## Some Clinical Observations on the Use of Liv.52 (An Indigenous Drug) in Cases of Cirrhosis of Liver in Children

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Although the nodular, fibrotic liver associated with ascites has been frequently described throughout the recorded history of mankind, it was Laennec<sup>3</sup> in 1919, who first employed the term Cirrhosis. It is derived from the Greek words "kirrhos" meaning tawny, and was applied by Laennec to describe the colour of the nodules of the cut liver surface. It is well to remember that many cirrhotic livers are green instead of brown, especially in the presence of jaundice. The tawny colour is due to a deposition of iron in the cirrhotic tissue.

Thus, although Laennec focussed attention upon the parenchymal cells, subsequent observers applied the term to indicate fibrosis of the supporting connective tissue and the concept of primary chronic inflammatory sclerosis became prevalent. In 1942 Rokitansky advanced the view that Cirrhosis may develop during the course of any liver inflammation.

Many authorities have pleaded that in the light of modern concepts of liver diseases, the term Cirrhosis and its loose usage be relinquished and more specific descriptive term be applied to the various types of end stage fibrosis. In this presentation, however, the general term Cirrhosis will be used to signify the fibrosis following single, repeated or chronic injury to various components of the liver.

Until recently it has been customary to classify Cirrhosis in accordance with gross anatomic alterations, e.g., Connor's<sup>2</sup> classification: (1) Toxis, (2) Biliary, (3) Pigment, (4) Fatty, or the etiologic one of Bockus: (1) Portal Cirrhosis, (2) Toxic Cirrhosis, (3) Biliary Cirrhosis. It is obviously difficult to compress into such classification all varieties of Cirrhosis of different aetiologies, produced under various circumstances.

Cases of Cirrhosis of liver are quite common in private practice. The disease is to be regarded as the end result of hepatic injury arising from varying causes which differ in children as compared with adults. As regards the pathogenesis of Cirrhosis in children there are many factors that may be responsible for its production.

- 1. Toxaemia of pregnancy in some mothers may lead later to the development of Cirrhosis in their children.
- 2. Gastric ulcer, diabetes, migraine in parents may be responsible for development of Cirrhosis in their children.
- 3. Rh +ve baby with Rn –ve mother and Rh +ve father is liable to develop Cirrhosis.
- 4. Whooping cough and typhoid fever may lead to its development.
- 5. Congenital syphilis may affect successive children in a family.
- 6. It may also follow severe Infective hepatitis.

- 7. It is also probable that nutritional deficiencies, if sufficiently severe and prolonged, may lead to similar changes in the liver after an intermediate period of fatty infiltration.
- 8. It may follow chronic biliary obstruction such as met with in congenital obliteration of the bile ducts.

Treatment of Cirrhosis in children is a problem both to the practitioner and the patient. Generally the treatment of it is purely symptomatic. I tried the drug Liv.52 in 8 cases of Cirrhosis in children. These cases were between the ages of 1 to 5 years. Most of them were brought on account of enlargement of abdomen, failure to grow, irregular fever, constipation. On examination the liver was found to be considerably enlarged, firm, and not tender in all the cases. In one case the spleen was also palpable. Abdomen was distended in all the cases with prominence of superficial abdominal veins. Jaundice was present in two cases and ascites was present in only one case. So the cases were divided into three groups:

- Group 1: Five cases with enlargement of liver without jaundice and ascites.
- Group 2: Two cases with jaundice.
- Group 3: One case with ascites.

Out of the eight cases, five were male and three female. Routine examination of blood, urine and stool were made in all these cases.

Liv.52 was given as the sole drug for one to two months or longer in doses of four tablets a day to elder children and three tablets a day to younger ones, along with restriction of fat in the diet and other symptomatic treatment.

Effectiveness of therapy was evaluated on the basis of the size and consistency of the liver, amount of ascites and severity of jaundice. Most of the cases showed improvement in their symptoms, such as improvement in constitution and appetite after about a fortnight of starting the treatment. There were no side effects or complications. Size of the liver gradually decreased, jaundice was completely cleared in a month's time, ascites also gradually decreased. One case with severe jaundice and liver enlarged upto the umbilicus, died 12 days after the treatment.

