formulation containing *Kasisa Bhasma*, *Hingu*, and *Revand Chini* (Rheum emodi) and *Lasuna swarasa* as *Bhavana* dravya. These ingredients act synergistically to correct the *Samprapti* at multiple levels. The formulation facilitates *Sroto-shodhana* and *Lekhana*, relieving *Kapha*-mediated obstruction in *Yakrut* and *Raktavaha srotas*. *Kasisa* contributes to the normalization of *Rakta dhatu* and supports hepatic metabolic functions. *Hingu*, *Revandacini*, and *Lasuna* promote *Pacana* and provide *Sula-prasamana* effects. Collectively, these actions help in the regulation of *Pitta–Rakta dushti*

Anuloma DS contains *Trivrt* (*Operculina turpethum*), *Haritaki* (*Terminalia chebula*), *Aragvadha* (*Cassia fistula*), *Eranda taila / Eranda mula* (*Ricinus communis*), *Trikatu* (*Sunthi*, *Maricha*, *Pippali*) promotes *Vatanulomana* by regulating the downward movement of *Apana Vata*, thereby facilitating smooth bowel evacuation. It exhibits mild *Rechana* and *Bhedana* actions, relieving *Vibandha* without causing excessive purgation. The formulation enhances *Agni*, reduces *Ama* accumulation, and alleviates *Anaha* and *Adhmana*.

Laghusutasekara ras contains *Shudda gairika*(Red Ochre / Hematite), *Shunti* (*Zingiber officinale*), *bhavana* with *Nagavalli swarasa*(Betel leaf) acts primarily by pacifying aggravated *Pitta* in the *Annavaha srotas* through its *Pittashamaka* and *Shita-prabhava* properties. *Shuddha Gairika* neutralizes excessive *Amlata* and alleviates *Daha* and *Hrd-daha*. *Sunthi* supports *Agni* regulation without provoking *Pitta*.

Conclusion

The present case study demonstrates that a systematically planned Ayurvedic therapeutic regimen can play a meaningful role in the clinical management of *Kumbhakamala* w.s.r. to Chronic Liver Disease (CLD).

The patient, who had previously been advised liver transplantation and was unwilling to undergo the procedure, showed significant clinical, biochemical and elastographic improvement following Ayurvedic intervention.

Subjectively, there was marked relief in cardinal features of *Kumbhakamala* such as *Udarashoola*, *Aruchi*, *Avipaka*, *Angasadana* and *Vibandha*, indicating improvement in *Agni*, *Annavaha srotas* function and overall quality of life. Objectively, laboratory parameters reflected normalization of liver function, with a reduction in total and direct bilirubin, significant decline in AST (SGOT) levels, improvement in ALP and maintenance of serum albumin and total protein, suggesting preserved synthetic function of the liver. Renal parameters and electrolytes remained stable throughout the course of treatment, indicating safety of the administered formulations.

Most notably, the Fibroscan value reduced from 28.9 kPa to 15.5 kPa, which signifies a substantial decrease in liver stiffness. This objective finding supports the Ayurvedic concept of *Sroto-sodhana*, *Lekhana* and *Pitta–Rakta prasadana*, reflecting partial reversal of *Srotorodha* and functional improvement of the liver. Although ultrasonographic findings continued to show coarse hepatic echotexture, the reduction in stiffness suggests improvement at a functional and microstructural level, which may precede morphological changes detectable on imaging.

From an Ayurvedic standpoint, the observed benefits can be attributed to the *Pittashamana*, *Raktashodhana*, *Agni-deepana*, *Ama-pachana* and *Vatanulomana* actions of the administered formulations—*Kasisadya Vati*, *Laghusutasekara Rasa*, and *Anuloma DS*. These drugs collectively addressed the underlying *Pitta–Rakta dushti* with *Kapha avarana*, which forms the core *samprapti* of *Kumbhakamala*.

In conclusion, this case provides preliminary evidence that Ayurvedic management may contribute to functional recovery and reduction of hepatic stiffness in CLD, even in advanced cases where conventional medicine suggests transplantation. While the findings are encouraging, they are limited by the single-case design. Larger controlled clinical studies with long-term follow-up are warranted to validate these observations and to establish standardized Ayurvedic protocols for the management of *Kumbhakamala* and Chronic Liver Disease.

References

1. (1/22/34 Atharvana Veda).
2. Dr. Ram Karan Sharma, Vaidya Bhagwan Dash; Panduroga adhyaya. Agnivesha Charaka samhitha; Choukhambha Sanskrit series office; Varanasi; Edition Reprint (2016). Chikitsa sthana, Volume 4, Sloka 36, p.95
3. Dr. Ram Karan Sharma, Vaidya Bhagwan Dash; Panduroga adhyaya. Agnivesha Charaka samhitha; Choukhambha Sanskrit series office; Varanasi; Edition Reprint (2016). Chikitsa sthana, Volume 4, Sloka 34, p.95
4. Rasatantra sara va siddha prayoga Sangraha, Dwitiya khanda, by Takur Nathusigh ji; Krishna Gopalaayurveda Bhavan, Parvatapura Ajmer; Rajasthan; 2020 p.194
5. Rasatantra sara va siddha prayoga Sangraha, Dwitiya khanda, by Takur Nathusigh ji; Krishna Gopalaayurveda Bhavan, Parvatapura Ajmer; Rajasthan; 2020 kharaliya rasayana prakarana.134.