[***Probe*** (1981): (XX), 4, 288-290]

Clinical Evaluation of Liv.52 as an Adjuvant in Cancer Cases Getting Large Field Irradiation with or without Chemotherapy

Krishnan Nair, M., *M.D., F.F.R. (London),*
and
Chandrasekharan Nair, *B.Sc., M.B.,B.S., D.M.R.**
Department of Radiology and Cancer Institute, Medical College Hospital, Trivandrum, India.
(*At present: Asst. Prof. in Radiology, Calicut Medical College and Hospital, Calicut, India)

INTRODUCTION

Various types of malignancies are being treated today by either appropriate therapeutic doses of irradiation or specific chemotherapy. These in many cases bring about clinical response and regression of the tumour and may even bring about a temporary remission. Irradiation therapy or chemotherapy have deleterious effects on the hepatic parenchyma, the bone marrow and sometimes on other organs and tissues of the body. This brings about alteration in haemopoiesis with lowering of haemoglobin percentage, red blood cell and white blood cell counts and disturbance of the hepatic function.

MATERIAL AND METHODS

A controlled study was carried out on 40 hospitalised cancer patients getting large field irradiation with or without chemotherapy. The purpose of the study was to evaluate the clinical usefulness of Liv.52 (The Himalaya Drug Co.) as an adjuvant in these cases. The cases were divided into two groups, each group consisting of 20 patients. The first group was given the usual supportive measures like multivitamins, iron and pyridoxin.

The second group was given Liv.52 in addition to the usual supportive measures. The dosage of Liv.52 used was two tablets 3 times daily for 15 days. The haematological and liver function tests were performed before and after starting treatment in both the groups.

OBSERVATIONS

It was observed that patients in the Liv.52 group were relatively free of symptoms occurring due to radiation reaction like nausea and vomiting. There was a sense of well-being and improvement in appetite compared to the Control group. There was also a marked improvement in liver function and gain in weight, compared to patients in the Control group.

RESULTS

The observed details of the trial and the results are summarised in the Tables 1, 2 and 3.

Table 1

General improvement	Control group	Liv.52 group
Body weight	5%	80%
Appetite	10%	70%
Sense of well-being	5%	95%
Average gain in weight		From 1 to 3 kgs
Improvement in haematopoiesis:		
R.B.C. count	5%	60%
Haemoglobin percentage	5%	60%
W.B.C. count	5%	40%
Improvement in liver function:		
Thymol turbidity	5%	100%
Serum bilirubin	–	100%

Vandenberg	Remained same in both groups before and after treatment

Table 2: Control group without Liv.52 - 20 cases

Sl. No.	R.B.C. in mill/cm		Haemoglobin percentage		W.B.C. per cm		Thymol turbidity		Serum bilirubin	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	4.2	5.0	7.5	8.0	6700	4400	2	7	1.2 mg	1.6 mg
2	5.5	4.6	9.5	9.0	7200	5400	2	4	0.8 mg	1.8 mg
3	4.2	4.0	12.0	11.0	6900	7600	4	8	1.0 mg	1.6 mg
4	5.0	4.2	10.5	10.0	5800	5400	3	6	1.6 mg	2.2 mg
5	6.2	4.6	10.5	9.0	6000	5800	1	4	0.6 mg	2.0 mg
6	3.8	3.5	11.0	8.5	6600	6200	3	7	1.0 mg	1.2 mg
7	4.2	4.0	11.5	10.0	6000	5800	4	6	1.2 mg	1.8 mg
8	3.87	3.1	14.0	10.5	7500	5200	3	6	0.9 mg	1.6 mg
9	4.0	3.9	7.5	6.5	5700	4100	3	5	06 mg	1.4 mg
10	4.2	3.3	12.0	9.0	7900	5100	2	6	0.6 mg	2.4 mg
11	3.92	2.98	10.5	7.5	7900	5100	2	3	1.1 mg	1.6 mg
12	4.8	3.2	9.5	7.0	6000	4200	2	3	1.0 mg	1.7 mg
13	4.1	3.6	10.0	8.5	4800	4000	–	–	–	–
14	5.0	4.4	14.5	8.5	6000	4000	2	8	1.2 mg	4.2 mg
15	5.1	4.2	13.5	9.0	8600	5400	2	3	1.0 mg	1.8 mg
16	5.1	4.8	12.5	11.0	6800	5600	2	4	1.2 mg	2.0 mg
17	4.6	3.8	12.5	8.5	10500	6700	2	5	0.6 mg	1.8 mg
18	5.6	4.3	13.5	10.0	7900	6200	5	3	0.8 mg	1.4 mg
19	4.7	3.9	11.0	8.0	7800	4700	4	6	1.0 mg	1.6 mg
20	4.6	4.1	13.0	10.5	9800	5400	2	5	0.8 mg	1.2 mg

