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EFFECT OF GUDUCHI AND KALMEGH CHURNA ON KAMALA (HEPATITIS)

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Abstract: Infective hepatitis is one of the chief culprits of Liver related morbidity and mortality. In Ayurveda, Purificatory Methods (Samsodana) and Internal Medicine (Samsamana) are the modes of treatment indicated for the complete eradication of doshas and eliminate the disease. Samsamana therapy is mainly depend on the tikta rasa dravya. Present clinical trial was carried out on 30 patient selected from the Sir Sunder Lal Hospital, IMS .BHU Varanasi. For this study Kalmegha and Guduchi were used, which is described By Dr P V Sharma and Charaka Samhita respectively. There was significant improvement in symptoms and it was evident clinically and statically too. The therapy was proved quite effective in the Management of Kamala (Hepatitis).

Key words: Kamala, Hepatitis, Kalmegha and Guduchi

Introduction: The Indian science, in its long struggle absolute cause of Mortality/Morbidity found its culmination in Ayurveda, the crest jewel of the Vedas. A galaxy of great sages who ever walked the earth, for thousands of years, have attested and propounded this sublime knowledge. In fact, Ayurveda has always been evidenced based science and most of the principles and treatment modalities have been critically tested and validated for the conditions existing in their own time frame“ Liver is the Hub of the Wheel of Life”^[1]. Liver is considered as a major metabolic organ in the body, namely metabolism, coagulation and detoxification of toxic materials. Hepatitis simply denotes inflammation of liver, which can be caused by viral infection, non viral infection, drugs, toxins, alcohol, any metabolic disease and ischaemia. Infective hepatitis is one of the chief culprits of Liver related morbidity and mortality ^[2]. It is emerging as a tough challenge in the series of global health problems after HIV. It is the leading killer among all infectious agents. In Ayurveda, Purificatory Methods (Samsodana) and Internal Medicine (Samsamana) are the modes of treatment indicated for the complete eradication of doshas and eliminate the disease ^[3]. Samsamana therapy is mainly depend on the tikta rasa dravya. Tikta is the best rasa among all

the pitta pacifying rasas. Tikta rasa have deepanpachanguna, which convert sama-pitta to nirama- pitta. It has rakta and mamsasthirik-aranaguna, so play very important role in the sampraptivighatana of the kamala disease^[4]. Kalmegha and Guduchi (one which protect the body) are tikta rasa dravya, so used in the treatment of kamala ^[5]. Guduchi has additional property of rasayana, balya and immunomodulators^[6]. Kalmegh has antioxidant property, which is important in remodeling of liver parenchyma. Many ayurvedic drug have undergone clinical and experimental research trials among which Katuki, Kalmegh, Guduchi, and Nimba are some of them indexed hepatoprotective, hepatoregenerative, immunomodulant and cholegogue agents but extensive till to days only few studies are conducted to evaluate their role on the clearance of viral markers or elimination of viruses^[7].

Ayurvedic drugs and formulations contribute to a great deal in alleviating the signs and symptoms and much scientific, validated research data is available to substantiate it. Ayurveda-the so called 'Complementary and Alternative Medicine' in Western science is widely used for Hepatitis in developing countries. Many experimental and clinical trials are being conducted to evaluate the efficacy and

safety of these herbal medicines individually or combined with current therapeutic drugs^[6]. The quality of these clinical trials on Ayurvedic medicines for Hepatitis is poor, in that they do not follow the randomized, placebo-controlled, double-blind model, and the taste, flavor and colour of Ayurvedic formulations compromise much to the quality of research. However, the outcomes of these limited clinical trials have encouraged physicians and guided scientists to continue the search for active compounds or the optimal formulations for the treatment of Acute and Chronic infective Hepatitis.

Materials and Methods

The patients were selected for this trial after fulfilment of diagnostic criteria of Kamala. Patient were thoroughly examined and questioned on both subjective and objective parameters. Ethical clearance and informed consent was obtained before conducting the clinical trial.

