

A Liver Manifestation; Hepatic Cirrhosis and its Management through Electro-Homoeopathy: An Overview

Ajit Singh^{1*} and Sanjay Mishra²

¹*Department of Electrohomoeopathy Pharmacy, Kings Herbal Research Laboratories, Jalandhar-144023, Punjab- India.*

²*Regional Food Research and Analysis Centre (RFRAC), Udyan Bhavan Campus, 2, Sapru Marg, Lucknow- 226001, U.P., India.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Hepatic Cirrhosis is recognized by the formation of regenerative nodules in liver parenchyma bounded by fibrous septa consequent to chronic liver injury. Cirrhosis occurs because of necrosis of liver cells followed by fibrosis and nodule formation. The liver organization becomes abnormal and interferes with liver blood flow and function, and ultimately leads to portal hypertension and hepatocytic dysfunction. Chronic liver diseases represent a noteworthy health problem across the globe with liver cirrhosis. The exact prevalence of cirrhosis worldwide was obscure due to the clinical continuum ranging from indolent, asymptomatic to complete liver decompensation. Thus, continual inputs through a series of research considering various conventional and certain earlier techniques in background, along this thrust medical area, led an emerging and medically most precise an alternate technique, namely, Electro-Homoeopathic Medical Science that has been currently in practice by several practitioners in India revealing fascinating outcome without any

*Corresponding author: E-mail: drajit_7@hotmail.com;

significant post therapeutic physiological and/or biochemical side effect as well as risk factor. The efficacy of electrohomeopathy treatment for liver disease was successfully evaluated over a 60-day period based on improved subjective parameters and hematological investigations. The result of this survey provides new information on the development and establishment of an increasingly advanced version of the electro-homeopathic system for a precise diagnosis revealing a specific root cause and smooth-running management of Liver Disease as well as its manifestation.

Keywords: Clinical continuum; electro-homeopathy; fibrosis; liver cirrhosis; hepatocytic dysfunction; liver manifestations.

1. INTRODUCTION

1. INTRODUCTION

Modern science explains ,Liver fibrosis is dynamic change in normal wound healing response to different fibrogenic stimuli leading to activation and trans differentiation of liver stellate cells to myofibroblasts that leads to excessive synthesis and deposition of extracellular matrix components like collagen (type I and type III) accompanied by deformation of normal hepatic vasculature, hepatocyte dysfunction, irreversible liver injury, complications, and result in mortality [1]. Cirrhosis represents the common pathway for chronic liver diseases [2-10]. The progression of liver injury to cirrhosis may take place over weeks to years. Patients with hepatitis C may have chronic hepatitis for as long as 40 years before progressing to cirrhosis. Various types of hepatic injury are marked by fibrosis, defined as an overload deposition of the components of the extracellular matrix (collagens, glycoproteins, and proteoglycans) within the liver. Besides fibrosis, the complications of cirrhosis consist of portal hypertension, ascites, hepatorenal syndrome and hepatic encephalopathy. A few patients with cirrhosis are asymptomatic and have a rationally normal life expectancy while some individuals have severe symptoms of end-stage liver disease and narrow chance for survival, (when the cause is not diagnosed in proper time.)

According to the concept of electrohomeopathy, liver cirrhosis is the result of a "vitiation" which can occur either because of blood, lymph or both. It had been noticed that a person belongs to the Sanguine and Mixed constitution are more prone in comparison to persons of lymphatic constitution [11-12]. General signs and symptoms may come up from decreased liver synthetic function (coagulopathy), reduced detoxification capabilities of the liver (hepatic encephalopathy) or portal hypertension (variceal

bleeding) [13-15]. The present overview is the assemblage of overall studies aiming at pathophysiology, symptoms and diagnosis of 'Liver Cirrhosis' as well as its management through Electro-Homeopathy under following major heads:

