

Prevalence and associations of liver diseases among Sri Lankan adults: An autopsy study

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Abstract

Background:

Most chronic liver diseases are subclinical until advanced, delaying their detection and management. Population screening should be guided by prevalence, which determines cost-effectiveness. Autopsy studies are a valuable source to estimate population prevalence and associated factors, particularly for conditions that need invasive screening methods. No large-scale post-mortem studies on liver diseases have been reported from Sri Lanka previously.

Aims to determine the prevalence and associated factors of liver diseases in an autopsy series of Sri Lankan adults.

Methods:

A cross-sectional autopsy study was performed on a series of post-mortems performed in the Institute of Forensic Medicine and Toxicology, Colombo between 2014 and 2016. Liver specimens were examined macroscopically and microscopically with Haematoxylin and Eosin staining under the light microscope. Clinical and demographic data were collected from the next-of-kin and/or by review of medical records whenever available.

Results:


Of 441 autopsies performed (men 77.8%, age at death 52.5 ± 17.2 years), 431 specimens were examined macroscopically. Microscopic findings were available from 382 liver specimens. Fatty liver (56.8%), cirrhosis (7.1%) and granulomatous hepatitis (2.1%) were the main histological findings. Prevalence was not different between men and women. Only one specimen showed a neoplasm, which was an adenoma. Diabetes and alcohol use independently predicted the severity of fatty liver. Age, sex, diabetes and alcohol did not predict the presence of fatty liver or cirrhosis.

Conclusions:

Fatty liver and cirrhosis are common in this post-mortem series of urban-dwelling Sri Lankan adults. Diabetes and alcohol use independently predicted more severe fatty liver.

Keywords: Fatty liver, Cirrhosis, Steatosis, Steatohepatitis, Hepatoma, Post-mortem study, Sri Lanka

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