September 30, 2012

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 485-revised.doc).

Title: Hepatic focal nodular hyperplasia in children: the imaging feature of dynamic multi-phase MSCT and CT angiography

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 485

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) The number of cases is small, therefore, it is regretafully not clear that the differences of feature and character of FNH between adults and children. The data of this paper provides us only an impression that the character of padiatric FNH is similar as adult FNH.

Reply: Yes, the number of cases in our study is small, whether there are differences of MR features of FNH between adults and children still to be comfirmed by further studies. It is a limitation of our study.

(2) One of the importance of this paper is to provide readers the clue which distingushs FNH from malignant tumor. The small FNH seems to be diffilt to diagnosis precisely. It should be discussed what kinds of modality are usefull for diagnosis of FNH and examination process for difinite diagnosis, if MSCT is not enough to difinite diagnosis of FNH.

Amendment: The following sentences is added in the article "MRI examinations with hepatobiliary-specific gadolinium-based contrast agents (pecifically gadobenate dimeglumine, gadoxetate disodium or gadoxetic acid) may be valuable for the diagnosis of FNH, particularly on the delayed hepatobiliary phase of imaging where FNHs are usually iso- or hyperintense relative to the liver parenchyma but rarely hypointense, presumably because of the presence of functioning hepatocytes and focal abnormal biliary excretion [24]."

[24] Gupta RT, Iseman CM, Leyendecker JR, Shyknevsky I, Merkle EM, Taouli B. Diagnosis of focal nodular hyperplasia with MRI: multicenter retrospective study comparing gadobenate dimeglumine to gadoxetate disodium. AJR Am J Roentgenol 2012;199:35-43

(3) Table 1: Please unify the placement of the word in the table. Words are placed superior in some columns, but inferior in other columns.

Amendment: The placement of the word in the table has been unified according to the requirement.

(4) P5, line 14: Ca199. Carbohydrate antigen 19-9 (CA19-9)?

Original: CA125, and Ca199

Amendment: CA125, and carbohydrate antigen 19-9 (CA19-9)

(5) P5, line 20: Seimens. Siemens?

Original: Seimens Medical Solutions, Erlangen, Germany

Amendment: Siemens Medical Solutions, Erlangen, Germany

(6) P6, line 10: pre-contast. pre-contrast?

Original: pre-contast images and contrast-enhanced CT images, central scar,

Amendment: pre-contrast images and contrast-enhanced CT images, central scar,

(7) P7, line 8: were. was?

Original: Pseudocapsule was very rare in the cases of pediatric FNH (1/12, 8.3%) and were confirmed pathologically as

Amendment: Pseudocapsule was very rare in the cases of pediatric FNH (1/12, 8.3%) and was confirmed pathologically as

3 References and typesetting were corrected

4 **Peer review**

COMMENT-1

General comments:

This manuscript is well written, and the authors retrospectively analyze the imaging features of FNH in children by MSCT and CTA, and suggested that it is an effective method for diagnosing FNH in children, but there are two questions need to be clarified.

1. FNH is a slow growing tumor and conservative treatment is recommended for asymptomatic patients. In this study, all patients were confirmed by pathology and how many cases cannot be definitely diagnosed by MSCT and then selective surgery?

   Reply: In our study, all 12 patients were performed with MSCT, and the diagnosis of hepatic FNH was suggested due to the large size of FNH (4.0 -12.9 cm, with an average diameter of 5.5 ± 2.5 cm) which demonstrated the characteristic imaging features. Although hepatic FNH was suggested by MSCT, lesions were resected in all 12 patients since the pediatric patients presented with symptoms or large size of masses. Small FNH usually lacks typical imaging manifestations, and the definite diagnosis can not be obtained by MSCT. In these circumstances, it is necessary to distinguish FNH from other pediatric solid hypervascular tumor, and percutaneous fine needle biopsy may be suggested when necessary. Small FNH less than 3.0cm confirmed by surgery or biopsy does not present in our database.

2. What is the difficult part to make a definite diagnosis by MSCT and CTA images in these patients?

   Reply: If all of the imaging characteristics of FNH are identified on MSCT and CTA images, FNH can be diagnosed with confidence. In case of FNH lesions lacking typical imaging manifestations, such as the absence of central scar, rapid washout of contrast agents in the portal vein phase,

absence of delayed enhancement in the central scar, and presence of rim enhancement of the pseudocapsule, a definite diagnosis can not be made by MSCT and CTA images.

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

Sincerely yours,

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