ILC 2017: Serious liver disease develops in over one-third of young people in the UK with childhood acquired Hepatitis C virus

In the UK, the main route of Hepatitis C virus infection in young people is intravenous drug abuse

April 20, 2017, Amsterdam, The Netherlands: Results from a retrospective review of a UK national Hepatitis C virus (HCV) database found that over one-third of young people (<18 years old) with childhood acquired HCV develop serious long-term liver disease, 5% develop liver cancer and more than 4% undergo a liver transplant. The cohort study, presented at The International Liver Congress™ 2017 in Amsterdam, The Netherlands, revealed intravenous drug abuse as the main route of HCV infection in young people in the UK (53%, n=535/1,014).

HCV is one of the most widespread transmissible diseases globally.[1] It is estimated to infect over 185 million people worldwide, of whom 350,000 die each year, with 84,000 of those being in Europe.[2] HCV is considered a silent pandemic as most people do not know that they have it.[1] HCV causes both acute and chronic infection, with about 55–85% of HCV-infected individuals developing chronic infection.[2] HCV is a leading cause of chronic liver disease, end-stage cirrhosis and liver cancer.[3] In the United States, 23,000 to 46,000 children are estimated as having chronic HCV infection.[4] In developed countries, transmission of HCV in children is mainly through the mother at birth (perinatal transmission).[5] HCV increases the risk of liver-related death by 26 times when acquired during childhood.[5]

“Our study showed that more than one-third of young people infected with HCV in childhood have serious long-term liver disease,” said Dr Line Modin, Birmingham Children’s Hospital, United Kingdom, and first author of the study. “Detection of HCV should be aimed at relevant risk groups, particularly young intravenous drug abusers.”

Data on patients with an estimated age at first HCV infection between 0 and 18 years old were analysed from a national clinical database (HCV Research UK) that covered 51 adult and seven paediatric centres. Data were collected between July 2012 and October 2016. The study included 1,014 patients, 731 (72%) of whom were males.

The most prevalent route for infection with HCV was intravenous drug abuse (535 individuals). Other means of infection included blood products (244 people) and acquiring HCV around the time of birth (116). Other risk factors accounted for HCV infection in 119 individuals. The most common HCV genotype in the study was genotype 1 (57%). Over one-third (35%) had genotype 3, which is the most difficult subgroup of patients to cure and for which treatment options remain suboptimal.[6] Liver disease was found in 354 patients (33%), with cirrhosis in 269 (27%), liver cancer (hepatocellular carcinoma) in 55 (5%) and 47 (5%)

had undergone a liver transplant. Patients with perinatal exposure to HCV developed cirrhosis at an earlier age than the intravenous drug group (median of 36 years versus 48 years).

“Our study highlights how important it is that clinical trials of antiviral therapy are performed in children, to develop clear treatment guidelines to prevent long-term liver disease,” said Professor Deirdre Kelly, Birmingham Children’s Hospital, United Kingdom, and study lead.

“This study from the UK suggests that many children infected perinatally may develop cirrhosis at a young age, if left untreated. Safe and efficacious direct-acting antiviral treatment should be made available to children, to prevent liver disease progression and viral spread at a later age,” said Prof Francesco Negro, Divisions of Gastroenterology and Hepatology of Clinical Pathology, University Hospital of Geneva, Switzerland and EASL Governing Board Member.

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About The International Liver Congress™
This annual congress is the biggest event in the EASL calendar, attracting scientific and medical experts from around the world to learn about the latest in liver research. Attending specialists present, share, debate and conclude on the latest science and research in hepatology, working to enhance the treatment and management of liver disease in clinical practice. This year, the congress is expected to attract approximately 10,000 delegates from all corners of the globe. The International Liver Congress™ 2017 will take place from April 19 – 23, at the RAI Amsterdam, Amsterdam, The Netherlands.

About The European Association for the Study of the Liver (EASL) (www.easl.eu)
Since its foundation in 1966, this not-for-profit organisation has grown to over 4,000 members from all over the world, including many of the leading hepatologists in Europe and beyond. EASL is the leading liver association in Europe, having evolved into a major European Association with international influence, with an impressive track record in promoting research in liver disease, supporting wider education and promoting changes in European liver policy.

Contact
For more information, please contact the ILC Press Office at:

- Email: ILCpressoffice@ruderfinn.co.uk
- Telephone: +44 (0)7841 009 252

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Time, date and location of session: 08:00 – 18:00, Thursday 20 April to Saturday 22 April, Hall 1
Presenter: Line Modin, United Kingdom
Abstract: Epidemiology of hepatitis C infection in children and young people in the UK (LBP-525)

Author disclosures

None.

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