

STUDY OF HERBOMINERAL THERAPY EFFECT IN THE CASES OF KAMALA (JAUNDICE)

S.K. Singh¹, Ramji Singh², O.P. Singh³ and U.S. Singh⁴

(Received on 31-3-2005)

Kamala (Jaundice) is a clinical term indicating yellow discolouration of the skin, sclera and mucus membrane due to increase in circulating bilirubin. Apart from viral, other causes of jaundice are Bacterial, Drug induced, Alcoholic, Tumour, Congenital etc. In Ayurvedic texts different causes and their treatment are mentioned. On that basis many drugs like Punarnava mandoor, Navayas lauha, Phalatrikadi kwath, Bhumyamalki, Katuki, Guduchi, Kalmegha churna and their other formulations have been evaluated and results are encouraging. In the present study Punarnava mandoor along with Arogyavardhini vati have been evaluated in 37 patients and the results are analysed.

Introduction

Kamala (Jaundice) is a commonly occurring disease entity in the form of Viral Hepatitis and other infections of Liver and Gall bladder, if lately diagnosed and remained untreated for longer time it leads to severe complication like Cirrhosis, Ascites etc.

In Ayurvedic medicine it has been stated that if the patients suffering from Pandu takes food substances aggravating Pitta in the body leads to vitiated Pittas, Rakta, and Mansadhatu, causes Kamala. It is presented in the form of yellowish discolouration of eyes, nails, skin, mucus membrane, buccal cavity etc.

Patient passes yellow coloured urine and stool along with indigestion, anorexia lassitude, fatigue etc.

Materials and Methods Selection of the patients

The study was conducted at O.P.D. level at Central Research Institute (Ay.) Lucknow, between the period 2001-2002 to 2003-2004 on 37 patients of Kamala (Jaundice).

Criteria For Selection

Patients of either sex in the age range of 12 to 60 years having increased serum bilirubin and subjective changes like loss of appetite, yellowish discolouration of conjunctiva, nails, skin etc. were selected for trial. The chronicity between 1 month to 3 months only was considered for the trial.

1,2 & 3 Research Officer (Ay.) CRI (Ay.) Lucknow, 4. Research Officer (Ay.), In-charge CRI (Ay.) Lucknow.

Inclusion Criteria

1. patients between 12 years to 60 years were taken for the study.
2. patients having serum bilirubin 1mg. to 20mgs were taken for the trial.

Exclusion Criteria

1. Patients less than 12 years and more than 60 years excluded from the study.
2. Patients suffering from Hepatorenal Syndrome, Diabetes and cirrhosis with ascites were excluded.

Criteria for Establishment of Diagnosis, Ceriteria for Assessment

Subjective changes like appetite, abdominal pain etc. and objective change like yellowish discolouration of eyes, nails etc. were noted initially after each week and at the end of the treatment. The patients were also subjected to routine and microscopic test of Stool, Urine and Blood for Sugar, Urea Serum Bilirubin, S.protein A.G. ratio, SGOT, SGPT, Alkaline phosphatase along with TC,DC,Hb and ESR.

Classification of Results

- i. Good response - 75% to complete normalcy of clinical features.

- ii. Fair response - 50% to 74% relief in presenting clinical features.
- iii. Poor response - 25% to 49% relief in presenting clinical features.
- iv No response - Less than 25% or no change in clinical features.
- v. Drop out - Discontinuation before completion of the course.

Principal Drug, Dose Schedule, Vechicle, Diet and Duration of Treatment

Punarnava Mandoor 500mg. along with *Arogyavardhini Vati* 1gm, three times a day. Duration of the treatment was 21days along with fat free and rich Carbohydrate diet.

Source of Supply of drug

Supplied by the council

Observations and Results

As for as age and sex is concerned in the present study the patients were taken for trial between the age group 12 to 60 years, while maximum 23 patients were observed in 21-40 years age group. Males

were more i.e. 23 in comparison to females i.e. 14 (Table 1)

Table 1
Showing Age and Sex
in the patients of Kamala

Age Group (in Years)	Sex		Total
	M	F	
12-20	4	3	7
21-40	15	08	23
41-50	4	3	7
Total	23	14	37

Maximum 17 patients approached for treatment having chronicity >1 to 3 months followed by 11 patients suffering since >3 months while only 9 patients were suffering since <1 months. (Table 2)

Table 2
Showing the
Duration of Disease

Duration (in months)	No. of patients
Up to 1 month	09
> 1-3 months	17
> 3 months	11
Total	37

As for as occupation of the patients are concerned, maximum 12 are housewives followed by 11 servicemen while farmers are 04, and students 02. (Table 3)

Table 3
Showing Occupation
of the Kamala Patients

Occupation	No. of patients
Businessmen	05

Farmers	04
Servicemen	11
Students	02
House wives	12
Labourer	03
Total	37

The incidence of the disease doesn't seem to be related with high educational status as the highest number of patients were illiterate i.e. 18 and graduates and technicals were almost minimum i.e. 05 and 04 respectively while only 03 patients were educated up to middle class. (Table 4)

Table 4
Showing Educational
Status of Kamala Patients

Educational Status	No. of patients
Illiterate	18
Up to middle	03
Up to Intermediate	07
Graduate on wards	05
Technical	04
Total	37

