



SILENT LIVER DISEASES IN AUTOPSY CASES IN RIMS, RANCHI : 5 YEARS RETROSPECTIVE STUDY

Pathology

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ABSTRACT

The liver is a major organ in our body which is vulnerable to wide variety of metabolic, toxic, microbial, circulatory and neoplastic insults. There may be no definite sign and symptoms of chronic liver diseases and therefore, they may go undiagnosed or found incidentally. This study was to find out the prevalence of silent liver diseases. 183 liver autopsies specimens were assessed and 9 cases were excluded due to autolysis. The study showed that majority of cases had fatty change 32.95% followed by congestion 18.91% and normal liver 17.48%. Out of total 183 cases, Males were 147 and Females were 36. Incidence of liver diseases was higher in 4th - 5th decades. The commonest finding was fatty change in liver.

KEYWORDS

Chronic Liver Disease, Fatty Liver

I. INTRODUCTION

The liver is vulnerable to a wide variety of metabolic, toxic, microbial, circulatory, and neoplastic insults. The major primary diseases of the liver are viral hepatitis, non-alcoholic fatty liver disease, alcoholic liver disease, and hepatocellular carcinoma. Sometimes, the diseases are secondary to alcoholism, cardiac decompensation or extra hepatic infections.⁽¹⁾ There may be no prominent sign and symptoms of chronic liver diseases and therefore, they may go undiagnosed or found incidentally. The underlying causes of such chronic liver diseases usually vary based on age, sex, life style, socio-economic status and endemic infections. Alcohol is one of the major cause of such silent liver diseases. Alcohol abuse mainly causes three liver diseases- fatty change, hepatitis and cirrhosis.⁽²⁾ The main area of interest was to ascertain the silent liver diseases which were undiagnosed during life. The true incidence and prevalence of silent liver diseases are not well known. This is because liver histology is required as the gold standard for precise diagnosis and as it is a invasive procedure it is still not considered essential.

Autopsy called as "Ultimate Audit" remains the gold standard for identifying specific cause of deaths as it offers valuable insights into the accuracy of the earlier clinical diagnosis and can identify previously undiagnosed disease burden.⁽³⁾

II. MATERIAL AND METHODS

We analysed 183 specimens of liver of the deceased sent to the Pathology department of RIMS, Ranchi over a period of 5 years (2014-2019) and 9 cases were excluded due to autolysis. The autopsy reports were assessed and analysed. Basic demographic data such as age, sex, and medical history were recorded. The Gross and the histopathological findings were recorded. The specimen were fixed in 10% formalin, weighed and dimensions measured. Grossly examined for color, consistency, nodules and congestion.

III. OBSERVATIONS AND RESULTS

Table 1: Gross Findings

External surface	Nos.	Cut surface	Nos.
Yellow green	61	Nodular	17
Yellow brown	53	Greasy	76
Red brown	11	Nutmeg	32
Normal	58	Normal	58
Total	183	Total	183

Table 2: Liver weight and sex distribution

Liver wt in gms	Male	Female	Total
< 1000	16	1	17
1000-1500	44	24	68
1500-2500	87	11	98
Total	147	36	183

Table 3: Histopathological Findings

Age	Histopathological Findings														
	Fatty Changes			Cirrhosis			Congestion			Hepatitis			Malignancy		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0-30	13	3	16	2	0	2	0	0	0	0	0	0	0	0	0
31-40	9	2	11	4	0	4	2	1	3	1	0	1	0	0	0
41-50	14	4	18	5	0	5	10	2	12	1	0	1	0	0	0
51-60	15	4	19	2	0	2	2	1	3	5	2	7	2	0	2
61-70	4	1	5	5	1	6	5	1	6	4	1	5	3	0	3
71-80	2	0	2	0	0	0	1	0	1	1	0	1	3	1	4
81-90	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0
91-100	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	58	15	73	18	01	19	21	5	26	12	3	15	8	1	9
	39.90%			10.38%			14.20%			8.19%			4.91%		
													22.42%		

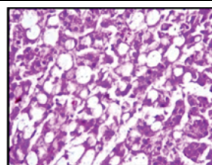


Figure 1: Fatty Change H&E

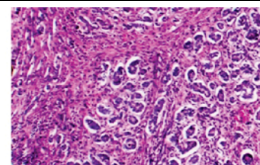


Fig 2: Cirrhosis(H&E)

I. DISCUSSION & CONCLUSION

In this study of 183 cases, Males were 147 and Females were 36 in number. Incidence of liver diseases was higher in 4th and 5th decades. The most common finding was fatty change of liver followed by normal liver and hepatic congestion.

One study in Iran (2006) 945 cases were assessed; forty nine cases were excluded due to autolysis. Out of 896 cases 777 (86.7%) cases were male and 119 (13.2%) female with mean age of 43.8 ± 19.7 years. Most of the cases were reported by RTA 35% as causes of deaths and microscopic examination fatty changes 31.6% normal findings 52.1% hepatitis 5%, male gender was predominant, asymptomatic fatty liver was the most common silent liver disease⁽⁴⁾.

Bal MS et al. conducted a study in which out of 100 cases of liver specimens- fatty liver 39%, normal 30%, cirrhosis 14%, congestion 9%, hepatitis 3%, malignancy 3% and chronic abscess 2%; males

predominate with 83% and female 17%; fatty liver was more common among 41-60 years of age⁽⁵⁾.

V. REFERENCES

1. Crawford JM. Liver and biliary tract. In: Robbins and Cotran 8th eds. Pathologic basis of disease. South Asia Ed. Vol 2 New Delhi:Elsevier; 2015: P 835.
2. Harsh mohan. The liver, Biliary tract and Exocrine pancreas. In: Harsh mohan 8th ed. Textbook of pathology. Jaypee; 2019:P 619
3. Gambino SR.The autopsy-the ultimate audit.Arch Patho Lab Med 1984;108:444-5
4. Rosoul Sotoudehmanesh, Masoud Sotoudeh, Ali Ali- Asgari, et al. Silent Liver Diseases in Autopsies from Forensic Medicine of Tehran. Archives of Iranian Medicine, 2006; 9 (4): 324-28.
5. Bal MS, Singh SP, Bodal VK, et al. Pathological findings in Liver autopsy. JIAFM, 2004; 26(2);55-57.