ANNALS of Hepatology

HEPATOLOGY HIGHLIGHTS

November-December, Vol. 14 No. 6, 2015: 772-773

Hepatology highlights

Rolf Teschke

Department of Internal Medicine II, Division of Gastroenterology and Hepatology, Klinikum Hanau, Teaching Hospital of the Medical Faculty, Goethe University Frankfurt/ Main, Hanau, Germany.

Chen S, et al. Evaluation of alpha-fetoprotein as a screening marker for hepatocellular carcinoma in hepatitis prevalent areas

Chen S, *et al.* The authors from Seoul evaluated the role of serum alpha-fetoprotein (AFP) as a screening method for hepatocellular carcinoma (HCC) in Korea and and focused on patients with hepatitis B and C as the predominant risk groups. Their initial study group was large and consisted of 48,122 Koreans, with 1,873 patients who were positive for HBsAg, 393 patients who were positive for anti-HCV, and 20 individuals who were positive for both. Overall, 24 patients were diagnosed with HCC; of these, 17 were positive for HBsAg, 2 were positive for anti-HCV, and 5 showed negative results for both parameters. For all 24 patients, a quantitative serum AFP level was individually provided. When the cutoff suggested by the manufacturer for serum AFP (8.1 ng/mL) was considered, 20/24 patients showed serum levels of AFP exceeding this cutoff, associated with a sensitivity of 82% and a sensitivity of 100%. The authors suggested a new cutoff value of 8.4 ng/mL for patients with a positive HBsAg, of 9.2 ng/mL for patients with a positive anti-HCV, and of 14.6 ng/mL for the non-B/non-C group. These new cutoff values for AFP provided variable improvements of few validity parameters but are based on few patients, requiring confirmation by a larger group. There was some problem in the hepatitis B group with AFP levels of only 2.8-6.8 ng/mL and a delayed HCC diagnosis for several months.

Concern has been earlier expressed that AFP is insufficiently sensitive or specific for the use as a surveillance assay.[1] The present study raises the question whether screening for HCC may be improved by additional consideration of the presence or absence of liver cirrhosis and by concomitant imaging data.[1,2] The key question will be how can we ensure early detection of HCC at low costs. For this approach, we need more information of both specific risk factors relevant for the individual cases and validation data of methods to capture HCC in its early phase of development. The present study confirms that AFP may be helpful in some but certainly not in all suspected HCC cases.

Gomes Martins de Moura Tomich L, *et al.* Drug-induced liver injury in hospitalized HIV patients: high incidence and association with drugs for tuberculosis

Gomes Martins de Moura Tomich L, *et al.* In this issue, the authors report on a complex cohort of patients with HIV who were hospitalized in a tertiary hospital in Sao Paulo, Brazil. All 149 patients were HIV-infected, but overall assessment was hampered due to the inhomogeneity of the cohort study group. Confounding variables include tumors, infections by hepatitis B and C, HSV, and CMV, prior alcohol consumption, and use of hepatotoxic drugs such as HAART prior and during hospital admission, all of which could have contributed to increased liver function tests. During hospitalization, mycobacteriosis was diagnosed in 24/149 HIV patients, with use of antituberculosis drugs in 14 patients. Following multivariant analyses, the authors describe a high frequency of DILI associated with mycobacteriosis and use of anti-tuberculosis drugs, obviously based on a temporal association. A strict causality assessment method using RUCAM/

Correspondence and reprint request: Rolf Teschke, M.D. Professor of Medicine. Department of Internal Medicine II. Section of Gastroenterology and liver disease. Klinikum Hanau. Teaching Hospital of the Goethe University of Frankfurt/Main. Leimenstrasse 20. D-63450 Hanau. Germany.
Tel.: +49-6181/21859. Fax: +49-6181/2964211
E-mail: rolf.teschke@gmx.de

Manuscript received: September 07, 2015.
Manuscript accepted: September 07, 2015.

DOI: 10.5604/16652681.1171738

CIOMS[3,4] was not applied to verify causality, and it remained unclear to what extent alternative causes commonly found in suspected DILI cases[5] were actually excluded in the group of suspected DILI by anti-tuberculosis drugs and whether drug treatment was finished.

This article appeals to look for tuberculosis in patients with HIV and suggests that this group of patients may be more susceptible experiencing DILI by the use of anti-tuberculosis drugs. Multimedication as shown among the evaluated patients may also increase the risk of DILI, which should be considered in this clinical setting.[6] In line with previous reports,[7] this study extends the earlier observation that HIV infected patients are at higher risk for tuberculosis.

Safi W, et al.

Contrast-induced acute kidney injury in cirrhotic patients. A retrospective analysis

Safi W, *et al*. In their retrospective analysis, the authors examined the potential of intravenous iodinated contrast (IC) to cause acute kidney injury (AKI). Their study cohort included 152 hospitalized patients with liver cirrhosis from Munich, Germany. Presently, there is some uncertainty among hepatologists caring for patients with liver cirrhosis, to what extent IC may cause new acute kidney injury in this patient cohort or deteriorates preexisting renal impairment. Prevailing inconsistencies in this important clinical setting are due to previous reports on high osmolar contrast media, which are no longer in common use, or on arterial interventions as a specific subgroup.Often an appropriate control group was lacking, and several measures to prevent AKI were confounders. In the present analysis, cirrhotic patients undergoing CT or MRI studies were included. In all IC-enhanced CT scans, iomeprol was used as contrast medium, whereas gadolium was applied in all MRI studies. As far as possible, confounders were eliminated by focusing on stable patients and non-emergent examinations. In the present study, cirrhotic patients receiving IC in connection with CT were more likely to reach a sensitive combined end-point for kidney dysfunction than patients who underwent imaging by MRI with gadolinium.

The present report substantially adds to the present knowledge in the field[8,9] and clarifies some unsettled issues. Clearly, patients with liver cirrhosis undergoing CT examinations with IC will require appropriate surveillance regarding the renal functions. Whenever possible and for risk minimizing, physicians should consider the use of MRI with gadolinium instead of CT with IC.

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