



A CASE REPORT ON THE MANAGEMENT OF RUDDAPATHA KAMALA - OBSTRUCTIVE JAUNDICE

*¹Dr. Mallethwar Rao and ²Dr. Madhava Diggavi

¹Final Year Kayachikitsa PG Scholar, Taranath Government Ayurvedic Medical College and Hospital, Ballari.

²Professor, Guide and Hod Dept of PG Studies in Kayachikitsa, Taranath Government Ayurvedic Medical College and Hospital, Ballari.

Corresponding Author: Dr. Mallethwar Rao

Final Year Kayachikitsa PG Scholar, Taranath Government Ayurvedic Medical College and Hospital, Ballari.

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ABSTRACT

Jaundice(kamala) is yellowish pigmentation of the skin, the conjunctival membranes over the sclera (yellow of eyes), and other mucous membranes caused by hyperbilirubinemia (increased levels of bilirubin in the blood). Today's life style with unhygienic and poor dietary habits and alcoholic habits etc. which responsible factors to promote hepatic damage which clinically reflects as kamala roga. The effect of ayurvedic treatment was assessed in relation to improvement in over all clinical signs and symptoms and biochemical investigations on the basis of grading and scoring system.

KEYWORDS: Ruddapatha kamala, obstructive jaundice, Liver disorders, Shamanoushadi

INTRODUCTION

Ayurveda is the oldest system of medicine and philosophy of the life. The aim of this science is to protect the human being from various diseases which occur by not following the Swasthavrittha. In human beings Rakta Dhatu is given utmost importance as the diseases pertaining to Rakta is more in incidence. Kamala is such a disease where in the Raktadhatu is vitiated primarily by Pitta Dosh.^[1] If the patient suffering from Pandu indulges in Pittala Ahara-vihara (diet and regimens), the Pitta aggravates and burns the Rakta and Mamsadhatu to cause the disease Kamala. Mainly Ranjaka Pitta Vikruti is mentioned in Kamala etiopathogenesis.^[2] Eyes, skin, nails and face of the patient become exceedingly yellow. Stool and urine become red or yellow in colour. Patient develops complexion like that of frog (Bheka Varna). Senses gets impaired, patient gets emaciated and gets afflicted with burning sensation, indigestion, weakness and anorexia.^[3] Two types of Kamala are mentioned on the basis of pathogenesis and clinical presentations, Koshtashakhasrita and Shakhasrita Kamala (Ruddapatha kamala). Koshtashakhasrita Kamala is a common disorder seen in urban as well as rural areas with poor hygiene and sanitation. Individual who indulge in Nidana Sevana as indicated under Ruddapatha Kamala become victims of the diseases. Ayurvedic literatures have wealth of resource information regarding the treatment of Kamala and preventing its complications. By considering all

these factors the study is aimed at understanding the disease; bearing in mind, the etiological factors, its Samprapti, role of different present day investigations in evaluating the disease Kamala.

Obstructive Jaundice^[4] is due to obstruction of bile flow, its cause may lie anywhere between the hepatocyte and the duodenum. Jaundice becomes progressively severe in unrelieved cholestasis, because conjugated bilirubin is unable to enter the bile canaliculi and passes back in to blood, also because there is a failure of clearance of unconjugated bilirubin arriving at the liver cells. Cholestasis may be due to failure of hepatocytes to generate bile flow, to obstruction of bile flow in the bile ducts in the portal tracts, or to obstruction of bile flow in the extra hepatic bile ducts between porta hepatis and the papilla of Vater. Cause of cholestasis can operate at more than one of these levels. Those confined to the extra hepatic bile ducts may be amenable to surgical correction. In Ayurveda, we may find a ray of light as it is having unique approach to understand the disease. Further in case of management also it is having unique way to treat the suffering not only by means of palliative treatments, but also by means of purification procedures to treat and check the root cause of the disease and minimize the recurrence of the same. Considering the grave nature of the disease though it does not reduce the life expectancy, it has been selected for the present study to find out a better cure. As virechana is the purification its better useful in the

jaundice as said by Acharyas. In present study after deepana pachana oushadi, Snehapana, virechana, Shamanoushadi should be given in this condition.

