

## **Liv.52 in Post-cholecystectomy Dyspepsia**

**Misgar, M.S., M.S., F.I.C.S.**, Prof. & Head of Surgical Unit IV,

**Karihaloo, P.L., M.S.**, Lecturer in Surgery,

**Mir Nazir Ahmad, M.S.**, Lecturer in Surgery,

**Sethi, S.K., M.B.,B.S.**, Resident House Officer

and

**Mohd. Yousuf Wani, M.B.,B.S.**, P.G. Student, Department of Surgery,

Government Medical College, Srinagar, Kashmir, India.

### **INTRODUCTION**

The term post-cholecystectomy dyspepsia refers to a number of vague and non-specific symptoms, associated with the removal of the gall bladder and includes anorexia, belching, flatulence, abdominal discomforts, sour eructations, nausea and vomiting.

In about 5-10% of cases these symptoms are severe enough to be of concern to the surgeon and usually an associated pathology in the form of peptic ulcer, hiatus hernia, pancreatitis or an organic biliary tract disease, e.g. over-looked choledocholithiasis, structure of common bile duct (CBD), because of operative trauma, is present in these cases. The discovery of these diseases does not necessarily indicate our error in initial diagnosis, although this is often the case and an adequate treatment, either surgical or conservative, should relieve the patient.

Previously all such cases were labelled as post-cholecystectomy syndrome. However this term has been abandoned now and replaced by post-cholecystectomy dyspepsia because of the diverse nature of symptoms and their severity, their most frequent cause being the diseases of other systems and organic biliary tract diseases, therefore unrelated to gall bladder surgery. In some cases there exists a functional disorder of biliary ducts or so called biliary dyskinesia.

Ninety to ninety five per cent of patients subjected to cholecystectomy have a substantial or complete relief of symptoms, but a large number of these patients persist with complaints of indigestion and loss of appetite. Their symptoms are very mild in the form of flatulence, belching and fullness after taking meals and most of the times are not given much attention by surgeons. Usually these patients respond very well to symptomatic treatment with some adjustments in dietary habits but sometimes their treatment is really difficult and challenging.

As Liv.52 (The Himalaya Drug Co.) has been used in various hepatic disorders with encouraging results, we were prompted to undertake a controlled trial in 100 post-cholecystectomy dyspepsia cases with Liv.52 to determine the effectiveness of this drug in such cases. Each tablet of Liv.52 contains:

Exts. Capparis spinosa	65 mg
Cichorium intybus	65 mg
Solanum nigrum	32 mg
Cassia occidentalis	16 mg
Terminalia arjuna	32 mg
Achillea millefolium	16 mg
Tamarix gallica	16 mg
Mandura bhasma	33 mg
(Processed in various hepatic stimulants)	

## MATERIAL AND METHODS

The present study was conducted in the Department of Surgery, S.M.H.S. Hospital, Srinagar during a period of two years from July 1981 to July 1983, in a hundred patients in whom cholecystectomy had been done. After cholecystectomy, on their first follow-up visit to the hospital, which was usually one to two weeks after the discharge from hospital, the patients were carefully examined and a detailed history taken. It was found that only a small percentage of patients were absolutely symptom-free and in whom no follow-up or medication in any form was necessary, whereas in a majority of patients there was significant relief but symptoms such as anorexia, flatulence, belching and fullness after taking meals persisted.