2. ELECTROHOMOEOPATHY PATHOPHYSIOLOGY

Electrohomoepathy describes that Disease is the result of a Vitiation in the body so, in the absence of Vitiation, the liver plays a vital role in the synthesis of proteins such as albumin, clotting factors, harmonizing factors and detoxification and storage of vitamin A. It is involved in the metabolism of lipids and carbohydrates. Once the vitiation occurred and not managed in time, it leads to hepatitis and steatosis and later in the stage, cirrhosis. Vitiation is also a cause and provides a medium for many microorganisms to develop and reproduce in tissues that contribute more to the propagation of infection [16]. Histopathologic results revealed, in cirrhosis a development of scar tissue replaces normal parenchyma and checks portal blood flow to the organ and affects normal function. Research in modern science reveals the imperative role of the stellate cell in the development of cirrhosis that generally stores vitamin A [17]. Hepatic parenchyma injuries due to the inflammation activate stellate cell, ultimately increases fibrosis followed by obstruction of the blood circulation. The formation of fibrous tissue bands separate hepatocyte nodules, which replace the entire liver architecture [18,17], leading to decreased blood flow throughout (Fig. 1).The spleen becomes congested, and enlarged resulting in its retention of platelets, which are needed for normal blood clotting. Portal hypertension is responsible for the most severe complications of cirrhosis. In addition, stellate cells secrete TGF beta 1 that leads to a fibrotic response and proliferation

of connective tissue. Moreover, it secretes TIMP1 and TIMP2, naturally occurring inhibitors of matrix metalloproteinases, which prevent them from breaking down the fibrotic material in the extracellular matrix. The pathologic features of cirrhosis includes regenerating nodules separated by fibrous septa and loss of the normal lobular architecture within the nodules which leads to decreased blood flow throughout the liver. Spleen congestion leads to hypersplenism and increased sequestration of platelets [19]. Two types of cirrhosis have been described based on the underlying cause (a) Micro nodular cirrhosis in which regenerating nodules size is about less than 3 mm and the involvement of entire liver and often caused by alcohol induced damage or biliary tract disease. (b) Macro nodular cirrhosis in which the variable size nodules are formed and normal acini is seen within the larger nodules and it is often associated with chronic viral hepatitis.

3. SYMPTOMS AND COMPLICATIONS OF CIRRHOSIS

In early stage of cirrhosis there are generally no symptoms. As the Vitiatio Progressive, condition causes symptoms like:-

Soreness: in the abdomen.

Gastrointestinal: bleeding, dark stools from digested blood, fluid in the abdomen, nausea, passing excessive quantities of gas, vomiting of blood, or water retention.

Whole body: tiredness, loss of appetite or decreased hormone production.

Skin: a web of blood vessels swollen into the skin or yellow skin and eyes.

Weight: Gain or lose weight.

Also common: bleeding, breast augmentation, bruising, dark urine, itching, mental confusion, muscle weakness, shortness of breath, swelling of extremities, or swollen veins in the lower oesophagus. and various complications are as (a) Impaired metabolic and endocrine functions (b) Splenomegaly due to portal hypertension; (c) Haematological derangements such as thrombocytopenia; (d) Gastrointestinal varices; (e) Ascites a severe complication due to portal hypertension; (f) Spontaneous bacterial peritonitis; (g) Hepatocellular carcinoma; (h) Hepatic encephalopathy; (i) Hyponatremia; (j) Hepatorenal syndrome; (k) Spider angiomas due to decreased oestradiol degradation in liver [20].

4. ELECTROHOMOEOPATHY DIAGNOSIS

Having past experiences research studies on various conventional and certain earlier diagnostic tools, the diagnosis was accomplished as per the concept of "Electrohomoepathy", in which it is ascertained on priority that the patient belongs to which type of Vitiatio. (Blood, Lymph or Both) [13] [20-23]. It was found mostly the patients suffering with Liver organ disorders and its manifestations belong to the 'Vitiatio' of Blood or both and patients suffered with 'Vitiatio' of Lymph were low in number with liver problems and its manifestation as compared to "Vitiatio of Blood" [24-25]. Therefore, understanding the type of "Vitiatio" was the first step of diagnosis in electro-homeopathy which is confirmed on the basis of the patient's constitution. After this, attention is brought to notice the symptoms of the problem and makes the other clinical examinations according to the clinical diagnostic methodology. The symptoms gave an indication of the involvement of the organ system that was sick due to the impact of the diagnosed "Vitiatio". This effect of vitiatio was verified by studying the patient's iris analysis as shown below for liver manifestations

To verify the impact of Vitiatio on Liver, Electrohomeopathy centers [Table-2] could often take help from the modern diagnostic tools as below:-

(a) Serological: Aspartate aminotransferase (AST), Alanine transaminase (ALT), Alkaline phosphatase (ALP), bilirubin, prothrombin time, Gamma-glutamyl transpeptidase, albumin, immunoglobulins principally IgG, creatinine level, sodium level, Low sodium reflect severe liver disease as a consequence of excessive diuretic therapy or malfunctioning free water clearance. Albumin level is reduced below 28 g/l, serum creatinine concentration increased above 130 $\mu\text{mol/l}$ and the prothrombin time is extended.