CASE REPORT

A 60 years old female patient visited Pandith Taranath Government Ayurvedic medical college and Hospital Ballari on 16/02/2021 with complaints of Aruchi, Hrullasa, Agnimandya, Jwara, Alpanidrata, Peetamutrata, Peeta netrata, Peeta twak, Shoka, Bhaya, Kroda etc.

HISTORY OF ILLNESS

Patient apparently normal before 10 days, gradually develops Aruchi, Hrullasa, Agnimandya, Jwara. The patient was taken allopathic medication patient did not get satisfactory relief and came to Pandith Taranath Government Ayurvedic medical college and Hospital Ballari on 16/02/2022 on IPD treatment started. Reg no-COPD no:1841, Dept. OP NO: 530.

Past history

H/o Type2 Diabetes mellitus since 3 years on Modern medicine.

No H/o of Hypertension/Thyroid dysfunction/surgical history.

Personal history

No personal history

General Examination: Built: Moderate, Height: 5'4'', Weight: 55kg, Nourishment: Moderate, Pulse: 78/min, Blood Pressure: 130/80, Temperature: 98.6F, Respiratory rate: 16/min, Pallor/Icterus-Present.

Systemic Examination

- 1) CNS: Well oriented, conscious.
- 2)CVS: S1 S2 Normal, No added sounds.
- 3)RS: Normal vascular breathing sounds.
- 4)P/A:

Inspection: Shape :- slightly scaphoid Symmetrical in shape, Scars :- No scars at abdomen, Umbilicus :- Inverted, Discharge:- No discharge.

Palpation: Tenderness:- Tenderness at right hypochondriac region and at the umbilical region. Enlargement of Organs: No enlargement of organs.

Percussion: Resonant: present, Shifting dullness – absent.

Auscultation: Fluid thrill test – Negative , Bowel movements: Present.

Asthavidha pareeksha - Nadi: 78/min, Mutra: 5-7 times a day, 1-2 times/night, Mala: 2/day, Jiwha: Alpalipta, Shabda: Prakruta, Sparsha: Anushana sheeta, Druk: Prakruta, Akriti: Madhyama

MATERIALS AND METHODS

Intervention

a) **Table No. 1:** Deepana Pachana with Trikatu churna^[5]- 6gm bd B/F with lukewarm water for 3days.

Day	Date	Observations
01	17/02/2022	Deepana ,Hrullasa reduced
02	18/02/2022	Deepana, Pachana.
03	19/02/2022	Agnideepti, amapachana

Table No. 2: Snehapana With Pippali Gritha^[6]

DAY	GRITHA IN ML
1(20/02/22)	40ml (T.D)
2(21/02/22)	100ml
3(22/02/22)	100ml
4(23/02/22)	100ml

Table No. 3: Assessment of Samyak Snigdha lakshana.

Sl.no	Samyak Snigdha lakshana	Day-1	Day-2	Day-3	Day-4
01	Agnideepti			+	+
02	Snehadwasha				+
03	Angalaghavata				+
04	Gatramriduta				+
05	Purishasnigdhatata				+
06	Twaksnigdhatata				+
07	Vatanulomana			+	+
08	Adhastath Snehadarshana				
09	Klama			+	+

10	Angashaitilya			+	+
11	Ghani				+
12	AsamhataVarchas			+	+

Vishrama Kala: -Sarvanga Abhyanga and Bashpasweda with Moorchita tilaitaila for X 3 days,

Table No. 4: Samyak Sweda Lakshnas.

