Oxford University Hospitals

PRESS RELEASE

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Patients with cirrhosis at increased risk of death from COVID-19, study finds

An international study led by researchers at Oxford University Hospitals NHS Foundation Trust has shown that patients with cirrhosis are at increased risk of dying as a result of COVID-19.

The study, published in the <u>Journal of Hepatology</u>, found that mortality from COVID-19 was particularly high among patients with more advanced cirrhosis (called Childs-Pugh B or C cirrhosis) and those with alcohol-related liver disease.

The study was a collaboration between scientists at the Oxford Liver Unit, based at Oxford's John Radcliffe Hospital, and colleagues at the University of North Carolina (USA), and was supported by the European Association for the Study of the Liver (EASL).

The paper presented data on over 1,300 patients from 29 different countries and compared COVID-19 outcomes between patients with and without liver disease.

"Our study confirms that severity of liver disease is closely associated with poor outcomes from COVID-19, with cirrhosis patients being at significantly increased risk of death," said Dr Thomas Marjot, who leads the study alongside Professor Eleanor Barnes at Oxford University Hospitals.

"Given the huge global burden of cirrhosis, with an estimated 112 million people affected, and the resurgence of the virus in many areas of the world these findings have far-reaching implications for how we manage patients with liver disease during the pandemic. This includes the need to consider enhanced protection and social distancing for patients with advanced cirrhosis," Dr Marjot explained.

The study found that mortality among patients with cirrhosis was 32%, compared with 8% in those without. However, the risk of mortality increased in those with more advanced forms of cirrhosis, rising as high as 51% in those in the most severe category. Other risk factors for death included advancing age and alcohol-related liver disease.

The majority of deaths in cirrhosis patients (71%) were from respiratory failure caused by COVID-19. The virus also seemed to cause a deterioration in liver function, with patients developing complications such as ascites or encephalopathy even in the absence of typical respiratory symptoms of COVID-19.

This work follows a recent publication from the same group in <u>The Lancet Gastroenterology</u> <u>& Hepatology</u> which showed that liver transplant recipients did not appear to be at increased risk of death from the virus.

Dr Andrew Moon at The University of North Carolina said "This study nicely compliments our findings in patients with prior liver transplantation. In contrast to the presence of advanced cirrhosis, having a liver transplantation was not associated with increased risk of death from COVID-19. This suggests that we should aim to continue liver transplant services during the pandemic wherever possible".

Professor Thomas Berg, EASL Vice-Secretary General and Head of the Division of Hepatology at Leipzig University Medical Centre in Germany, said: "The findings from this large registry study are very relevant to clinicians and patients worldwide, as we continue to optimise liver disease management during the pandemic.

"These results are timely and reinforce the recommendations made in the joint Position Papers by EASL and the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) published in JHEP Reports, which offer guidance on how to approach patients with different types and stages of liver disease."

ENDS

Oxford University Hospitals NHS Foundation Trust (OUH) is one of the largest acute teaching trusts in the UK, with a national and international reputation for the excellence of its services and its role in patient care, teaching and research.

The Trust supports world-leading research programmes in cardiovascular diseases, musculoskeletal disorders, neurological disorders such as Parkinson's and Alzheimer's through its designation as one of the UK's five comprehensive biomedical centres. It works in close partnership with the University of Oxford and is a leading centre for cancer, neurosciences, diabetes, genetics and many other fields. Research themes of particular strength are: cancer, cardiovascular science, diabetes, endocrinology and metabolism, infection and immunology, musculoskeletal science, neuroscience and reproduction and development.

This brings together academic research expertise with clinical teams to translate medical science into better healthcare treatments. Our patients benefit from world-class discovery and innovation supported by the NIHR Oxford Biomedical Research Centre, a partnership between the Trust and the University of Oxford, funded by the National Institute for Health Research.

The Trust employs over 12,000 staff and consists of four hospitals: the Churchill Hospital, John Radcliffe Hospital and Nuffield Orthopaedic Centre in Oxford and the Horton General Hospital in Banbury. On 1 October 2015 the Trust was awarded Foundation status and became Oxford University Hospitals NHS Foundation Trust. <u>www.ouh.nhs.uk</u>

Contact: Roy Probert, Senior Communications Manager Mobile: 07341 115585 roy.probert@ouh.nhs.uk