(b) Histological: Liver biopsy is measured as gold standard for diagnosis and sequential histological grading of fibrosis and to corroborate the type and severity of hepatic disease. Stains are required for copper and iron analysis to verify diagnosis of Wilson's disease or iron overload and immunocytochemical stains detect viruses, bile ducts and angiogenic conformation.

(c) Radiological Techniques

(i) Ultrasonography: To identify changes in size, shape of the liver and hepatocellular carcinoma. Fatty change and fibrosis produce towering level of echogenicity. In cirrhosis, there may be deformation of the arterial vascular architecture and marginal nodularity of the liver surface. The patency of the portal and hepatic veins are assessed. Elastography is used for diagnosis and follow up observing to avoid liver biopsy.

(ii) Computerized Tomography Scan (CT Scan): Arterial phase contrast enhanced scans are important in the detection of hepatocellular carcinoma. This technique reveals the picture of hepatosplenomegaly and collateral vessels enlargement below the anterior abdominal wall due to portal hypertension and dilated collaterals in liver disease.

(iii) Endoscopy: For detection and treatment of portal hypertensive gastropathy and varices.

(iv) Magnetic Resonance Imaging (MRI) Scan: For diagnosis of benign tumours (haemangiomas). Magnetic resonance angiography picturizes the vascular anatomy and Magnetic resonance cholangiography reveals the biliary tree.

5. ELECTROHOMOEOPATHY MANAGEMENT ALTERNATE TO MODERN MEDICINE MANAGEMENT OF LIVER CIRRHOSIS

There have been certain ways of managing Liver Cirrhosis in **modern science** : (i) Nutrition and Exercise: Debilitated patients have been reported to get benefit from balanced nutrition

concomitant with formal exercise program supervised by a physician [26-28]; (ii) Vaccination: Patients with chronic liver disease have been shown to receive vaccination to protect against hepatitis A and as a protective measure, vaccination against influenza and pneumococci; (iii) Analgesics: The use of analgesics in patients with cirrhosis can be problematic. Most hepatologists permits the use of acetaminophen doses of up to 2000 mg/day in patients with cirrhosis. NSAID use in patients with cirrhosis may cause gastrointestinal bleeding. Patients with cirrhosis are at risk for NSAID induced renal insufficiency because of prostaglandin inhibition and impairment in renal blood flow; (iv) Drug hepatotoxicity in the patient with Cirrhosis: Medications associated with drug-induced liver disease include NSAIDs, Isoniazid, Valproic acid, Erythromycin, Amoxicillin/ clavulanate Ketoconazole, Chlorpromazine and Ezetimibe. Statins are frequently associated with mild elevations of alanine aminotransferase level and should be used safely in patients with chronic liver disease. Besides, an amino glycoside antibiotic has been reported to cause nephrotoxicity in patients with cirrhosis and should be avoided. Low dose estrogens and progesterone appear to be safe in the setting of liver disease [13]; (v) Liver transplantation: Liver transplantation has emerged as an important strategy in the allopathic surgical management of patients with cirrhosis [13], providing rather better results as compared to previous four therapies, although with a hope of establishing most sensitive, précised and without any significant side effect (physiological and biochemical), currently **electro-homeopathic therapy** for management of 'Liver Disease' has been in popular practice. The brief account of this vital system is ascribed as follows:

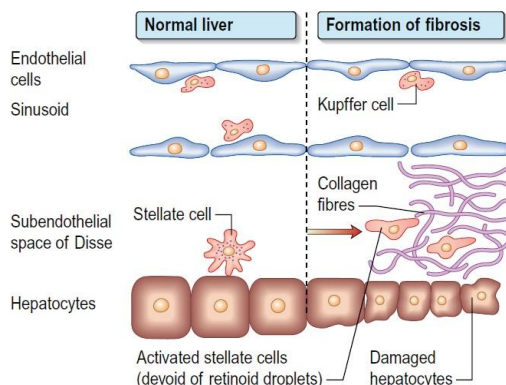


Fig. 1. Pathogenesis of fibrosis

[Source: Ref. [19]Activation of the stellate cell is followed by proliferation of fibroblasts and the deposition of collagen.