Lakshanas	Day 1	Day-2	Day-3
Sheetoparama			+
Shuloparama			+
Gauravanigraha			+
Mardava(Mriduta)			
Sweda Pradurbhaava			+
Roga Lakshanaprashamana		+	+
Sheetaartitvam			

Virechana

Trivriith lehya - 40 gms

Date: - 27/02/2022

Number of Vega's: - 8

Assessment of Shodhana Karma

Table No. 5: Samyak Virechanayoga Lakshana.

Srotovishuddi	+
Indriya prasada	+
Laghuta	+
Agnivruddi	+
Anamayatvam	+
Kramat Vit Pitta Kaphagamana	
Vatanulomana	+
Absence of Atiyoga	+

SHAMANOUSHADI

1) KAMALANTHAKA LOHAM^[7] 250mg BD B/F WITH MADHU FOR 30 DAYS.

Table No. 6: Subjective Parameters.

Sl. No.	Assessment Criteria	Follow Up In Days			
		Score	Bt	After Shodhana	A.T
1. Peeta Netrata		0			+
		1			
		2		+	
		3	+		
2. Peeta Mootrata		0			+
		1		+	
		2			
		3	+		
3. Peeta Twak		0			+
		1		+	
		2	+		
		3			
4. Dourbalya		0			+
		1			
		2		+	
		3	+		

5. Aruchi	0			+
	1		+	
	2			
	3	+		
6.Parswashoola	0		+	+
	1	+		
	2			
	3			
7. Jwara	0		+	+
	1	+		
	2			
	3			
8.Tila Pistanibha Varchas	0			+
	1		+	
	2	+		
	3			
9. Pandu	0		+	+
	1	+		
	2			
	3			
10. Atopa	0			+
	1		+	
	2	+		
	3			

Table No. 7: Objective Parameters.

Sl No	Assesment Criteria	Bt	After Shodhana	At
1	Hb%	10.4%	11.1%	15.7%
2	Lft Total Billirubin	10.1 mg/dl	6.8 mg/dl	1.26 mg/dl
3	Direct Billirubin	5.2 mg/dl	2.5 mg/dl	0.3 mg/dl
4	Indirect Billirubin	4.9 mg/dl	4.3 mg/dl	0.96 mg/dl
5	SGOT	327.1 Iu/L	135 Iu/L	23.7 Iu/L
6	SGPT	150 Iu/L	297 Iu/L	27.3 Iu/L
7	Alk Phosphate	190.1 Iu/L	166 Iu/L	81 Iu/L
8	Total Protein	6.7 G/Dl	7.5 G/Dl	7.1 G/Dl
9	Serum Albumin	3.4 G/Dl	4.1 G/Dl	3.89 G/Dl
10	Serum Globulin	3.3 G/Dl	3.4 G/Dl	3.0 G/Dl
11	Urine Bile Salts	+Ve	+Ve	-Ve
12	Urine Pigments	+Ve	+Ve	-Ve

USG changes

Before treatment: 1) Minimal free fluid in pelvis 2) ² Due to viral infection.

After treatment: No significant abnormality detected.

BEFORE TREATMENT

INVESTIGATIONS	OBSERVED VALUE	REFERENCE VALUE
BIO-CHEMISTRY TESTS		
Liver Function Tests		
S.Bilirubin Total;	10.1mg/dl	0.1-1.2mg/dl
Bilirubin Direct ;	5.2mg/dl	0.0-0.4mg/dl
Bilirubin Indirect;	4.9mg/dl	0.1-0.6mg/dl
SGOT ;	327.1IU/L	10-50 IU/L
SGPT ;	150.6IU/L	10-40U/L
Alkaline Phosphatase;	190.1IU/L	20-130 U/L
S.Protein ;	6.7g/dl	6.0-8.0g/dl
S.Albumin ;	3.4g/dl	3.2-4.5 g/dl
S.Globulin ;	3.3g/dl	2.0-3.5g/dl
A/G Ratio ;	1.0	6.0-8.0
Urine Test ; Bile salts ; Present		
Bilepigments ; Present		

Signature

ULTRASOUND OF ABDOMEN

LIVER: Normal in size and normal in echotexture. No e/o focal mass lesion is seen. Intrahepatic biliary radicles are not dilated. Portal vein and CBD are normal.

