

# Clinical evaluation of Kamilari - an ayurvedic drug in the management of viral hepatitis and jaundice

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## Summary

"Kamilari" a popular marketed antihepatotoxic ayurvedic preparation has been clinically evaluated for its efficacy in viral hepatitis. The study showed that Kamilari was useful as an antihepatotoxic agent as it significantly reduced serum bilirubin, ALT & AST values within a week of treatment.

## Introduction

Kamilari is an ayurvedic preparation recommended as effective in the treatment of jaundice, acute and chronic inflammatory liver disorders, dyspepsia, loss of appetite, alcoholism, etc. This drug has received wide acceptance, as evidenced from local newspaper reports. Animal experiments have shown encouraging results<sup>1</sup>. The present study was aimed at evaluating the safety and the efficacy of the drug.

## Composition:

Kamilari consists of the following ingredients : Thespesia populnea, Elletaria cardamomum, Zingiber officinalis, Glycyrrhiza glabra and honey.

Thespesia populnea, the main component of the formulation has been found to be interestingly endowed with hepatoprotective activity<sup>2</sup>. A survey of literature revealed that Glycyrrhiza glabra<sup>3</sup> and piper nigrum<sup>4</sup> were useful antihepatotoxics.

weeks prior to the study. The study was divided into 2 groups comprising of 20 patients each.

**Group A:** Patients were administered with Kamilari, 2 tablespoonsful (30), orally, t.i.d. before meals for 2 weeks.

**Group B:** Patients served as control and continued on conventional treatment i.e. vitamin B complex and fluids.

All the cases were advised a diet that was fat and spice free through the course of

Group A (Treated)							Group B (Untreated)						
Age (Yrs)	Male	%	Female	%	Total	%	Male	%	Female	%	Total	%	
10-20	6	60	2	20	8	40	4	40	8	80	12	60	
20-30	4	40	2	20	6	30	2	20	0	0	2	10	
30-40	0	0	0	0	0	0	4	40	0	0	4	20	
40-50	6	60	0	0	6	30	2	20	0	0	2	10	

## Clinical Investigation

Clinical symptoms	Group A				Group B			
	Day 0	Day 7	Day 14	Day 21	Day 0	Day 7	Day 14	Day 21
1. Anorexia	10	--	--	--	20	12	6	2
2. Abdominal discomfort	6	--	--	--	10	4	--	--
3. Lethargy	20	--	--	--	20	14	8	2
4. Nausea	20	--	--	--	20	12	4	2
5. Jaundice	18	--	--	--	20	16	6	2
6. Dark urine	20	8	3	--	20	14	4	2
7. Enlarged liver	16	2	2	--	16	12	6	2

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Specially contributed to "The Antiseptic"  
Vol.93 No.11 P: 412 - 413

## Materials and Methods

Clinical trials were carried out at the KMC Hospital Manipal. Forty patients suffering from confirmed viral hepatitis were chosen for the study. All patients selected were drug free for at least 2

the study. Assessment was done once a week for clinical and biochemical parameters.

**Clinical:** Jaundice, nausea, vomiting, anorexia, diarrhoea, colour of urine, liver enlargement and spleen enlargement.

	Without trial drug			With trial drug		
	No. of cases	Before treatment (7 days)	After treatment (14 days)	No. of cases	Before treatment (7 days)	After treatment (14 days)
Serum Bilirubin D + S.E. / <i>t</i>	20	1.5 + 0.3 5	3.0 + 0.425 7.04	20	2.84 + 0.364 7.8	3.44 + 0.444 7.75
SGPT D = S.E. / <i>t</i>	20	396.5 + 141.5 2.8	519.3 + 141.56 3.66	20	758.3 + 139.08 5.45	315.3 + 147.89 5.51
SGOT D + S.E. / <i>t</i>	20	716.3 + 178.67 4.0	815.5 + 186.56 4.37	20	417.63 + 56.94 7.33	592.25 + 78.63 7.57

N.B. /*t* = D where D is the arithmetic mean of paired differences (before and after treatment)

**Biochemical:**

Serum bilirubin, ALT & AST.

**Observations**

The age and sex incidence of the cases selected are shown in Table 1, clinical investigations in Table 2 and biochemical investigation in Table 3

**Discussion**

Clinically the patients treated with trial drug exhibited a satisfactory response. From Table 2 it can be observed that the symptoms anorexia, abdominal discomfort, lethargy, nausea and jaundice

disappeared within a week of treatment with Kamilari. Liver enlargement however persisted in 12% cases. In the untreated group B however nearly 30% patients still showed clinical symptoms of viral hepatitis after 2 weeks. As recorded in Table 3, the "t" test showed significant reduction in the serum reduction in the serum bilirubin. ALT & AST values within 7 days of treatment itself compared to the untreated group.

**Conclusion**

The results in the present study therefore indicate that Kamilari could be a

valuable therapy for patients suffering from viral hepatitis.

**References**

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*The mean life expectancy - 72 year for men and 79 years for women - has been extended by some 25 years since 1900. Recently a scientist captured the headlines by announcing we could live to 160 years, thus making octogenarians merely middle aged. We would, however, have to take in fewer calories and live like devout Marmonis : abstaining from alcohol, tobacco, and coffee; getting more sleep; and taking more exercise. But others set the mean achievable limit at 85 years, arguing that eliminating cancer and heart disease would still not arrest the natural degeneration of the body. None the less, more octogenarians are now working than ever, though an increased tendency to fatigue often requires some modification of their lifestyle.*

*But the young also get tired, some excessively so. And in recent months there has been much interest in the syndrome often dubbed "yuppie flu", typically affecting professional women in their 30s who suffer from total overwhelming exhaustion. Some are so weak, that they cannot work, and a few can hardly move. Yet sceptics have questioned the existence of an actual disease, suggesting this merely represents an end of a continuum (as with hypertension) of various degrees of fatigue. Some believe that the disease is psychological and that about half of the sufferers are depressed. Against this, however, is the occasional flu-like syndrome, muscle aches, and low grade fever. It may also be that this disease (if indeed it be one) is not new, similar outbreaks apparently having occurred in the past 60 years in California, Britain, Iceland and Australia. Viruses are the prime suspects, especially Epstein-Barr and retroviruses such as HTLV-II, and a derangement of the CB8 type of T cells has been postulated.*

(BMJ Feb. 2, 1991)