

Morphological findings at autopsy of people who died from alcoholic liver steatosis and liver cirrhosis

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INTRODUCTION

According to Lithuanian Institute of Hygiene, in 2020 liver diseases (K70-K76) were the third leading cause of death among working-age adults. WHO warns that health systems may face a significant increase in treatment demand for alcoholic liver diseases and their complications. Hepatic decompensation is common among patients with alcohol-associated cirrhosis. Stickel and colleagues found that alcoholic liver disease is a clinically silent disease with little or no signs in the early stages. In some patients any complications of cirrhosis (gastrointestinal bleeding, ascites, jaundice, hepatic encephalopathy) might be the first symptom of alcoholic liver disease, in others – alcoholic steatohepatitis is the primary manifestation.

METHODS

A retrospective analysis was performed on data of people who died from alcoholic liver disease (steatosis and cirrhosis) and underwent autopsy in Kaunas Department of The State Forensic Medicine Service from 2014 to 2018. Alcoholic liver steatosis and cirrhosis were underlying diseases in these individuals. Autopsy findings used for the study include age, sex, cardiovascular, digestive and immune systems abnormalities. Descriptive observational study was performed. Examination reports of 162 individuals were examined: 91 cases of alcoholic liver steatosis and 71 of liver cirrhosis. Statistical analysis was done with Excel and IBM SPSS Statistics 26 software. Descriptive analysis methods were used to analyze collected data, demographic statistics. Differences between variables assessed using chi-square (χ^2) criteria, Mann-Whitney tests, tests of normality. Results were statistically significant when $p < 0.05$.

CONCLUSIONS

Men were the most dominant gender in groups of alcoholic liver steatosis and liver cirrhosis. The age mean was similar in both groups and does not differ significantly. Complications, such as ascites, esophageal varices, jaundice, were more common in the group of liver cirrhosis. Enlarged spleen and heart were detected more often in the liver cirrhosis group.

AIM

To analyze tendencies of morphological organ changes and relations between different organ systems dysfunctions in individuals who died from alcoholic liver steatosis and liver cirrhosis.

RESULTS

Disease/Component	Alcoholic liver steatosis	Liver cirrhosis
Age mean	57,25 (\pm 10,49) years	54,28 (\pm 8,93) years
Gender	69 % men 31 % women	55 % men 45 % women
Enlarged spleen ($p < 0,05$)	median 130 g; range 30-570	median 227,5 g; range 60-2310
Enlarged heart ($p < 0,05$)	(median 380 g; range 220-610	median 410 g; range 210-720