GALL BLADDER: Well distended. Wall is normal. No e/o calculi / cholecystitis.

SPLEEN: Normal in size and normal in echotexture. No focal lesion is seen. Splenic vein is normal.

PANCREAS: Normal in size and normal in echotexture. No e/o mass lesion / calcification. Pancreatic duct is not dilated.

KIDNEYS: Both the kidneys are normal in size and echotexture. No e/o hydronephrosis / calculi.
Rt. Kidney: measures: 96 * 44 * 12mm.
Lt. Kidney: measures: 98 * 43 * 13mm.

URINARY BLADDER: Well filled. Wall is normal. No e/o calculi / growth. No e/o significant residual urine.

UTERUS: Anteverted, measures: 64 * 32 * 39mm. Myometrial echotexture is normal. No e/o focal mass seen. Endometrium is normal.

OVARIES: Not visualized.

No e/o lymphadenopathy.
E/o minimal free fluid in pelvis.

RIF: Normal. No obvious e/o thickened appendix.

IMPRESSION: - Minimal free fluid in pelvis
? Due to viral infection

Sug: Clinico biochemical correlation.

DR. GOVIND REDDY, M.D. CONSULTANT RADIOLOGIST
DR. ANITHA REDDY CONSULTANT RADIOLOGIST
DR. SHANBU CONSULTANT RADIOLOGIST

DURING TREATMENT

Investigation	Findings	Unit	Reference Value
URINE FOR BILE SALT & BILE PIGMENT (Biochemistry)			
Bile Salts	Positive		Negative
Bile Pigments	Positive		Negative
RANDOM BLOOD GLUCOSE (RBS) (Biochemistry)			
Random Blood Glucose (RBS)	297	mg/dL	Upto 200
LIVER FUNCTION TEST (LFT) (Biochemistry)			
Total Bilirubin	6.8	mg/dl	0 - 1.0
Direct Bilirubin	2.5	mg/dl	0 - 0.2
Indirect Bilirubin	4.3	mg/dl	0 - 0.8
SGOT (ASPARTATE AMINOTRANSFERASE (AST))	135	U/L	< 37
SGPT (ALANINE AMINOTRANSFERASE(ALT))	297	U/L	< 41
Alkaline Phosphatase (SAP)	166	U/L	53 - 128
Total Protein	7.5	g/dl	6 - 8
Serum Albumin	4.1	g/dl	3.5 - 5.2
Serum Globulin	3.4	g/dL	2 - 3.5
A/G Ratio	1.2		

Lab Head

23, 2nd Cross, Above Clarity Diagnostics, Gandhi Nagar, Ballari - 583 103.
www.prime-labs.in | e-mail : prime@labsballary@gmail.com

ULTRASOUND - ABDOMEN & PELVIS

LIVER - Liver is normal in size 11.5 cm. Shows normal echo-texture. No focal lesion noted. Main portal vein and its branches appear normal. There is no intrahepatic biliary dilatation seen. CBD is not dilated (it measures: 5mm)

GALL BLADDER -Is well distended. No obvious calculus / wall thickening / pericholecystic fluid.

PANCREAS -Head and body is normal. Tail is obscured. Main pancreatic duct is of normal caliber. There is no evidence of parenchymal or ductal calcification seen.

SPLEEN - Normal in size 9.8 cm and echotexture. No focal lesion seen.

RIGHT KIDNEY -measures 10.0 x 5.0 cm. Normal in size and echotexture. Cortico medullary differentiation is maintained. There is no evidence of mass lesion / hyperechoic calculus seen. PCS is normal. Right ureter is not dilated.

