



PROFILE OF PATIENTS WITH CHRONIC LIVER DISEASE IN SALEM - TAMILNADU

Dr.Rajkumar Solomon T	Department of Medical Gastroenterology, Government Peripheral Hospital Anna nagar, Chennai -600102, Tamil nadu, India
Dr.Krishnan C *	Department of Medical Gastroenterology, Govt Mohan Kumaramangalam Medical college, Salem-636030, Tamilnadu, India - Corresponding author
Dr. Kandasamy alias Kumar. E	Department of Medical Gastroenterology, Govt Mohan Kumaramangalam Medical college, Salem-636030, Tamilnadu, India

ABSTRACT *Aim:* To present the clinical profile of Chronic liver disease patients who attended the department of Medical gastroenterology, Government Mohan Kumaramangalam Medical college a tertiary referral centre in Salem, Tamilnadu, India.

Methods: Study Design: Descriptive study. Period of study: July 2012 to June 2013. Data of 142 consecutive patients with chronic liver disease were analysed. A detailed history was taken including alcohol consumption, diabetes mellitus, previous surgery, and past blood transfusion. basic work up was done including blood sugar, liver function tests, HbsAg, HCV antibody testing and ultra sound abdomen. Wilson disease work up was done in patients less than 40 years.

Results: 111 patients out of 142 (78.17%) had decompensated liver disease and the rest (21.83%) had compensated liver disease. There were 93 males and 49 females. Age distribution was between 11 and 70 years. All (82) but 11 male patients had alcohol related chronic liver disease. (88.17% males). HCC was present at the time of presentation in 3 patients. Two were alcoholics (of which one was Anti HCV positive also). and other was a Hbs Ag positive 11 year old boy. The 11 year old boys' mother tested positive for HBsAg. Two patients had Wilson disease and one had diabetes mellitus. All the females were negative for HBV and HCV; no one was dependant on alcohol.

Conclusion: Chronic Liver disease of the liver is a common hepatic disorder encountered in a tertiary care centre. Alcohol is the primary etiological factor in our study. Women probably had cryptogenic cirrhosis.

KEYWORDS : Chronic liver disease, Salem.

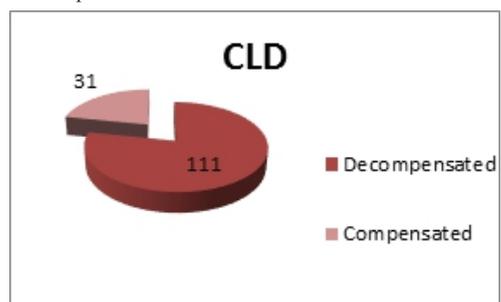
Introduction: Chronic liver disease and its complications constitute a major part of gastroenterological out patients as well as inpatients in any large hospital. The disease is well known for the high degree of morbidity and mortality^[1] Chronic liver disease was generally divided into alcoholic and post hepatitis varieties. After the advent of newer techniques and investigation methods the classification of the chronic liver diseases has been improvised to a great extent. After the establishment of comprehensive management of chronic hepatitis B and C definitive diagnosis and etiological analysis of chronic liver disease has become mandatory, so that a decision regarding the use of antiviral agents can be made. Another problem, which is assuming importance, is co-existence of more than one hepatotropic virus. While the co-infection or superinfection of HBV and Hepatitis D Virus (HDV) is well studied, the significance of the presence of viral markers of HBV and HCV in the same patient is not yet clear. Which agent is responsible for the observed liver damage and how the presence of one virus alters the biological behavior of other, are questions which have already caught the attention of hepatologists worldwide. The frequent demonstration of viral markers in alcoholic liver disease (ALD) raises fresh dilemmas^[2]. Golding et al., stress the importance of establishing the presence or absence of Hepatitis viruses before dubbing the case as Alcoholic liver disease. Conditions which have been earlier passed off as Cryptogenic liver cirrhosis or as ALD need to be reevaluated now in the light of prevalence of high degree of viral markers in them. Alcohol is one of the most openly available and generally consumed mood-altering substances. Patterns of intake vary among different geographic regions. Men who drink more than 80 g of ethanol per day are at substantial risk for development of clinical liver disease. Liver disease in women who drink excessively is two to four times more likely to develop than in men who drink excessively. The risk of liver disease begins at relatively low levels of alcohol consumption (30 g/day), this finding has led to a general recommendation that the maximal safe level of ethanol consumption is 20 g/day of ethanol, or two "drinks" per day, even among those who ingest large amounts of alcohol (more than 60 g/day), serious liver disease develops in only approximately 1 in 10^[3] When disease occurs, it can take many forms, ranging from steatosis, to alcoholic hepatitis, to hepatic fibrosis or cirrhosis, because disease severity does not correspond to classic dose dependency, other factors are likely to play an important role in pathogenesis. These factors may be hereditary, environmental, or both. Hence analysis of the etiology as well as the clinical profile of the patients with chronic liver disease at regular intervals will be helpful in categorizing the patients and providing comprehensive expertise

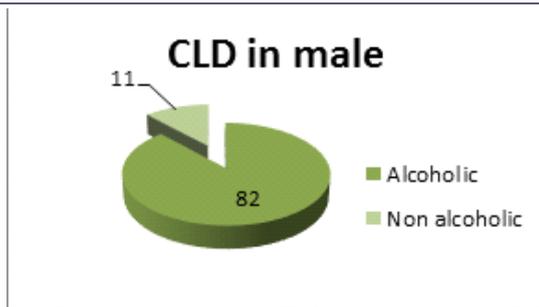
health care in tertiary care centres.