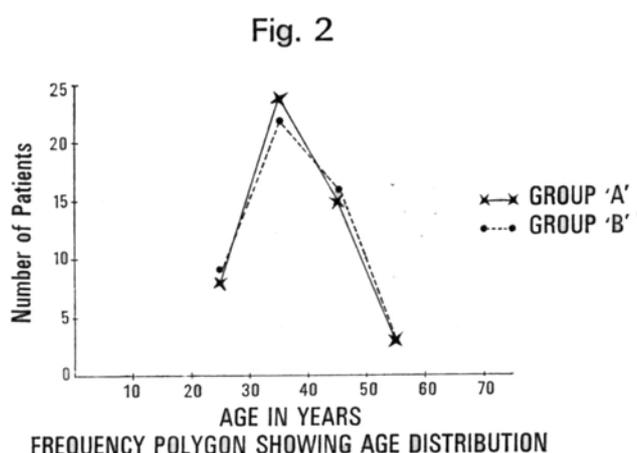
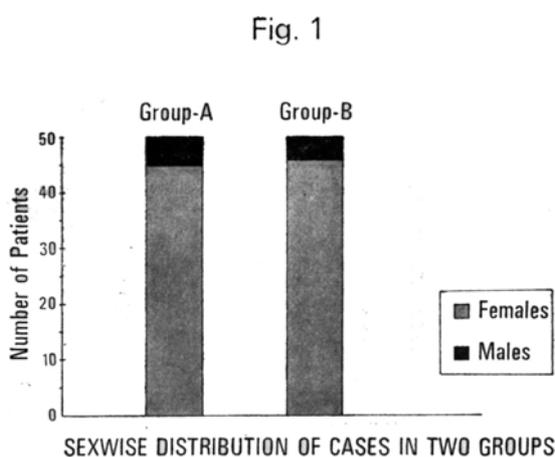
Every effort was made to rule out any associated pathology which might be responsible for these symptoms and in an endeavour to do this, in all the patients selected for the study, a barium screening of stomach and duodenum was done to rule out peptic ulcer and hiatus hernia. Only in those patients where there was reason to suspect a biliary tract disease, investigations such as I.V.C. and E.R.C.P. were carried out.

Only after all these investigations were normal and all other diseases could be ruled out with certainty, these 100 cholecystectomy patients were divided into two groups of 50 each, group 'A' and group 'B'. Patients in both the groups were predominantly females and most of them were in the 30-50 years age group.

Patients in group 'A' were treated with Liv.52 tablets, 2 tablets 3 times a day after meals and were encouraged to take a normal diet without any restrictions, whereas patients in group 'B' were treated with a placebo without any dietary restrictions.

## OBSERVATIONS

Age and Sex distribution (Figures 1 and 2).



In both groups of patients, females out-numbered males. In group 'A' there were 45 females and 5 males, whereas in group 'B' there were 46 females and 4 males. Age distribution is shown in frequency polygon (Figure 2); the youngest patient in the series was 22 years and the oldest 60 years. The maximum numbers of patients were in the 4<sup>th</sup> decade of life, followed by the 5<sup>th</sup> decade and the 3<sup>rd</sup> decade in order of frequency, in both the groups (Table 1).

Symptomatology (Figure 3).

Although the patients presented with a wide variety of symptoms most of them were considered to be subjective but almost all of them complained of indigestion. However on careful questioning of the patients in both the groups, various symptoms in descending order of frequency were flatulence,

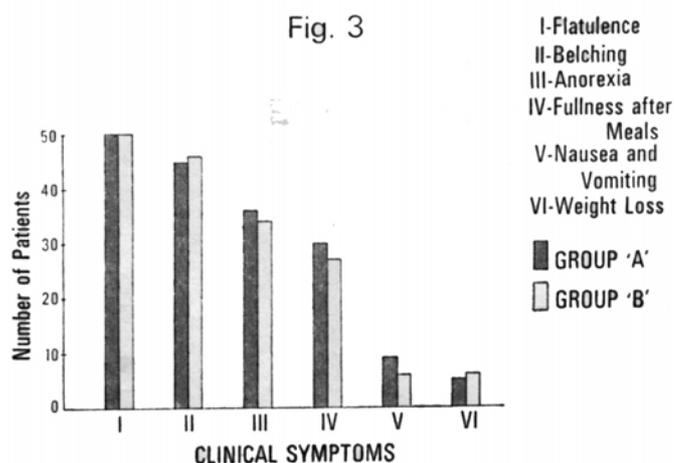
belching, anorexia, fullness after taking meals and occasional nausea and vomiting in some patients. Ten percent of patients in group 'A' and 12% in group 'B' complained of weights loss (Table 2).

Age in years	Group 'A'		Group 'B'	
	No. of patients	Percentage	No. of patients	Percentage
20-30	8	16%	9	18%
31-40	24	48%	22	44%
41-50	15	30%	16	32%
51 - 60	3	6%	3	6%
Total	50	100%	50	100%

Symptoms	Group 'A'		Group 'B'	
	No. of patients	Percentage	No. of patients	Percentage
Flatulence	50	100%	50	100%
Belching	45	90%	46	92%
Anorexia	36	72%	34	68%
Fullness after meals	30	60%	27	54%
Nausea and vomiting	8	16%	6	12%
Weight loss	5	10%	6	12%

Treatment in the form of Liv.52, two tablets thrice a day after meals, was carried out for a period of three months in all the patients in group 'A' and prolonged only in those who still continued with some symptoms. Eighty four percent of the patients in group 'A' did not need any further treatment, whereas in the remaining 16% a further three months' treatment with Liv.52, two tablets thrice a day orally, relieved their symptoms completely.

