

April 18, 2017

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 33269-Prospective study.doc).

Title: Low bone mineral density and the severity of cholestasis in biliary atresia

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Name of Journal: *World Journal of Hepatology*

ESPS Manuscript NO: 33269

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

- (1) A very interesting study to explore the prevalence of osteopenia and osteoporosis in post-Kasai biliary atresia (BA) children and the association of bone mineral density and biochemical parameters in postoperative BA patients. Because of those complications as well as osteopenia and osteoporosis, early liver transplantation should be describing additionally in the discussion section for the treatment strategy alert.

Response: We have improved our manuscript as the reviewer's suggestion and included more discussion in the manuscript: "A number of biliary atresia cases eventually become advanced stage of liver disease and pediatric liver transplantation is the treatment strategy of choice for improving quality of life in BA children. Recent study has reported that successful liver transplantation could improve biochemical markers of bone formation and resorption suggesting acceleration of growth process in BA children^[16]."

- (2) Manuscript is well written and informative.

Response: Thank you very much for your advice

- (3) Authors analyzed bone-marrow density (BMD) in 70 BA patients with cassia operation. they found that hyperbilirubinemia and abnormal liver tests is correlated with lower BMD. my comments are as follow: *as authors also emphasized serum vitaminD level must be measured in this study. since underling vitaminD defficiency secondary to cholestasis and/or liver disease may be the real causes of low BMD in these patients. * child score or meld score should be added to tables. * the ratios in this sentence should be controlled "Moreover, we have illustrated that osteopenia and osteoporosis was detected in 35.7% and 57.1% of a group of jaundiced BA patients in comparison with 19.0% and 4.8% of a non-jaundiced group,"

Response: Thank you for your valuable suggestion.

- We also include serum 25-hydroxyvitamin D measurement in this study as demonstrated in Tables 1 and 2.
- Unfortunately, in this study we did not routinely monitor Child score or MELD score and therefore, we have no data on these. Child score and MELD score were not included in the protocol of this study when the protocol was submitted and approved by the Institutional Review Board on Human Research of the Faculty of Medicine, Chulalongkorn University. However, we address that point in the discussion: "Moreover, another limitation of our study is the lack of Child-Pugh and Model for End-Stage Liver Disease (MELD) scores. Future study is also required to evaluate the Child-Pugh and MELD values for predicting of chronic liver disease severity."
- We replace with a new sentence according to reviewer's suggestion in the discussion: "Moreover, we have illustrated that the prevalence rates of osteopenia and osteoporosis in jaundiced BA subjects were higher in comparison with those in non-jaundiced children."

3 We provide audio core tip and the required documents. We also add Reference#16:

"16 Teisseyre M, Pawłowska J, Kryśkiewicz E, Karczarewicz E, Czubkowski P, Dadalski M, Jankowska I, Teisseyre J, Ismail H, Lorenc R. Bone mineral metabolism in children with biliary atresia after living related liver transplantation. Evaluation of selected parameters. *Ann Transplant* 2007;12:19-25"

Thank you again for publishing our manuscript in the *World Journal of Hepatology*.

Sincerely yours,

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