Selection of Drug: Guduchi and Kalmegha were well known medicine for hepatoprotective and anti infective property against viral agent causing hepatic damage because both were having the property for amapachana and immunomodulation.

Dose: Both the drugs were used in churna form (simultaneously) with honey 3gm bd (12hourly).

Selection of Cases: A series of 30 diagnosed, uncomplicated cases of Acute Viral Hepatitis have been registered from the O.P.D. and I.P.D of Kayachikitsa, Sir Sunderlal Hospital, Banaras Hindu University, Varanasi. The study was approved by "The Ethical Committee" of Institute of Medical Sciences, Banaras Hindu University, in which patient completed 3 month follow up 1 month interval. The case selection was regardless of sex, occupation, socioeconomic status and others conditions. Both acute and chronic cases of hepatitis were taken.

Inclusion Criteria

1. Aged between 15-60 yrs.
2. Symptomatic newly diagnosed cases of Acute viral hepatitis.
3. Patient willing to participate in the above trial and giving informed consent

Exclusion Criteria

1. Viral hepatitis associated with other systemic complications or associated diseases like DM, HTN, Asthma, CHF, Tuberculosis and AIDS.
2. Viral hepatitis complicated with Gross swelling of the limbs, Ascites, Portal

Hypertension, Esophageal Varices, Bleeding disorders and Hepato-renal syndrome.

3. Patients with a Prothrombin time > 18 seconds, and INR > 2.
4. Patients with S.Albumin level < 3.5 mg/dl.
5. Pregnant and lactating women.
6. Patient undergoing other Panchakarma procedures.
7. Patients who took any other medication or discontinue the trial period without information of the investigator.

Statistical Methods: Qualitative variables were assessed by Chi-square (χ^2) for significant difference between the groups. "Friedman Test" was used to find out difference within the groups. To assess the effect of drug from base line to different follow ups in Quantitative variables Paired 'T'-test was applied. To assess the effect of drugs from the base line to different follow ups in qualitative variables increment in asymptomatic plus mild cases were undertaken.

Techniques to be Employed: CBC, Blood Sugar, RFT, LFT, Lipid Profile, Hepatitis Viral markers with HBsAg, HBeAg, Anti-HBe, Anti HBe-IgM/IgG, auto immune liver profile, USG abdomen.

Assessment of Treatment Outcome: The treatment outcome was graded into Complete Remission, Mild, Moderate, Marked and Unchanged depending on the percentage remission of Symptoms and Signs and Changes in the Liver Function Tests.

1. **Complete Remission:** 100% relief in symptoms and signs and objective parameters with no recurrence in during follow up study.
2. **Marked Improvement:** 75-100% relief in symptoms and signs and objective parameters.
3. **Moderate Improvement:** 50-75% relief in symptoms and signs and objective parameters.
4. **Mild Improvement:** 25-50% relief in symptoms and signs and objective parameters.
5. **Unchanged:** Less than 25 relief in symptoms and signs and objective parameters.

Results

Selected patient were allowed to take the drug as advised. Assessment was done on the subjective and objective parameter. Significant changes were observed which are shown in the table, however no change was observed in routine blood examination.

Discussion

As shown in the observation table there was significant improvement in symptoms. It was evident clinically as well as statistically. Thus Guduchi and Kalmeghachurna was proved

effective in the management in Kamala (Hepatitis).

Changes in Symptoms in Total Patient of Kamala (Hepatitis)