As regard to *prakriti*, *vata*pittaj patients were maximum i.e. 29 followed by 07 *pitta*kaphaj while *vata*kaphaj type of patients were minimum that is 01. (Table 5)

In all the cases there was yellowish

Table 5
Showing Prakriti of
Kamala Patients

Prakriti	No. of patients
Vatapittaj	29
Vatakaphaj	01
Pittakaphaj	07
Total	37

discolouration of urine, sclera etc. along with loss of appetite. Loss of weight, weakness and pain abdomen was observed in most of the cases. While in few cases there was itching of skin, nausea and fever etc. (Table 6)

As for as serum Bilirubin level is

Table 6
Showing clinical features
in Kamala patients

Clinical features	No of Patients
Yellowish discolouration of urine, sclera etc.	37
Loss of appetite	37
Loss of weight	32
Pain abdomen	29
Weakness	35
Fever	09
Muscle cramps	15
Nausea/vomiting	14
Itching	11

concerned 29 patients had between (1 to 5 mg%) while 06 patients had between (>5 to 10 mg%) and only 02 patients got (>10 mg%) of serum Billrubin. (Table 7)

Table 7
Showing Increased Serum
Bilirubin in Kamala patients

Serum Bilirubin (in mg.%)	No. of patient
1 to 5	29
> 5-10	06
> 10	02
Total	37

Regarding SGOT/SGPT level maximum 20 patients had been >35-100 i/u, 09 patients had got > 100 i/u, while only 08 patients got upto 35 i/u SGOT/SGPT level. (Table 8)

Table 8
Showing SGOT/SGPT(U/L)
level in Kamala Patients

SGOT/SGPT(U/L)	Up to 35	>35-100	>100
SGOT/SGPT	08	20	09

The result of the study indicated that 14 patients had got good response, 09 patients got fair response, 02 patients poor response and no response each, while 10 patients were dropped out from the study (Table 9).

Table 9
Showing Results
in Kamala patients

Result	No of patients
Good response	14
Fair response	09
Poor response	02
No response	02
Dropped out	10
Total	37

The results in relation to sex indicates almost equal type of response. (Table 10)

Table 10
Showing Results
in Relation to Sex

Results	No. of patients		Total
	M	F	
Good response	10	4	14
Fair response	06	03	09
Poor response	01	01	02
No response	01	01	02
Dropped out	05	05	10
Total	23	14	37

The result in relation to age group indicate slight better response between 21-40 years. (Table 11).

Table 11
Showing the Result in Relation to Chronicity

Age Group (in yrs.)	Sex	Results					
		Good response	Fair response	Poor response	No response	Dropped out	Total
12-20	M	2	1	1	0	0	04
	F	1	1	0	0	1	03
21-40	M	8	3	0	1	3	15
	F	3	2	1	1	1	08
41-60	M	0	2	0	0	2	04
	F	0	0	0	0	3	03
Total		14	09	02	02	10	37

Discussion

The prognosis of *Kamala* (Jaundice) patients are good except Viral Hepatitis-B, Cirrhosis and other complications like Ascites. In the present study with a view to explore a combination of formulations likely to render antiviral, anti oedematous and purgative effects the trial was conducted in 37 patients of *Kamala* (jaundice).

It has been observed that patients in the age group of 21-40 are more vulnerable for the disease and the incidence of males is high than females. Among the patients approached for the treatment, most has the chronicity between >1-3 months, most of the patients had Serum Bilirubin <5mg % while 2 patients had >10mg%. The result was better in the age group of 21-40 years.

The efficacy of this combination may be attributed to the properties of their ingredients with the mostly *antipitta*, *srotoshodhak*, purgative and antiviral effects. Such a combination would be helpful to arrest the multiplication of viruses and regeneration of hepatocytes.

Considering the effect of this therapy for three weeks course, the same way may be tried with more duration of treatment or in other modified combination to get the better results.

Conclusion

Considering the prognosis of the disease and the effect of this combination with three weeks course of treatment it is suggested that longer duration of treatment may render better effect.

REFERENCES

- | | |
|-------------|---|
| Charak | <i>Charak Samhita</i> , Translated by Prop. P.V.Sharma published by Chowkhambha Surbharati, Varanasi. |
| Sushrut | <i>Sushrut samhita</i> translated by K.L. Bhisagratna, published by Chowkhambha sanskrit series office, Varanasi. |
| A.P.I. 1992 | G.S. Sainani published by Association of Physicians of India, Bombay. |

हिन्दी सारांश

कामला (जांडिस) के उपचार में आयुर्वेदिक औषधि का आतुरीय आंकलन

एस.के. सिंह, रामजी सिंह, ओ.पी. सिंह एवं यू.एस. सिंह

प्रस्तुत शोध पत्र में पुनर्नवामण्डूर के साथ आरोग्यवर्धनी वटी का प्रयोग कामला रोगियों पर किया गया।

इस अध्ययन में चिकित्सा के प्रभाव अध्ययन हेतु 21 दिन तक सीरम बिलिरुबिन में कभी भूख लगना, मूत्र का पीलापन कम होने को मुख्य आधार बनाया गया। चिकित्सा अवधिपूर्ण करने वाले 37 रोगियों में 14 को अच्छा लाभ, 9 को अधिक लाभ, 2 को कम लाभ, 2 को कोई लाभ नहीं हुआ जब कि 10 रोगियों ने चिकित्सा क्रम पूर्ण नहीं किया।