

Liv.52 in Infective Hepatitis*

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Infective hepatitis is the main cause of jaundice in our country. It is endemic in the city of Hyderabad, as cases occur throughout the year. The majority of them take treatment elsewhere, only a few complicated cases seek admission to hospitals. On an average, about 200 cases are admitted every year in the Fever Hospital.

There is so far no specific therapy for viral hepatitis. It was considered desirable to ascertain the effects of Liv.52 on hepatitis, as published reports recorded its successful use. Liv.52 is an indigenous drug having eight drug ingredients in its composition.

MATERIAL AND METHODS

Forty eight patients admitted to the Fever Hospital were randomised into two groups, A and B. A series of liver function tests were performed on all of them to confirm the diagnosis and assess the progress made by the patient; these tests were studied at the time of admission and after an interval of 15 days.

All the patients had anorexia, nausea, general malaise, abdominal pain, jaundice and hepatomegaly, and sought admission 10 to 15 days after the appearance of the jaundice either in the moderate or the severe stage of the disease.

All patients were kept on glucose, vitamins and low fat diet. Group 'A' patients received Liv.52, in addition to the above regime.

To children Liv.52 was given in the form of a syrup. The daily dose of 60 drops was given in divided doses and the adults were kept on two tablets three times a day for a period of 20 days.

In group A, the youngest was three years and the oldest was 55 years and in group B the youngest was four years and the eldest was 42 years of age (Table I).

Age group	Group A	Group B
1 to 15 years	11	10
16 to 30 years	10	9
31 to 45 years	3	4
46 to 55 years	1	Nil

Liver function tests :

In group A, three patients had serum bilirubin over 22 mg. per 100 ml. and in group B two patients had 17.7 mg. per 100 ml.; 80% of cases in group A and 60.8% in group B had serum bilirubin over

8 mg. per 100 ml. It will be seen that in group A the liver was not in a better position to excrete bilirubin and in these patients the jaundice was more striking than in group B.

It will be seen that Liv.52 had brought down the values of serum bilirubin to 2 mg. per 100 ml. in 64% in group A and 34.7% in group B, by the end of two weeks and it had exerted a good effect on the clinical improvement of jaundice, which in the words of Bradley (1963), is “the unique clinical manifestation of hyperbilirubinaemia” (Tables II and III).

Serum bilirubin levels mg./100 ml	Group A	Group B
0 - 5	5	7
6 - 10	12	9
11 - 15	4	5
16 - 20	Nil	2
21 - 25	4	Nil

Serum bilirubin levels mg./100 ml	Number of patients	
	Group A	Group B
1 - 2	16	9
3 - 5	4	10
5 - over	5	4

B. ALKALINE PHOSPHATES

It is known that high levels of alkaline phosphates indicate biliary obstruction and 30 K.A. is taken as the dividing line between the parenchymatous and obstructive types. In our series 52% in group A and 52.6% in group B had values above 30 K.A. (Tables IV and V).

Serum alkaline phosphates K.A. units	Number of patients	
	Group A	Group B
15 - 30	12	11
31 - 45	9	7
46 - 60	4	5

Serum alkaline phosphates K.A. units	Number of patients	
	Group A	Group B
5 - 10	9	5
11 - 20	8	10
21 - 30	5	2
31 - 40	3	6

It will be observed that Liv.52 helped in clearing the obstruction. In group A, 12% of patients and in group B about 26% of patients had values over 30 K.A. units at the end of 15 days.

Thymol turbidity:

Thymol turbidity is a measure of the acute process in the liver and a positive test is an indication of hepatic jaundice and this test remains positive for a longer period. In our series all patients gave a positive result and the values were higher in group A than in B (Tables VI and VII).

Thymol turbidity units	Number of patients	
	Group A	Group B
5 - 10	5	9
11 - 20	9	7
21 - 30	7	4
31 - 40	Nil	3
41 - 50	4	Nil

Thymol turbidity units	Number of patients	
	Group A	Group B
0 - 5	4	4
6 - 10	8	6
11 - 15	9	6
16 - 20	—	—
21 - 25	4	2
26 - 30	—	5

It will be seen that the fall in the values of various levels was more appreciable in group 'A' than in 'B'.

DISCUSSION

Patrao (1957) and Mathur (1957) reported that Liv.52 helps in improving the outlook in severe hepatic damage. Seth (1963) observed that it has a salutary effect on anorexia of infective hepatitis. Qazi (1965) stated that in animal experiments Liv.52 had a good influence on biochemical and functional abnormalities of the liver. It is reported that the drug has a protective action against hepatotoxicity of tetracycline in rats.

In our own observations, we found that the average number of days for the clearance of jaundice in groups A and B were 22.9 and 26.1 days, respectively. The bilirubin-value fell to 2 mg. in 80% of patients in group A and in 60.8% of the patients in group B.

Also Liv.52 helped in clearing obstruction and it was noted that the difference in groups A and B is over 50%, which is significant.

A fall in thymol turbidity is observed but the difference in the two groups was not much except that a minor series in group B showed a higher value than group A.

The fall in serum bilirubin, alkaline phosphates and thymol turbidity was more appreciable in group A than in group B after 15 days' treatment (Table VIII).

Individual liver function test		Fall in the values	
		Group A Liv.52	Group B
1.	Serum bilirubin level mgm/100 ml	5.3	3.4
2.	Serum alkaline phosphates K.A. units	14.9	11.1
3.	Serum thymol turbidity Units	6.3	5.3

The mechanism of action of Liv.52 is not known. It has no action on the virus but it clears the jaundice, improves the appetite and brings a sense of wellbeing. Obviously it has an anti-inflammatory action, for it clears obstruction. In this respect Liv.52 resembles the corticosteroids in its action. As the use of corticosteroids has to be limited, Liv.52 can be used freely to achieve the anti-inflammatory effects in hepatitis.

SUMMARY

48 patients with infective hepatitis admitted to the Fever Hospital, Hyderabad, were studied. On 25 cases Liv.52 was tried (Group A), the remaining 23 patients being kept as control (Group B). The jaundice in group A cleared in 22.9 days as compared to 26.1 days in group B. There was an appreciable fall after 15 days in the values of the liver function tests in group A, as compared to group B. Further extensive trials with Liv.52 are, however, necessary to establish its superiority in the management of infective hepatitis.

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