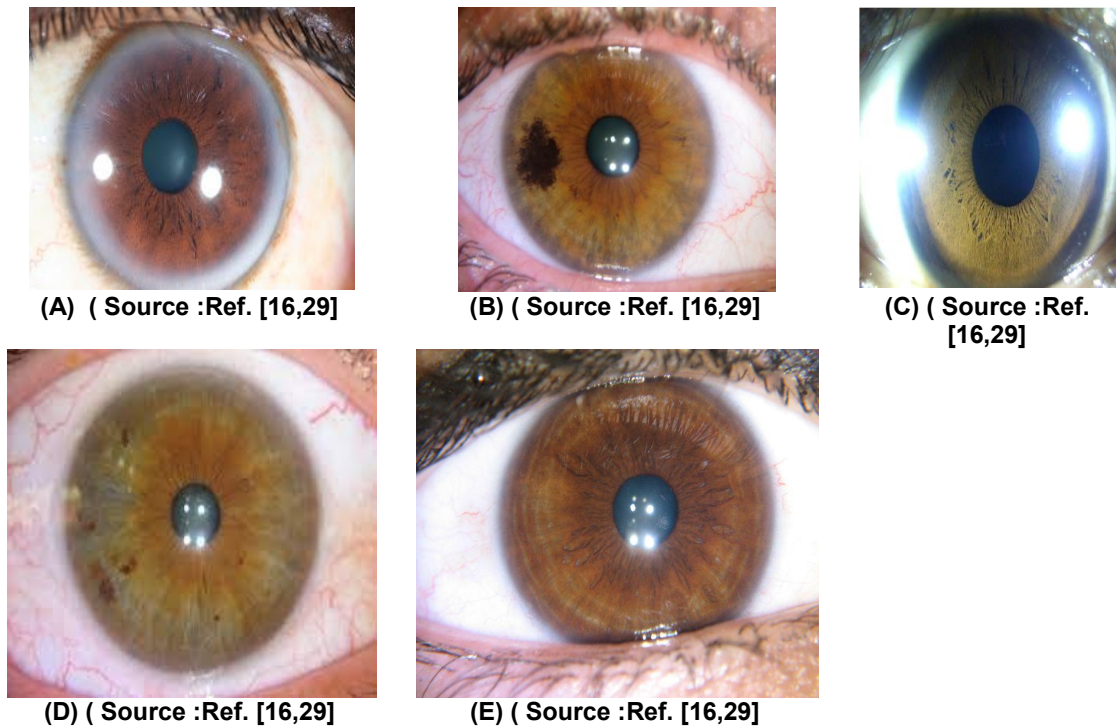


Fig. A. Sodium ring indicating Metabolic Liver dysfunction with Multiple Hormone deficiency or Imbalance

Fig. B. Brown pigment with circulatory ring Indicating Liver manifestation and venous return of the blood is hampered

Fig. C. Scurf ring indicating skin conditions

Fig. D. Melanin Liver Pigment

Fig. E. The lacuna relates to the gall bladder located at 40° in the right eye and is small

5.1 Electro-homoeopathic Management of Liver Disease and its Manifestations

Methodology: To treat the impact of Vitiations on Liver following slightly modified line of Electro-homoeopathy treatment [30-31] was adopted as:

- (i) A constitutional remedy prescribed to deal with the kind of Vitiations involved.
- (ii) A liver remedy prescribed to recover from disturbed functional and structural changes.
- (iii) An external application used in the form of compresses and ointments to enhance the synergistic effect of the given formulations as per the Polarity of Body (Figure F)

[Table-1] to treat the patients belong to different Constitution and types of Vitiations: Further, the dose was prescribed as per following rules of Law of Dosology laid down by the Count Ceasre Mattei ,Inventor of Electrohomoeopathy [27,28,30]:

- (i) Dose must be inversely proportional to the Gravity of a disease “which means, if the roots of disease (Vitiations) and its manifestations are chronic than dose must be given in least amount by making the lighter dilution of the prescribed medicine and Vice versa;
- (ii) More the remedy is diluted more frequently it must be repeated i.e. “a litre dilutions must be repeated frequently in compare to the higher dilutions.

Overall, the clinical treatment prescribed at the 15 electrohomeopathy health centers [Table 2] for diseased liver followed the following pattern

This Concept of Electrohomoeopathy medicine dosology assisted in providing miraculous results while treating the chronic liver disease and its acute manifestations like jaundice, disturbed

LFT, portal hypertension, esophageal varices, gall bladder Colic, itchy skin, ascites etc.