Groups	Symptoms Grading	Number of Patient Bt		Number of Patient F1		Number of Patient F2		Number of Patient F3		Within the Group Comparison Friedman Test	
Aruchi	ABSENT	0	0	0	0	0	2	8	12	48.0	
	MILD	1	0	0	2	8	11	44	11	44	$\chi^2=70.46$ p<.001
	MODERATE	2	5	20	13	52	12	48	1	8	
	SEVERE	3	15	60	10	40	0	0	0	0	
	VERY SEVERE	4	5	20	0	0	0	0	0	0	
SEVERE											
Fever	ABSENT	0	0	0	3	12	7	28	10	40	$\chi^2=52.47$ P<.001
	MILD	1	3	12	4	16	8	32	9	36	
	MODERATE	2	8	32	11	44	7	28	4	16	
	SEVERE	3	9	36	7	28	3	12	2	8	
	VERY SEVERE	4	5	20	0	0	0	0	0	0	
Icterus	ABSENT	0	0	0	0	0	0	0	6	24	$\chi^2= 67.39$ p< .001
	MILD	1	0	0	1	4	12	48	14	56	
	MODERATE	2	6	24.4	15	60	9	36	15	20	
	SEVERE	3	11	44	7	28	4	16	0	0	
	VERY SEVERE	4	8	32	2	8	0	0	0	0	
Fatigue	ABSENT	0	0	0	0	0	4	16	12	48	$\chi^2= 70.34$ P< .001
	MILD	1	0	0	2	8	9	36	12	48	
	MODERATE	2	7	28	12	48	11	44	1	4	
	SEVERE	3	13	52	9	36	1	4	0	0	
	VERY SEVERE	4	5	20	2	8	0	0	0	0	
Hepatomegaly	ABSENT	0	0	0	1	4	6	24.0	9	36.0	$\chi^2=60.81$ P<.001
	MILD	1	1	4	4	16	6	24.0	14	56.0	
	MODERATE	2	12	48.0	10	40	12	48.0	2	8.0	
	SEVERE	3	9	36	10	40	1	4.2	0	0	
	VERY SEVERE	4	3	12	0	0	0	0	0	0	
Avipaka	ABSENT	0	1	4	0	0	0	0	13	52	$\chi^2=58.38$ P< .001
	MILD	1	3	12	3	12	4	16	11	44	
	MODERATE	2	5	20	9	36	9	36	1	4	
	SEVERE	3	11	44	12	48	11	44	0	0	
	VERY SEVERE	4	5	20	1	4	1	4	0	0	
Nausea and vomiting	ABSENT	0	0	0	1	4	2	8	11	44	$\chi^2=69.19$ P< .001
	MILD	1	1	4	1	4	10	40	11	44	
	MODERATE	2	5	20	13	52	10	40	3	12	
	SEVERE	3	13	52	9	36	3	12	0	0	
	VERY SEVERE	4	6	24	1	4	0	0	0	0	

Conclusion: Kamala is a Pittaja, NanatmajaVyadhi and Raktavaha Srotodushtijanyavyadhi. Pandu refers to Haridra Haritadivarnas hence Kamala is described along with Pandu in which the skin of pale or yellow-green. The cardinal symptoms are due to “accumulation of kutsita mala in excess in the body”. The Involvement of Yakrit and Pleeha was quoted by AcharyaCharaka “Raktavahanam Srotasam Yakrinmoolam Pleehacha”. Yakrit is the seat of Pitta (Ranjaka Pitta) and Rakta.

Ranjaka Pitta colours the Rasa dhatu and converts it into Rakta. When this Pitta is vitiated Prasadabhaga becomes less and Kittabhaga is formed more. Kittabhaga refers to malarupa pitta or sama pitta which has durgandha, haritasyavavarnas guru amlagunas. This malarupapitta (bilirubin) is removed by the body through stools when its synthesis exceeds its clearance, it accumulates in the Twaka, Nakha, Netra, Mutra and Purisha, and causes dourbalya, aruci, karshanajwaraetc^[3].

Ayurvedic drugs contribute to a great deal in this grey area and many single and compound formulations are available. The specific Ayurvedic line of management and drugs help in excretion of malarupapitta (bilirubin) out of the body and make it to follow the right channels of the body. So we can say that the drugs are capable of removing the excess bilirubin from the body and normalise the enterohepatic circulation inside the body. Hence the Ayurvedic drugs Guduchi and Kalmegha both can be used in acute as well as chronic patient of Kamala due to their pittarechaka, aampachaka, immunomodulatory and hepatoregenerating property^[4,7], with good hope and wish that the present study would proved a boon to the humanity.

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