Table 3: Liv.52 group - 20 cases

Sl. No.	R.B.C. in mill/cm		Haemoglobin percentage		W.B.C. per cm		Thymol turbidity		Serum bilirubin	
	Before	After	Before	After	Before	After	Before	After	Before	After
1	5.1	4.8	7.5	9.0	6200	6700	7	9	1.0	0.8
2	5.6	4.8	10.5	10.0	6800	5200	5	3	0.7	0.4
3	4.2	5.0	7.5	8.5	10200	6800	7	3	1.0	0.8
4	5.6	5.0	15.0	14.0	7600	5300	10	4	0.7	0.6
5	4.7	4.9	13.0	13.5	6300	5100	5	4	0.8	0.4
6	5.2	5.0	13.5	14.0	8600	9200	4	2	1.0	0.6
7	4.7	5.3	11.5	12.0	9500	10600	6	4	0.7	0.6
8	4.9	5.2	12.0	13.0	7200	8000	4	1	1.0	0.8
9	3.8	4.1	10.5	11.5	7000	8600	5	3	1.0	0.8
10	4.6	5.2	9.0	12.5	6300	8400	5	2	0.6	0.4
11	4.2	4.3	9.5	9.5	6600	5200	6	3	1.6	0.6
12	3.9	4.0	10.5	9.0	6800	6100	7	3	1.0	0.5
13	4.6	4.8	11.5	13.5	6200	5600	4	2	0.8	0.6
14	5.6	5.2	14.5	14.0	7100	6400	6	2	1.2	0.8
15	4.8	4.8	13.5	15.0	7900	8200	4	1	1.4	0.6
16	5.2	5.2	10.5	13.5	8600	7200	5	2	0.8	0.5
17	4.8	5.2	13.5	13.0	6700	6000	4	2	1.6	0.6
18	4.3	5.0	12.5	13.5	7400	6200	5	3	0.9	0.5
19	5.0	4.6	12.5	10.5	6000	5600	5	2	1.0	0.5
20	4.8	4.2	14.0	12.5	6200	7900	5	2	1.4	0.6

This clinical study and observation on the values of red blood cells, haemoglobin percentage and white blood cell count, thymol turbidity and blood bilirubin values showed that the findings in Liv.52 group presented a much better picture. This study clearly establishes the usefulness of Liv.52 in cases with malignancies of varied types receiving large field irradiation with or without chemotherapy. Liv.52 is highly effective in controlling the untoward effects of large field

irradiation and brings about a feeling of well-being in these patients. A significant proportion of these patients showed a weight gain of 1-3 kg demonstrating the value of Liv.52 as an anabolic agent in this debilitating disease. Liv.52 has a very salutary effect on haemopoiesis and body metabolism as a whole. It is also valuable in controlling the hepatotoxicity of chemotherapeutic agents as evident by the laboratory findings. There was no evidence of toxicity or untoward effect of Liv.52.

SUMMARY

1. A controlled study of 40 cases of cancer receiving irradiation and/or chemotherapy was carried out.

2. Twenty patients were put on Liv.52 in addition to radio and/or chemotherapy and the other 20 received only the therapy and severed as Controls.

3. General effects, effects on haemopoiesis and liver function were observed.

4. Liv.52 group presented overall improvement and better control of haemopoiesis and liver function.

5. There were no toxic effects.