6. RESULTS AND DISCUSSION

There was a significant improvement in the health of the patients and his sufferings (Highlight data in the table). It was observed many patients belonging to this disease to fall-in the age group of 35 to 65 and was mostly men as compared to women (Table 2) belong to three different types of constitution and types of Vitiatio. (Table 1).

The efficacy of the Electro-homoeopathy treatment for Liver Disease was evaluated in the Electromoeopathy Health centers over a period of 60 days based on improvement in the subjective parameters and blood investigations of modern diagnostic tool [11] [31-33]. The cytokine level in most of the patient starts to normalize within the 30 to 40 days of treatment that result also in balancing the protein loss and

thus reducing the body oedema. Liver enzymes get balanced too except the Alkaline Phosphatase (ALP), which takes more time to come back into normal range. Never-the-less, level of Lactate Dehydrogenase (LDH) should also be considered as one of the potential marker enzymes signifying the biochemistry of liver in view of justifying the affinity and efficacy of the Electro-homoeopathy treatment for Liver Disease.

While analyzing the patients, the maximum benefit was observed in the following complaints: Loss of appetite, restlessness, itching and balancing of Liver Enzymes and Cytokine level, concluded to be in the range, 70-80%, reflecting resemblance to the outcome of the study on acute toxicity and hepatoprotective activity against CCl₄ induced toxicity of scrofoloso 5 (S5) and livome electrohomoeopathic herbal preparations [2] immediate recent studies [30-31] in terms of affinity and efficacy of Electro-homeopathic management of Liver Cirrhosis.

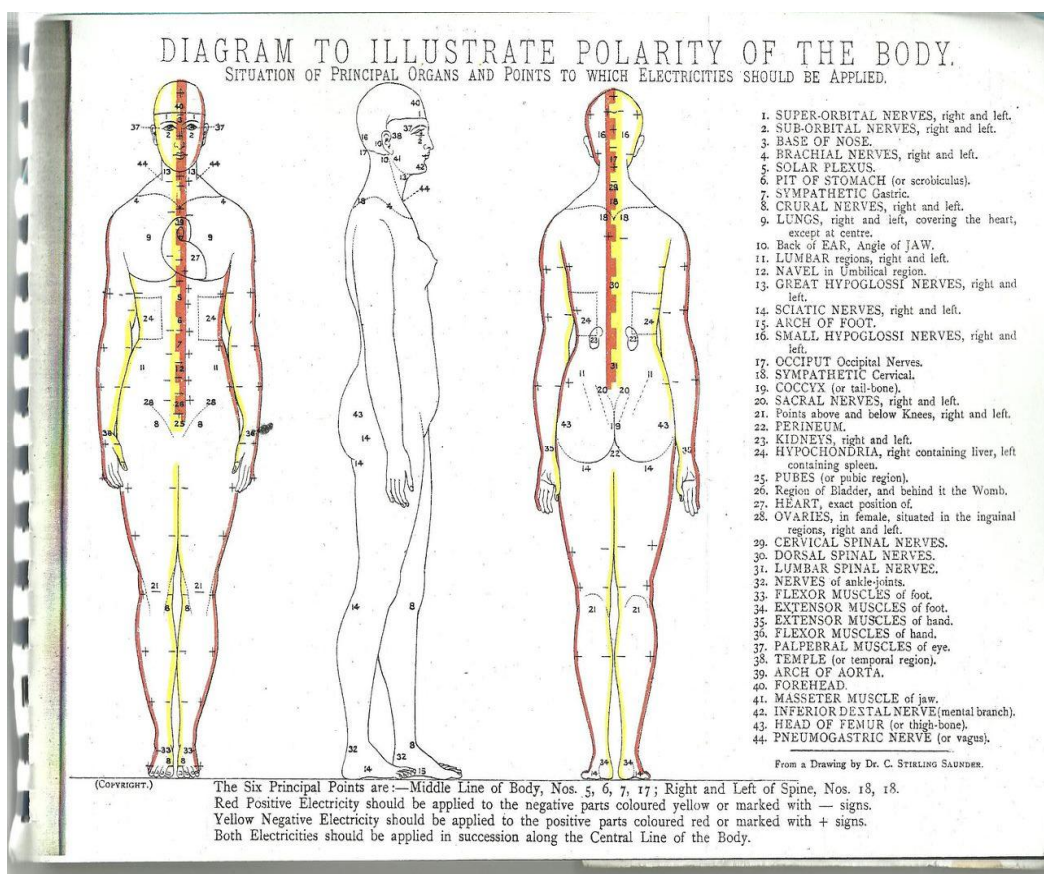


Fig. 3 (F); Diagram to illustrate polarity of the body Source: Ref. [12]

