



Hepatology highlights

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Unzueta A, *et al.*

Hepatitis E virus serum antibodies and RNA prevalence in patients evaluated for heart and kidney transplantation

Unzueta A, *et al.* In the present study authors evaluated serum from heart and kidney transplant candidates. They found 11.4% (15/132) prevalence of anti-HEV IgG for heart transplant and 8.5% (17/201) for kidney transplant candidates, with an overall seroprevalence of 9.6% (32/333). None of the patients tested positive for HEV RNA in the serum. On multivariable analysis, age older than 60 years was associated with HEV infection (adjusted odds ratio, 3.34; 95% CI, 1.54-7.24; $P = 0.002$). Authors concluded that there was no evidence of acute HEV infection in those pre-transplant population and that older age seems to be associated with positive anti-HEV IgG.

The results of this study are very interesting because few studies have evaluated pre-transplant seroprevalence of HEV infection. In addition this infection appears to be an emerging disease in the setting of donors to recipients of allografts. In fact, several previous case reports sug-

gested that HEV transmission by blood products is possible.¹

In this line is important to mention that it has been reported that each year, more than 70,000 organs, 100,000 corneas, and 2 million human tissue allografts are implanted worldwide.²

In the present study, Unzueta, *et al.* found a lower prevalence (8.5%) of anti-HEV IgG for kidney transplant candidates compared to that previously reported that was (14%). Also the investigators point out the higher prevalence of anti-HEV IgG for heart transplant candidates they found in this study (11.4%).

It seems that although at the present time it is a very important topic in the hepatology field the available information suggest that more accurate data is necessary to establish the risk and outcomes in this setting. It is also important to define the use of organs from donors with active or suspected infections.² We need to take into account the microbiological data and treatment options, and the availability of alternatives of treatment for donor or recipients ideally, set on before procurement.² The prevention of transmission infection from donors to recipients of allografts is mandatory.

Shi F, *et al.* Hepatocellular carcinoma (HCC) ≤ 4 cm treated with radiofrequency ablation with or without percutaneous ethanol injection

Shi F, *et al.* The aim of this study was to compare the survival of Chinese cirrhotic patients with HCC ≤ 4 cm who underwent radiofrequency ablation (RFA) alone or a combination of RFA with percutaneous ethanol injection (PEI). Six hundred eighty one cases with HCC ≤ 4 cm were treated with both treatments. They analyze retrospectively 180 patients in each group according to the score matching. They found higher overall survival and recurrence-free survival rates in the group of RFA + PEI

compared with RFA alone. The 1-, 3-, and 5-year cumulative OS rates were 78.0, 44.4, and 30.1% for patients in RFA group and 88.2, 58.0, and 41.1% for patients in RFA + PEI group, respectively. Authors concluded that the combination of RFA and PEI yielded better OS and RFS rates than RFA alone for Chinese patients with HCC ≤ 4 cm.

HCC is one of most common malignancy worldwide, with increasing incidence in developed countries. It is known that the screen and surveillance programs for HCC, led to an increase in the number of patients with HCC diagnosed at early stage.³ Surgical resection (SR) of HCC traditionally has been considered as the

treatment of choice and produces a 5-year survival of 41-72%.⁴ Local ablation therapy, including ethanol injection and RFA, is safe and effective in the treatment of HCC < 5 cm in those patients who do not meet all characteristics for surgical treatment.⁵ Recent meta-analysis has suggested that RFA achieved better survival than ethanol injection.⁵ Therefore, RFA is recommended as a curative treatment option for patients in early stage HCC.⁶ However, currently is not completely clear which is the most effective treatment for patients with unresectable HCC.⁵

The results of this study are interesting especially for countries with a high prevalence of HCC. Also these results support the use of this combination (RFA + PEI) in patients with HCC \leq 4 cm. Although are contradictory with those studies where the RFA was more effective than ethanol injection.⁷

Finally, it is important to keep in mind the limitations of this study as the authors have pointed out and perhaps the most important one are the randomization and the Barcelona Clinic Liver Cancer stage that are missing.

REFERENCES

1. Wedemeyer H, Pischke S, Manns MP. Pathogenesis and treatment of hepatitis E virus infection. *Gastroenterology* 2012; 142: e1381.
2. Fishman JA, Greenwald MA, Grossi PA. Transmission of infection with human allografts: essential considerations in donor screening. *Clin Infect Dis* 2012; 55: 720-7.
3. Motola-Kuba D, Zamora-Valdés D, Uribe M, Méndez-Sánchez N. Hepatocellular carcinoma. An overview. *Ann Hepatol* 2006; 5: 16-24.
4. Llovet JM, Schwartz M, Mazzaferro V. Resection and liver transplantation for hepatocellular carcinoma. *Semin Liver Dis* 2005; 25: 181-200.
5. Wang JH, Wang CC, Hung CH, Chen CL, Lu SN. Survival comparison between surgical resection and radiofrequency ablation for patients in BCLC very early/early stage hepatocellular carcinoma. *J Hepatol* 2012; 56: 412-8.
6. Bruix J, Sherman M. Management of hepatocellular carcinoma. *Hepatology* 2005; 42: 1208-36.
7. Giorgio A, Di Sarno A, De Stefano G, Scognamiglio U, Farella N, Mariniello A, Esposito V, et al. Percutaneous radiofrequency ablation of hepatocellular carcinoma compared to percutaneous ethanol injection in treatment of cirrhotic patients: an Italian randomized controlled trial. *Anticancer Res* 2011; 31: 2291-5.

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