Treatment for chronic hepatitis B linked to increased rates of colorectal and cervical cancer

April 15 2016

A new study presented today demonstrates a potential link between treatment of long-term oral nucleos(t)ide analogues and an increased risk of colorectal (p=0.029) and cervical (p=0.049) cancer in patients with chronic Hepatitis B virus (HBV). The study results were presented at The International Liver CongressTM 2016 in Barcelona, Spain.

Chronic HBV infection remains a global public health issue and continued prevention and control strategies are needed.1 Prolonged treatment with nucleos(t)ide analogues, which are used to prevent the virus from reproducing, are recommended for selected chronic HBV patients.2,3 However, questions have been raised regarding the long-term safety of such treatments.4

"Although our analysis showed that nucleos(t)ide analogue treatment does not increase overall incidence of liver, lung, breast and urinary/renal malignancies, it did reveal that patients with Hepatitis B virus on this treatment had a higher risk of developing colorectal and cervical cancers," said Professor Grace Wong, Department of Medicine & Therapeutics Academic at the Chinese University of Hong Kong and lead study author. "In light of these findings we strongly urge regular screening of these cancers to help prevent them from developing in patients taking nucleos(t)ide analogue treatment."

For their research, the authors of the Chinese study selected 45,299

patients who had been diagnosed with chronic HBV. Of these, 7,323 (16.16%) had undergone nucleos(t)ide analogue treatment. The primary outcome of the study was incident malignancies excluding hepatocellular carcinoma (HCC), the most common type of primary liver cancer.5 Follow-up duration was up to seven years, during this period the relative risk of primary outcome in patients with or without nucleos(t)ide analogue treatment was measured.

At the median follow-up of 4.4 years, malignancies occurred in 538 (2.1%) of untreated patients and 274 (5.7%) of those who had received nucleos(t)ide analogue therapy. Nucleos(t)ide analogue-treated patients had higher risks of developing colorectal cancer (adjusted Hazard Ratio (aHR) 2.17, 95% Confidence Interval (Cl) 1.08-4.36, p=0.029) and cervical cancer (aHR 4.41, 95% Cl 1.01-19.34, p=0.049). However, across treated and non-treated groups nucleos(t)ide analogue-treated patients had similar risks of developing other malignancies, including lung and pleural cancers, breast cancer and renal conditions.

"This large-scale study determines an important link between nucleos(t)ide analogue treatment and cervical and colorectal cancer," said Professor Tom Hemming Karlsen, EASL Vice-Secretary. "The results are important and could change cancer surveillance and management of patients treated for Hepatitis B."

More information: References:

1 Schweitzer A, et al. Estimations of worldwide prevalence of chronic hepatitis virus infection: a systematic review of data published between 1965 and 2013. The Lancet. October 2015;386(100030:1546-1555.

2 Fontana RJ. Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013. Hepatology. 2009 May;49(5 Suppl):S185-95.

3 Emedicine Health. Hepatitis B Treatment. Available from: www.emedicinehealth.com/hepati … gues_for_hepatitis_b. Last accessed: March 2016.

4 Zoutendijk R, et al. Serum HBsAg Decline During Long-term Potent Nucleos(t)ide Analogue Therapy for Chronic Hepatitis B and Prediction of HBsAg Loss. J Infect Dis. 2011 Aug 1;204(3):415-8.

5 Cancer Research UK. Types of primary liver cancer. Available from: www.cancerresearchuk.org/about … -liver-cancer#hepato. Last accessed: March 2016.

Provided by European Association for the Study of the Liver