In group 'B', at the end of three months only 46% of the patients were symptom-free, whereas the remaining 54% (27 patients) were put on Liv.52, 2 tablets thrice a day orally. It was observed that after 1-2 months' therapy with Liv.52, 44% of the patients were symptom-free. In the 10% who did continue to have some symptoms in the form of flatulence treatment with Liv.52 completely relieved their symptoms within a period of 3 months (Figure 3).

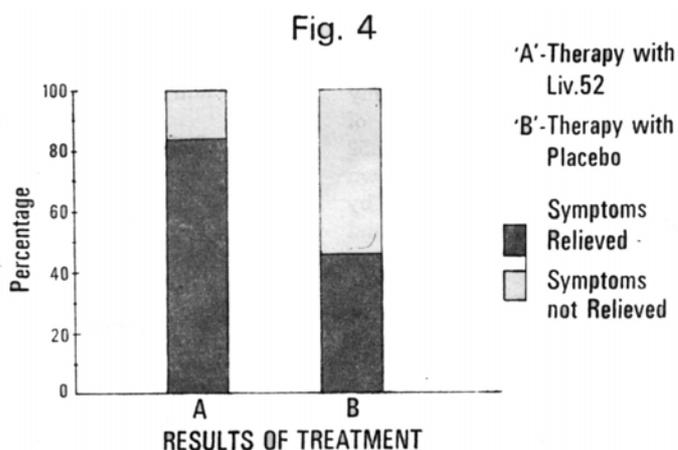


## DISCUSSION

Post-cholecystectomy dyspepsia as was seen in the majority of patients, is believed to be because of in co-ordination in bile secretion after the removal of the gall bladder. The bile, which was previously concentrated 5-10 times by the gall bladder with a corresponding increase in the proportion of bile salts, now enters the duodenum as it is formed by the liver with a decreased power of emulsifying the fat globules which are digested by intestinal lipases.

Although no definite cause is known this functional abnormality exists upto a period of 3-6 months after cholecystectomy and it is during this period that some sort of digestive therapy is required to make the patients symptom-free and enable them to take a normal diet. After this period, which can vary from 3-6 months or even more in some patients, compensatory mechanisms can come into play, the CBD dilates and functions as a storehouse of bile and secretion is regulated by the papillary sphincter.

There might be some other obscure factors, which at the moment are not well understood, therefore the treatment remains mainly symptomatic. However, Liv.52 has a definite role in relieving the symptoms of the post-cholecystectomy dyspeptic patients. The exact mode of action of the various ingredients of Liv.52 is not very clear. But it has been shown to stimulate hepatic functions possibly by reducing intrahepatic congestion and relieving cholestasis.



In the present study it is assumed that the beneficial effects observed with Liv.52 in post-cholecystectomy dyspeptic patients are probably due to choleric and cholagogue actions of this drug, thereby helping in the digestion of fats and regulating the secretion of bile till the compensatory mechanism takes over.

No adverse effects have been observed even with prolonged therapy of Liv.52. The beneficial effects observed with this drug are highly encouraging as is evident from the results obtained in the present study. It is therefore recommended that the patients with post-cholecystectomy dyspeptic symptoms (symptomatic cases) should be put on Liv.52 therapy till their dyspeptic symptoms are relieved. The low cost of the drug places it within the reach of even a poor man as compared to other costly choleric and cholagogue preparations available in the market.

#### **SUMMARY AND CONCLUSIONS**

A controlled clinical study was conducted on 100 patients with post-cholecystectomy dyspeptic symptoms, and divided into two equal groups of 50 each. In group 'A', therapy with Liv.52 for a period of 3 months relieved the symptoms completely in 84% of the cases as compared to group 'B' therapy with placebo, where only 46% patients were symptom-free for the same period. The remaining 54% (27 patients) were put on Liv.52 for 1-2 months and 44% (22 patients) were symptom-free. The beneficial effects of this drug in these cases are assumed to be due to choleric and cholagogue actions of the various ingredients thereby helping in the digestion of fats and regulating the secretion of bile till the compensatory mechanism takes over. The low cost of the drug places it within the reach of even a poor patient.

#### **ACKNOWLEDGEMENT**

We acknowledge the help and co-operation rendered to us by the patients of post-cholecystectomy dyspepsia in the present study.