LEFT KIDNEY -measures 9.7 x 5.7 cm. Normal in size and echotexture. Cortico medullary differentiation is maintained. There is no evidence of mass lesion / hyperechoic calculus seen. PCS is normal. Left ureter is not dilated.

PARA AORTIC AREA -Is normal.

BOWELS -No abnormal dilated bowel loop seen. Appendix could not be imaged. No e/o free fluid.

URINARY BLADDER -Is partially distended and lumen is anechoic.

UTERUS - obscured

IMPRESSION:
➤ No significant abnormality detected.

Dr. Mallikarjun MD MBBS., MD. Fellowship in body imaging (K.E.M. Hospital, Mumbai)
Breast Imaging (Cochin)
Non-Vascular Intervention Radiologist

Dr. Rakesh K. B. MBBS., DNB. Breach Candy Hospital, Mumbai
Specialist in Cross Sectional Imaging
Non-Vascular Intervention Radiologist

Dr. Rajesh MBBS., MD Fellowship in AIIMS
Special in Neuro Radiology
Intervention Radiologist

Plot No.23, Ward No.26, 2nd Cross Gandhi Nagar, Near Post Office, Ballari - 583103 - Karnataka

AFTER TREATMENT

Blood:	REPORT	Ref Range
Hb	15.7	gm/dl F-12-14 M-14-18
T.C.	6,900	cells/cumm 4000-11000
D.C.	P-55	% 40-75
	L-40	% 20-45
	E-02	% 0-6
	M-03	% 0-6
Platelet count	3,12,000/	cumm 1.5-4.5
Sr.Bilirubin	Total 1.26	mg/dl 0.2-1.2
Direct	0.3	mg/dl 0.0-0.3
Sr.SGOT	23.7	Iu/Lt 0-34
Sr.SGPT	27.3	Iu/Lt 0-40
Sr.Alk.Phosphatase	81.5	Iu/Lt 16-119
Sr.Proteins	Total 7.1	gm/dl 6.0-8.5
Albumin	3.89	gm/dl 3.5-5.2
P.T		
Control	13.0	Sec
Test	13.0	Sec
INR	1.0	
Urine		
Bile salts	Absent	
Bile pigments	Absent	

Lab Incharge

RESULT AND DISCUSSION

In Ayurveda, our ancient acharya's mentioned Agnimandya and pitta dosha is main samprapti ghataka's for Kamala and the etiological factors also states that excess intake of Katu, Amla, Lavana ahara, Vitiates jatargni leading to hypo functioning of jatargni in turn leads to production of Ama (Amavisha) which vitiates Rakta and produces kamala. Kamala is basically a pitta pradoshaja vyadhi. Deepana pachana with Trikatu churna is a purely herbal formulation containing 3 drugs such as Pippali, Shunti, Maricha administered to patient at a dose of 6gms in empty stomach morning and night with warm water as anupana for 3-4 days. This yoga is explained for deepana, amapachana as a purvakarma to virechana. Trikatu is useful in improving digestive fire and promotes the proper breakdown of food. It stimulates the secretion of digestive juices which increase appetite and also regulate the formation of hydrochloric acid which further help to prevent gaseous distension. It is beneficial to patients suffering from diarrhoea, cramps, bloating or gas associated with mucus in stool having sticky stools. It also acts as a natural anti-histamine, preventing any infection and inflammation of the gastric mucosa. It

