Letters to the Editor

We wish to highlight that based on a single abnormal psychometry test (NCT-A), they labeled 95% of their patients as having minimal hepatic encephalopathy (MHE); however, according to Ferenci et al. [2] two or more abnormal psychometric tests are needed to label patients with MHE which is a better terminology than SHE. Although it is not clear to us which sedation (propofol/midazolam) was given to them, they took 30 controls with no liver disease and found no deterioration/improvement in NCT-A tests; looking at the induction and recovery time it seems that they were given propofol. The primary result of the study that midazolam prolongs the psychometry tests in cirrhatics would be better appreciated if the effect of midazolam on psychometric tests was assessed in the control arm. The second end point of the study was that patients can be discharged early if an endoscopy was done under propofol. At what time patients can be discharged after endoscopy is a big question that has not been well addressed. The mean time of recovery was higher in the midazolam group compared to propofol (11.5 ± 5.0 vs 4.1 ± 1.9 min, p <0.001); the parameters taken to discharge the patients at 110.0 ± 42.0 min in the midazolam group and 38.0 ± 9.0 min in the propofol group was not clear. Some objective parameters before discharge like Post-Anesthetic Discharge Scoring System or the Aldrete scoring system should be used. The authors of this study planned to repeat a NCT-A after 1 h in sedated patients; however, this statement is contradicted by the fact that the mean time to discharge in the propofol group was 38.0 ± 9.0 min. We are also confused about what happened to the patients in the midazolam group who had an increased NCT-A after endoscopy. It would be important to know whether during follow up of 24–48 h in these patients there was any side effects related to sedation in either group.

Previous studies have shown that a learning effect is associated with psychometry tests [3,4]. Consequently, a deterioration in the performance of patients in these tests would be difficult to pick up by repeating these tests. Tests like critical flicker frequency or inhibitory control test would be better adapted for this assessment. In addition, they observed transient hypoxemia (<90% saturation) in four patients (two in each group) but none in controls, implying that cirrhotic patients are more prone to transient hypoxemia after sedation. From the study, it was not clear whether patients under sedation received prophylactic oxygen; moreover, the patients’ American Society of Anesthesiologists Physical Status (ASA) score was also not provided, as it might affect the outcome of psychometry tests and recovery time.

In our experience (unpublished data) of more than 1000 endoscopies (both in cirrhotics and non-cirrhotics) performed over a year under propofol sedation (Modified Observer’s Assessment of Alertness/Sedation Scale score 1), we agree with the results by Khamaysi et al. that propofol sedation is safe in performing upper gastrointestinal endoscopy in cirrhotic patients when given by anesthetist. In fact, all of our patients could be discharged at 2 h post-endoscopy. However, two or more psychometry tests/CF/ICT need to be performed to evaluate cognitive function before and after endoscopy, as well as a longer follow up to ensure that propofol does not exacerbate MHE.

Conflict of interest

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References


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Sub-clinical hepatic encephalopathy in cirrhotic patients is not aggravated by sedation with propofol compared to midazolam: A randomized controlled study

This is a reply to the Letter to the Editor by Sharma et al.

Thank you very much for the interesting comments by Dr. Sharma et al. We agree that hepatic encephalopathy is better defined by multiple psychometric tests than a single psychometric test, but NCT-A can still reliably detect minimal degrees of hepatic encephalopathy. Moreover, NCT is considered the standard in this area because of its sensitivity, ease of application, and quantitative aspect [1]. We agree that minimal hepatic encephalopathy (MHE) may be a more precise terminology than sub-clinical hepatic encephalopathy (SHE).

In our study, patients in the control group were given midazolam sedation and were discharged from the endoscopy unit as...
Acute autochthonous hepatitis E in western patients with underlying chronic liver disease: A role for ribavirin?

To the Editor:
We read with interest the recent editorial in the Journal of Hepatology entitled “Hepatitis E: Water, water everywhere – Now a Global Disease” [1]. The authors state that in industrialized nations, acute liver failure and acute-on-chronic liver failure due to autochthonous acute hepatitis E genotype 3 (HEV3) infection have not yet been documented. This statement is inaccurate. A series of seven patients with fulminant liver failure from acute autochthonous HEV3 infection have been reported from southwest France [2]. Six of these patients had chronic liver disease and five were active drinkers. Five of these patients died. In addition, acute HEV3 infection was reported as a cause of decompensation in three patients with chronic liver disease in the UK [3]. Two of these patients died from sub-acute liver failure.

In the past three years (January 2008–December 2010) 35 more cases of acute hepatitis E in immunocompetent patients were diagnosed in the Toulouse University Hospital. Of these, nine patients (26%) had underlying chronic liver disease, of which seven were alcoholic. There were seven males and the median age was 47 years (36–79). All cases were autochthonous. Four patients (44%) had ascites and two had encephalopathy. Median serum bilirubin was 127 μmol/L (29.6–704.4). The strains were sequenced in four patients. They were all genotype 3; subtype 3f in three patients, subtype 3c in one. Three patients died (33%).

The two most recent patients were treated with ribavirin monotherapy. A 79 year old patient with chronic liver disease was admitted for acute hepatitis and acute kidney failure requiring renal replacement therapy. HEV RNA was found to be positive both in the serum and the stools and all other causes of hepatitis were ruled out, including acute alcoholic hepatitis. Because of the severe presentation, the advanced age of the patient, and since we had shown earlier this year that ribavirin is effective and well tolerated in the treatment of chronic hepatitis E in kidney-transplant patients [4], he was given ribavirin monotherapy in order to rapidly contain viral replication. Ribavirin was started off at a dose of 200 mg every other day because of the acute kidney failure. The treatment was scheduled for a 3 month period. Serum HEV RNA concentration decreased from 6.36 log copies/ml at the initiation of the therapy to 4.6 log copies/ml at day 10, 2.9 log copies/ml at day 17, and was negative at one month. The patient completely recovered and dialysis was stopped at month two.

The second patient was treated for 10 days at a dose of 1000 mg per day in two divided doses. Viral load was 4.07 log copies/ml before treatment, 3.08 after 3 days, 2.54 after 6 days and undetectable one month later. Hemoglobin levels dropped from 12.6 g/dl before treatment to 11.6 g/dl after 6 days of treatment. There were no other ribavirin induced side effects. There was no viral relapse in these two patients.

These data show that the prognosis of acute autochthonous hepatitis E can be poor in industrialized nations, particularly in patients with chronic liver disease (acute on chronic liver failure), and is similar to that reported for HEV genotype 1 infection in patients with chronic liver disease in the Indian sub-continent [5]. An Anglo-French multicentre study is ongoing to assess its frequency and its induced-mortality in a larger number of patients. Short term ribavirin treatment may be useful in these patients. However, this hypothesis needs to be further investigated.

Conflict of interest
The authors declared that they do not have anything to disclose regarding funding or conflict of interest with respect to this manuscript.

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