Table 1. (Prescription of Electrohomeopathy treatment for Liver and Its Manifestations)

Constitutional/Vitiation Remedies for patients		Vitiated Organ and its Manifestation Remedies		External applications for instant relief and to support the Basic treatment in the form of compress. (As per Figure-2)		
Lymphatic Const.	S1	Liver and Gall Bladder	S9	Point No.	Body Area (Fig-2)	Remedy
Sanguine Const.	S2/A2	Portal hypertension	A2 /BE	24	Hypochondria Left (Spleen) Right (Liver)	C5/F2
Mixed Const.	S1/A2/C1	Melena/constipation	A2+C5+GE Slass Laxative	23	Kidneys (Rt and Lt)	RE
		Ascites	S6/C6	44	Pneumogastric Nerve	YE
		Thrombocytopenia	A3+S1+F1	27	Heart	RE/BE
		Fever Followed by Chills	L1+S10	30	Dorsal spinal Nerves	RE/YE

Table 2. Electrohomeopathic clinical survey of fifteen EH Clinics of India Practicing on Liver Cirrhosis patients (Men and Women) Involving three types vitiation in patients

S.No.	EH Clinic Address	EH Physician's Name	Number of Patients Attended (2015-2020)	Patients' Age Groups	Constitution Types Of patients		Type of Vitiation in Patients	
1.	Rezru Electrohomeopathy Health Centre, Jammu, Vill- Khandwal ,Near Govt Middle School	Dr.Suresh Kumar Mob-9419608951	20 20 (Cirrhosis of Liver)	40-65	No.	Types	No.	Types
					15	Sanguine	15	Blood
					03	Mixed	03	Blood and Lymph
					02	Lymphatic	02	Lymph
2.	Puja Clinic Bano Recedenc Kedari Nager galli no 8 near Oxford Comfort, Wanwdi, Pune – 411040, Maharashtra	Dr Shilpa Patil Mob-9168915294	30 (Liver Disease and its manifestation)	40-60	No.	Types	No.	Types
					28	Sanguine	28	Blood
					02	Mixed	02	Blood and Lymph
3.	Shri Gajanan Electrohomeopathy Clinic,	Dr. Virendra Girase	40 (Liver Disease and its manifestation)	35-50	No.	Types	No.	Types
					25	Sanguine	25	Blood

S.No.	EH Clinic Address	EH Physician's Name	Number of Patients Attended (2015-2020)	Patients' Age Groups	Constitution Types Of patients	Type of Vitiation in Patients		
	Nakane Road, Dhule-424002, Maharashtra	Mob-9922119220			15	Mixed	Blood and Lymph	
4.	Ayush clinic Main road Bhiwapur Dist Nagpur (Maharashtra) 441201	Dr. K.B Kakde Mob- 9545499488	30 (Liver Disease and its manifestation)	40-60	No. 25 05	Types Sanguine Mixed	No. 25 05	Types Blood Blood and Lymph
5.	Mahi Chiktasalaya , 1st Floor, Prathma UP Grameen Bank, Near Shabir Ground, Badaun - 243601 Uttar Pradesh	Dr. Sanjeev Kumar Shakya Mob- 9458844925	50 (Liver Disease and its complication)	50-65	No. 30 20	Types Sanguine Mixed	No. 30 20	Types Blood Blood and Lymph
6.	Sahara clinic Somavar peth,chikodi (Karnataka) 591201	Dr. Nisarhmed Ammangi Mob- 9448420368	45 cases of Liver and its manifestation	30-60	No 30 10	Types Sanguine Mixed	No. 30	Types Blood Blood and Lymph
7.	EH Herbal Clinic Girish Market Birla Coloney patna (Bihar) 801505	Dr. Amar Kant Kumar Mob- 8179654917	15 cases of Liver and its manifestation	45-55	05 No, 15	Lymphatic Types Sanguine	No. 15	Types Lymph Types Blood
8.	Gurudeo EH Research Centre, A/P-Khambada Tal-Chimur Dist. Chandrpur (Maharashtra) 442904	Dr. Gopichand Gajbhe Mob- 9403300509	25 cases of Liver and its manifestation	50-60	No. 20 05	Types Sanguine Mixed	No. 20 05	Types Blood Blood and Lymph
9.	Sanjeevani EH Chikitsalaya Camp Road Malegaon dist Nasik (Maharashtra) 423202	Dr. Shivdas Pagar Mob-9881991150	10 cases of Liver and its manifestation	45-55	No. 09 01	Types Sanguine Mixed	No. 09 01	Types Blood Blood and Lymph
10.	Shir EH Research centre	Dr. Amit Pati	15 cases of Liver	50-55	No.	Types	No.	Types