Aim of the study: To analyse the clinical profile of Chronic liver disease patients attending the Department of Medical gastroenterology, Government Mohan Kumaramangalam Medical college a tertiary referral centre in Salem, Tamilnadu.

Methods: Study Design: Descriptive study. Study period: July 2012 to June 2013. Data of 142 consecutive patients with chronic liver disease attending the Liver clinic of the Department of Medical gastroenterology, Government Mohan Kumaramangalam, Salem were analysed. A detailed history was taken including alcohol consumption, diabetes mellitus, previous surgery, and past blood transfusion. basic work up was done including blood sugar, liver function tests, HbsAg, HCV antibody testing and ultra sound abdomen. Wilson disease work up was done in patients less than 40 years.

Results: Of the 142 patients analysed 111 patients (78.17%) had decompensated liver disease and the rest 21.83% had compensated liver disease. There were 93 males and 49 females. Male/Female ratio was 9. Age distribution was between 11 and 70 years. All but 11 male patients had alcohol related chronic liver disease. (88.17% males). HCC was present at the time of presentation in 3 patients. Two were alcoholics (of which one was Anti HCV positive also). and other was a Hbs Ag positive 11 year old boy. The 11 year old boys' mother tested positive for HBsAg. Two patients had Wilson disease and one had diabetes mellitus. All the females were negative for HBV and HCV; no one was dependant on alcohol.





Discussion:

Chronic liver disease or cirrhosis occupies an important place in the tertiary care hospital which needs to be addressed. Alcohol related chronic liver disease occurrence is on the rise in this part of the country and mostly among male patients. (88.17%) Studies have focused on polymorphisms in ADH, CYP2E1, and ALDH which together cause a wide range of ethanol elimination rates. Asians who inherit the slower allele, ADH2*, tend to consume more alcohol and experience more liver disease than those with ADH2*2. Unlike ADH, the CYP2E1 allele associated with liver disease is the one that encodes the more active enzyme. For ALDH, the mutant allele ALDH2*2 has been implicated in the development of alcoholic liver disease. ALDH2*2 homozygotes have a strong aversion to ethanol caused by acetaldehyde toxicity. Among patients who have alcoholic liver disease, those with TNFA-A had twice the frequency of steatohepatitis of those without TNFA-A.^[4] In our study 82 male patients (88.17%) had features of alcohol related chronic liver disease. Women are more susceptible to serious alcoholic liver injury than men. They also exhibit a tendency toward disease progression even with abstinence. One theory implicates the reduced levels of gastric ADH in women as a causative factor. Accelerated alcoholic liver injury in women also may be related to gender-specific differences in fatty acid metabolism^[5].

Diet and Nutrition:

In human beings, however, alcoholic liver injury appears to be influenced strongly by nutritional status. Both undernutrition and overnutrition have been implicated as risk factors in the development of alcoholic liver disease. Obesity is now well recognized as an independent risk factor for hepatic steatosis and steatohepatitis. When alcohol consumption is superimposed on obesity, the risk of liver disease rises almost six fold.^[6]

Coexistent Viral Hepatitis and smoking:

18% to 25% of alcoholics are infected with the hepatitis C virus (HCV). In alcoholics with liver disease, the frequency of HCV infection is even higher. The combination of alcohol and HCV infection significantly accelerates the progression of liver disease over that seen with either insult alone. This association may be related to the effects of alcohol on HCV replication or on the host immune response to the virus. Cigarette smoking also has been shown to accelerate the progression of fibrosis in patients with alcoholic liver disease^[7] and smoking appears to accelerate disease progression in patients with HCV infection who drink heavily. In our study one patient was anti HCV positive and another was HBS Ag positive. Like HCV, hepatitis B virus (HBV) accelerates the progression of alcoholic liver disease. Epidemiologic surveys indicate that HBV infection hastens mortality in alcoholics. Cryptogenic cirrhosis: According to Caldwell SH et al, 70% of cryptogenic cirrhosis were female. 74% of them had history of obesity and/or diabetes^[8] In our study also all the females (49) were negative for viral markers and not dependent on alcohol. They were probably had cryptogenic cirrhosis but further investigations like serological markers for auto immune hepatitis and liver biopsy were essential to establish the diagnosis.

Conclusion:

Cirrhosis of the liver is a common hepatic disorder encountered in tertiary care centre. Alcohol is the primary etiological factor in our study. Women probably had cryptogenic cirrhosis.

References

1. Bosetti C, Levi F, Lucchini F, et al: Worldwide mortality from cirrhosis: An update to 2002. *J Hepatol* 2007; 46:827-39.
2. Feller A, Uchida T, Rakela J: Acute viral hepatitis superimposed on alcoholic liver cirrhosis: Clinical and histopathologic features. *Liver* 1985; 5:239-46.
3. Becker U, Deis A, Sorensen TI, et al: Prediction of risk of liver disease by alcohol intake, sex, and age: A prospective population study. *Hepatology* 1996; 23:1025-9.
4. Arteel G, Marsano L, Mendez C, et al: Advances in alcoholic liver disease. *Best Pract*

5. Res *ClinGastroenterol* 2003; 17:625-47.
6. Fuchs CS, Stampfer MJ, Colditz GA, et al: Alcohol consumption and mortality among women. *N Engl J Med* 1995; 332:1245-50.
7. Naveau S, Giraud V, Borotto E, et al: Excess weight risk factor for alcoholic liver disease. *Hepatology* 1997; 25:108-11.
8. Klatsky AL, Armstrong MA: Alcohol, smoking, coffee, and cirrhosis. *Am J Epidemiol* 1992; 136:1248-57.
9. Caldwell SH et al: Cryptogenic cirrhosis: Clinical characterization and risk factors for underlying disease. *Hepatology* 1999; 29: 664-669.