provides protection against allergic reaction. It enhances body warmth and decrease body pains, heaviness, fatigue, restlessness etc. In Trikatu churna 100% katu rasa pradhana dravyas. 66.66% of drugs are having Laghu guna and remaining 33.33% drugs are having snigdha guna. 66.66% are Ushna virya pradhana and remaining 33.33% are Sheeta virya. 100% drugs are having Madhura vipaka. Pippali churna has 33.33% drugs which are kaphapiitavatagna, 33.33% drugs are KaphaVataghna and 33.33% are Vatakaphaghna. Overall Trikatu churna tridosha shamaka by combined action of rasa, guna, virya and vipaka. It also acts towards the symptoms of Ruddapatha Kamala as mentioned above like peeta netrata, Peeta mutrata, Peeta twak, Dourbalya, Aruchi, Parsvasoola, Jwara, Tilapistanihavarchas, Pandu, Atopa. Snehapana with Pippali gritha having 3 ingredients among them 3 ingredients 66.66% are Madhura rasa pradhana and 33.33% katu rasa pradhana 90% of drugs are having snigdha guna and remaining 10% drugs are having Guru mrudhuguna. 66.66% are Sheeta virya pradhana and 33.33% are usnavirya 100% drugs are having Madhura. Pippal ighrita has 33.33% drugs which are tridosahara, 33.33% drugs are Pittasamaka and 33.33% are Vata Pitta hara. Overall pippali gritha

tridosha shamaka by combined action of rasa, guna, virya and vipaka. The Vipaka of the pippali and ghrita is madhura is Pitta shamaka in nature. Here there is combination of laghu or guru, Ruksha or snigdha, sheeta and ushna gunas. The laghu and Ruksha properties of Pippali perform the function of shoshana. Pippali gritha acts as the Yakrutpleeha hara. In Kamalanthakaloham among 26, 57.69% of dravyas are Tikta rasa pradhana, 53.84% of dravyas are Katu rasa Pradhana, 38.46% of dravyas are Kashaya rasa pradhana, 26.92% of dravyas are Madhura rasa pradhana, 7.69% of dravyas are Amla rasa pradhana. 69.23% of dravyas are Laghu guna, 65.38% of dravyas are Ruksha guna, 15.38% of dravyas are Teekshna guna, 7.69% of dravyas are Sheeta guna, 3.84% of dravyas are Ushna guna, 7.69% of dravyas are Snigdha guna, 11.53% of dravyas are Guru guna, 3.84% of dravyas are Sara guna. 69.23% of dravyas are Ushna virya, 30.76% of dravyas are Sheeta virya. 65.38% of dravyas are katu vipaka, 34.61% of dravyas are Madhura vipaka. 38.46% of dravyas are KaphaVataghna 34.61% of dravyas are Kapha Pittaghna, 23.07% of dravyas are Tridoshaghna, 3.84% of dravyas are kevala Kaphaghna. Kamalanthakaloham is the one of the khalviya preparation. Overall Kamalanthakaloham is Tridoshashamaka by combined action of Rasa, Guna, Virya and Vipaka. All the drugs which are used in the formulations have some similar qualities with respect to their Rasa, Guna, Virya and Vipaka. Major drugs are having tikta rasa pradhana which having deepana, pachana, raktaprasadhana, lekhaana karma, jwaragna properties. Tikta Rasa facilitates the normal function of Yakrit. Katu rasa having mainly deepana, pachana, Krimi hara, lekhaana, kaphahara properties. Kashaya rasa having mainly ropana, stambhana, kaphapittanasaka properties. All the drugs which are used in the formulations have a property which seems to have significant role in reducing Pitta. These drugs have Pitta Rechana, Raktashodhana, Yakrit Uttejaka, sarvamehaharam, jwaragnam, hrudiyam, shothagnam, rasayana properties.

CONCLUSION

In the above patient there was marked reduction of symptoms of Ruddapatha kamala and laboratorial investigations post ayurvedic management showed negative result in jaundice. From the above discussion we have concluded that ayurvedic line of management i.e deepana pachana with Trikatu churna, virechana therapy followed by shamana chikitsa is successful in the management of kamala with no unwanted side effects of the therapy during treatment and during follow up.

Declaration of patient consent

The author certifies that certificates they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his imagers, reports and other clinical information to be reported in the journal.

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