Case 1: Raj Kumar - 2 years - Male – distension of abdomen, failure to gain weight, liver palpable 4 fingers below the costal margin, firm and not tender, no ascites, no jaundice. Blood report revealed slight anaemia. One tablet of Liv.52 was given thrice a day. After 15 days of treatment the liver was 2 fingers below the costal margin, and after one and a half months it was just palpable below the costal margin.

Case 2: Chandra - 4 years - Female - distension of the abdomen, loss of appetite, retardation in growth, constipation and fever off and on, Liver palpable up to the umbilicus, hard, not tender, oedema of the feet. General condition poor, no ascites, no jaundice, slightly anaemic. One tablet of Liv.52 was given four times a day. After 15 days of treatment, the liver was four fingers below the costal margin, oedema disappeared, there was improvement in appetite. After a month of treatment the liver was three fingers below the costal margin, distension of the abdomen was less and there was improvement in the general condition. After another month of treatment, the liver was only two fingers below the costal margin and was not hard.

Case 3: Promod - 2½ years - Male - distension of abdomen, failure to gain weight, general weakness, irregular fever, liver palpable and four fingers below the costal margin, firm and not tender, no ascites, no jaundice. One tablet of Liv.52 was given three times a day. Fifteen days after

the treatment the size of the liver was reduced by one finger and after one and half months' treatment the liver was just palpable the costal margin.

Case 4: Vimla - 3 years - Female - distension of the abdomen, irregular fever, constipation, loss of appetite, the liver palpable 3 fingers below the costal margin, firm and not tender. Stool, urine and blood picture was normal. One tablet was given 4 times a day, the liver was only 1½ fingers palpable after one month of treatment.

Case 5: Ram Singh - 4 years - Male - distension of the abdomen, failure to gain weight, constipation, liver palpable three fingers below the costal margin, firm and not tender, stool, urine and blood picture were normal except for slight anaemia. One tablet of Liv.52 was given four times a day. Liver was just palpable below the costal margin after one and a half months of treatment.

Case 6: Laxmi Narain - 1 year - Male. Distension of the abdomen, yellow coloured urine and yellow discoloration of the eyes; loss of appetite, liver palpable up to the umbilicus, hard and not tender. Jaundice +++, Urine-Bile salts +, Bile pigments +, Van den Berg reaction biphasic positive. Icteric index 58 units. One tablet of Liv.52 was given three times a day. The child expired after 12 days of treatment.

Case 7: Kamlesh  $-2\frac{1}{2}$  years - Male. Distension of the abdomen; loss of appetite, failure to gain weight, constipation, liver palpable 4 fingers below the costal margin, Jaundice +, urine bile salts +, bile pigments +. One tablet of Liv.52 was given t.d.s. After one month of treatment there was no jaundice, urine was clear and liver palpable three fingers. After two months of treatment the patient was all right except that the liver, palpable only one and a half fingers below the costal margin and not so firm. There was general improvement in weight and appetite.

Case 8: Munni - 5 years - Female. Distension of the abdomen, oedema over the feet, weakness, loss of appetite, liver palpable three fingers below the costal margin, ascites, spleen palpable one finger. Blood count showed slight anaemia. One tablet of Liv.52 was given 4 times a day. Fifteen days after starting the treatment ascites went on decreasing gradually.

## **SUMMARY**

The study was undertaken with a view to find out the clinical response to the drug Liv.52 (The Himalaya Drug Co.) in cases of Cirrhosis of the Liver in children.

Liv.52 tablets have been clinically tried in 8 cases of Cirrhosis in children and was found to be very effective without any toxic side effects and complications. All the cases except one responded very well to the drug.

It is to be regretted that the exact therapeutic action of this drug in Cirrhosis is still obscure.

## **REFERENCES**

- 1. Bockus, H.L. Gastroenterology Philadelphia W.B. Saunders Co. Vol. 3, 1946.
- 2. Connor, C.L. Quart. J. Studies in Alcohol 195-208 (June), 1940.
- 3. Laennec, R.J.H. *Troite de lansulation*. Paris J.S. Clande, 1926 Vol. 2, p. 96.
- 4. Rokitansky, C. *A manual of Patholgoical Anatomy*, London, Sydenham Society 1849 Vol. 2, p. 125, Atlas Plate 3.