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Paolo Angeli[1,*]
Mauro Bernardi[2,#]
[1]*Unit of Internal Medicine and Hepatology (UIMH), Dept. of Medicine (DIMED), University of Padova, Italy*
[2]*Dept. of Medical and Surgical Sciences, Alma Mater Studiorum-University of Bologna, Italy*
*Corresponding author. Address: Unit of Internal Medicine and Hepatology (UIMH), Dept. of Medicine (DIMED), University of Padova, Via Giustiniani 2, Padova cap. 35128, Italy.
Tel.: +39 0498212291-2285.
E-mail address: pangeli@unipd.it

[#] On behalf of the European Association for the Study of the liver.

Is *ex vivo* liver resection and autotransplantation a valid alternative treatment for end-stage hepatic alveolar echinococcosis in Europe?

To the Editor:

The authors of the article "*Ex vivo* liver resection and autotransplantation (ELRA) as alternative to allotransplantation for end-stage hepatic alveolar echinococcosis" describe an overall mortality rate of 12% after a mean follow-up of 22 months.[1] The authors come to the conclusion that ELRA is an effective alternative to liver transplantation and is a feasible surgical option for patients with end-stage alveolar echinococcosis (AE).

The contents of article have to be regarded with caution, especially by European clinicians, given that essential information is missing. Although the selection process used to propose this procedure to patients, with very advanced AE, is properly described, comparison of its outcome with that of patients from the same center with standard *in situ* resection, and with anti-infective treatment, without surgery, is not available in this article. The conclusions are based on the assumption that liver transplantation is the only therapeutic alternative to resection in these patients and that such high mortality is acceptable. Results after allotransplantation are indeed associated with significant mortality, recurrence of disease, and the procedure is limited by the organ shortage that affects all countries, including China.[2,3] However, indications for liver allotransplantation for AE have considerably decreased in the European endemic areas of AE (only 1/111 in Bern [Switzerland] and 2/172 since 2000 in Besançon [France]), and the results of non-surgical treatment strategies in Europe are far better than presumed by the authors. Long-term treatment using albendazole alone or in conjunction with perendoscopic biliary stenting is a