S.No.	EH Clinic Address	EH Physician's Name	Number of Patients Attended (2015-2020)	Patients' Age Groups	Constitution Types Of patients	Type of Vitiation in Patients		
	Loog Jani Galli Kupwad Dist- sangli (Maharashtra) 416436	Mob- 9822878901	and its manifestation		13 02	Sanguine Mixed	13 02	Blood Blood and Lymph
11.	Chander Nature E/H Clinic. Sarna Nehar Pathankot Punjab-145025	Dr Lalit Chander Mob- 92179 69139	20 cases of Liver and its manifestation	40-60	No. 10 10	Types Sanguine Mixed	No. 10 10	Types Blood Blood and Lymph
12.	Gayatri Electrohomoeopathic and Iris diagnostic centre Chakrota road , Behat ,U.P	Dr Kalyan Saini Mob-9917978434	10 cases of Liver and its manifestation	50-60	No. 04 06	Types Sanguine Mixed	No. 04 06	Types Blood Blood and Lymph
13.	Siwan advance Electro homoeopathic health care centre, Adress- Bendusar buzurg, Badharia Road, Siwan (Bihar) 841227	Dr. Kanhaiya sharma	20 cases of Liver and its manifestation	25-60	No. 15 04 01	Types Sanguine Mixed Lymphatic	No. 15 04 01	Types Blood Blood and Lymph
14.	Advance Electrohomoeopathy health care center, Gorakhpur road nikat purani lohiawa pul kasia kushinagar (u.p)	Dr Raghavendra Singh Mob-97950 21159	50 cases of Liver and its manifestation	40-60	No. 30 17	Types Sanguine Mixed	No. 30 17	Types Blood Blood and Lymph
15.	Electro homeopathic clinic In front of allahabad bank Shiwala mahant Mirzapur -Up -231001	DR. MOHD ASLAM Mob-70075 28560	20 cases of Liver and its manifestation	30-50	03 No. 15 05	Lymph Types Sanguine Mixed	03 No. 15 05	Types Blood Blood and Lymph