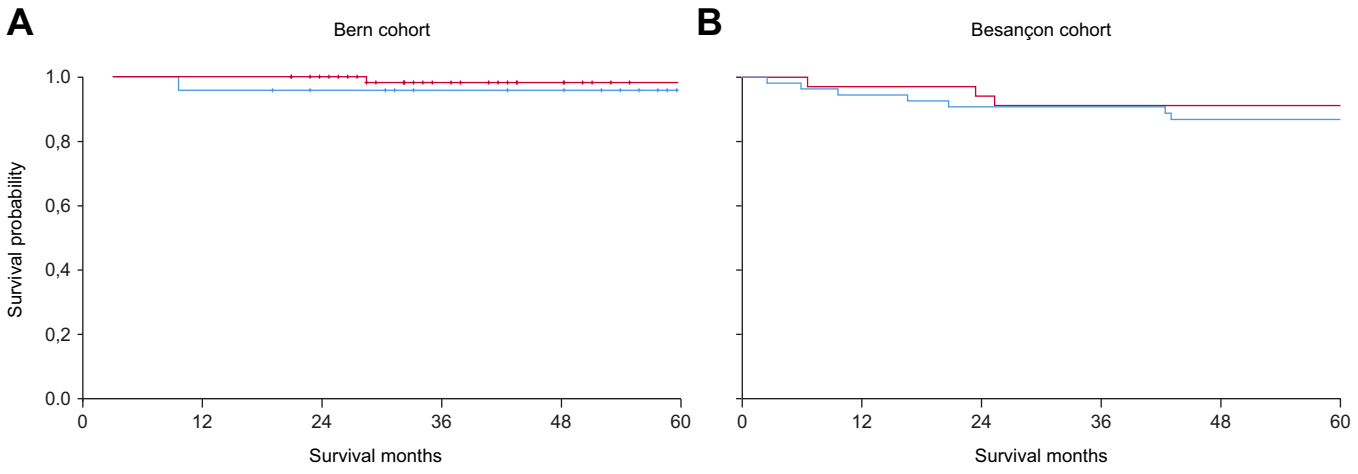

Fig. 1. Survival after conservative (blue curves) and surgical treatment (red curves) in Europe. (left panel) Bern, Switzerland and (rigth panel) Besançon, France. 5 yr-survival in 67 patients with diagnosis and follow-up in Bern from 1 Jan 1993 to 31 Dec 2015; 68.7% of patients had radical surgery; no deaths were related to AE. 5 yr-survival in 85 patients with diagnosis and follow-up in Besançon from 1 Jan 2003 to 31 Dec 2011; 38% of patients had radical surgery; only 1 death (1.2%) was related to AE. No death was directly related to the surgical procedure in either center, and all other deaths were related to associated conditions. AE, alveolar echinococcosis. (This figure appears in colour on the web.)

valuable option with a higher survival rate than that reported by the authors, as shown from an analysis of 2 distinct cohorts of European patients (Fig. 1). However, these excellent results may be because of the patients assessed, who were generally older and diagnosed with disease at an earlier stage than in China.[4] Chinese patients studied in Aji *et al.*'s article[1] are more similar to those diagnosed 30 years before in the same European centers;[2,5] in addition, the necessary strict follow-up of the anti-infective treatment which is the rule in Europe and includes surveillance of the occurrence of AE biliary/vascular complications and of albendazole adverse effects, and plasma albendazole sulfoxide measurement,[6] is likely more difficult in Chinese patients living in remote villages far from reference centers. These considerations have to be taken into account, as European surgeons may be tempted by the impressive but risky procedure proposed by their Chinese colleagues.

Conflict of interest

The authors declare no conflicts of interest that pertain to this work.

Please refer to the accompanying ICMJE disclosure forms for further details.

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Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jhep.2018.12.011.

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Guido Beldi[1,*]
Dominique Vuitton[2]
Anja Lachenmayer[1]
Bruno Heyd[3]
Jean-François Dufour[4]
Carine Richou[5]
Daniel Candinas[1]
Solange Bresson-Hadni[6]

[1]*Department of Visceral Surgery and Medicine, Visceral Surgery, Inselspital University Hospital Bern and University Bern, Bern, Switzerland*
[2]*WHO-Collaborating Centre for Prevention and Treatment of Human Echinococcosis, University Bourgogne Franche-Comté, 25030 Besançon, France*
[3]*National Reference Centre for Echinococcosis and WHO-Collaborating Centre for Prevention and Treatment of Human Echinococcosis, Visceral Surgery Department, Besançon University Hospital and University Bourgogne Franche-Comté, 25030 Besançon, France*
[4]*Department of Visceral Surgery and Medicine, Hepatology, Inselspital University Hospital Bern and University Bern, Bern, Switzerland*
[5]*National Reference Centre for Echinococcosis and WHO-Collaborating Centre for Prevention and Treatment of Human Echinococcosis, Hepatology Department, Besançon University Hospital and University Bourgogne Franche-Comté, 25030 Besançon, France*
[6]*National Reference Centre for Echinococcosis and WHO-Collaborating Centre for Prevention and Treatment of Human Echinococcosis, Parasitology-Mycology Laboratory and Visceral Surgery Department, Besançon University Hospital and University Bourgogne Franche-Comté, 25030 Besançon, France*
*Corresponding author. Address: Department of Visceral Surgery and Medicine, Inselspital, Bern University Hospital, CH-3010 Bern, Switzerland. Tel.: +41 31 632 24 03; fax: +41 31 632 97 23.
E-mail address: guido.beldi@insel.ch

Alcohol-associated liver disease, not hepatitis B, is the major cause of cirrhosis in Asia

To the Editor:

We read with interest the article "Burden of liver diseases in the world" by Asrani *et al.*[1] The authors have done an excellent job in reviewing the epidemiology of various liver diseases across the world. However, the authors have in this article stated in the section on 'Global Mortality': 'The causes of cirrhosis vary: in Western and industrialised countries alcohol and non-alcoholic fatty liver disease have overtaken viral hepatitis as the primary causes, whereas in China and other Asian countries hepatitis B continues to be a major cause'.

We do not agree with this statement for the reasons cited below. In fact, the authors themselves have also contradicted this assertion when they list 7 Asian countries in the top 10 countries with high global burden of alcohol-related cirrhosis mortality in Table 4 of their article. Excluding Moldova, Sierra Leone and Uganda, the remaining countries are all Asian coun-