7. CONCLUSION

Hepatic Cirrhosis represents the common histologic pathway for a diversity of chronic liver diseases. The injury to hepatocytes causes liver dysfunctions. In view of progression of affinity and sensitivity of therapeutic practice applying Electro-homeopathic technique has been shown to reveal fascinating outcome in terms of comparatively fast, sensitive, precise and safe medical technique without any noticeable post therapeutic physiological and/or biochemical side effects. Besides, critical comments/suggestions from relevant readers would be useful in further upgrading of Electro-homeopathic management of Liver Cirrhosis.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Harshmohan The liver, biliary tract and exocrine pancreas. Text Book of Pathology 4th Edition, Jaypee Brothers Medical publishers (P) Ltd., New Delhi. 2002;569-630.
2. Sureshbabu P, Krishna V, Singh A, Rameshbabu K, Venkatesh PK. Evaluation of acute toxicity and hepatoprotective activity against CCl₄ induced toxicity of scrofoloso 5 (S5) and livome electrohomeopathic herbal preparations. European J Medicinal Plants. 2015;5(3):220-228.
3. Materia Medica. Practice of Medicine. By Dr. Debasish Kundu (IBPS, New Delhi, India); 1993.
4. Practice of Medicine by Dr. N.L. Sinha. 1929;1:2 . (1929, Revised 2015) Kanpur-UP.
5. Practice of Medicine by Dr. N.L. Sinha; 1929;4. (1929, Revised 2015), Kanpur-UP
6. Practice of Medicine by Dr N. L. Sinha. 1929;4. (1929, Revised 2015) Kanpur-UP
7. Practice of Medicine by Dr. Manju Srivastva Agra –UP. 1998;1.
8. Practice of Medicine by Dr. Manju Srivastva Agra- UP. 1998;2.
9. Kansa K. Medical alchemy in the 19th century: Theoretical and Practical foundations of Electrohomeopathy. Mäetagused. Hüperajakiri. 2020;78:111-130.
10. Gioia S, Nardelli S, Ridolla S, Riggio O. Causes of management of non-cirrhotic portal hypertension. Current Gastroenterology Reports. 2020;22: Article no. 56.
11. Principles of Electrohomeopathy By Count Ceasre Mattei Punjab; 2009.
12. Stepping Stones of Electrohomeopathy By Dr. A. J. L Gliddon. New Delhi; 2009.
13. Nusrat S, Khan MS, Fazili J, Madhoun MF. (2014). Cirrhosis and its complications: Evidence based treatment. World Journal of Gastroenterology. 2014;20(18):5442-5460.
14. Tiwari AKM, Mahdi AA, Mishra S. Assessment of liver function in pregnant anemic women upon oral iron and folic acid supplementation. Journal of Gynecology, Obstetrics and Human Reproduction. 2018;47(2): 45-49.
15. Bilal BY, Rozina A, Saima K, Junaid M, Farhan N, Maham T. Fulminant hepatic failure (FHF) due to acute hepatitis C. Pak J Med Sci. 2015;31(4): 1009 -1011.
16. Electrohomeopathy and Iridology by Ajit Singh and John Andrews. 2021;27. ISBN 978-9916-4-0603-8.
17. Puche, JE, Saiman, Y and Friedman SL. Hepatic stellate cells and liver fibrosis. Comprehensive Physiology. 2013;3(4): 1473–1492.
18. Iredale JP. Cirrhosis: new research provides a basis for rational and targeted treatments. BMJ. 2013;327(7407):143-147.
19. Kumar P, Clark M. Disease. Kumar & Clark's Clinical Medicine. 7th Edition, Elsevier Limited, Spain. 2009;345-347.
20. Cameron GR, Thomas JC, Karunarathe, WAE. The pathogenesis of liver injury in carbon tetrachloride and thioacetamide poisoning. J Path Bact. 1996;41:297-300.
21. Grant A, Neuberger J. Guidelines on the use of liver biopsy in clinical practice. Gut. 1999;45(4):1–11.
22. Udell JA, Wang CS, Tinmouth J, FitzGerald JM, Ayas NT, Simel DL. Does this patient with liver disease have

- cirrhosis? Journal of the American Medical Association. 2012;307(8):832–842.4
23. Boyd's Textbook of Pathology by AC. Ritchie, William Boyd; 2015.
 24. Diagnosis and Symptoms by Dr. N. L. Sinha (1921 Revised 2015) Kanpur-UP
 25. A Personal Experience by Dr. N. L. Sinha (1921 Revised 2015) Kanpur –UP
 26. O'Shea RS, Dasarathy S, McCullough AJ. Alcoholic liver disease. Am J Gastroenterol. 2010;105(1):14-32.
 27. McPhee SJ, Gary D. Chapter 14: Liver Disease. Pathophysiology of Disease: An Introduction to Clinical Medicine 6th edition. Mc Graw-Hill Medical, New York; 2010.
 28. Berzigotti A. Advances and challenges in cirrhosis and portal hypertension. BMC Medicine 15: Article no. 2017;200 DOI 10.1186/s12916-017-0966-6.
 29. Available:http://repository-tnmgrmu.ac.in/10169/1/460115918rosy_ayda.pdf
 30. Sureshababu P, Siddalingamurthy E, Shashidhara NL, Sooryanarayanarao B. Bhavya DC. Eur J Med Plants. 2020;31(8):31-47.
 31. Puri P, Dhiman RK, Taneja S. Tandon P, Merli M, Anand AC, Arora A, Acharya SK., Nutrition in chronic liver disease: Consensus statement of the Indian National Association for Study of the Liver. J Clin Exp Hepatol. 2021;11(1):97-143.
 32. A Treatise of Electrohomoeopathy Pharmacy By Dr. Debasish Kundu and Dr. Ajit Singh (2005, EHDA, Garshankar, Punjab, Reprint 2017 Originals, Delhi); 2005.
 33. A Text Book of Electrohomoeopathy By Dr. A. P. Muraya Kolkatta; 2020.

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