

Please find enclosed the edited manuscript in Word format (file name: 11796-review.doc).

**Title:** Accuracy of routine MDCT in identifying arterial variants in patients scheduled for pancreaticoduodenectomy

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The manuscript has been improved according to the suggestions of reviewers (highlighted in RED):

1 Format has been updated

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

(1) Line 103: procedure not precodure

REPLY: We have corrected this mistake in the revised manuscript.

(2) Line 117: image is a noun not a verb, use another expression

REPLY: We have corrected this mistake in the revised manuscript.

(3) Line 138: Were the surgeons more appropriate to review the MDCTs than radiologists? Do they do that routinely or just for the study?

REPLY: A recent study [1] showed that the detection rate of R/A RHA by radiologists was 29%, and that by surgeons was 51%. This result revealed that surgeons were more likely to identify aberrant RHA than radiologists on CT scan. In our study, radiological films of the arterial phase of MDCT were reviewed by two experienced pancreatic surgeons with familiar knowledge of the peripancreatic vascular anatomy. The high accuracy, sensitivity and specificity in the detection of aberrant RHA in the present study indicate that surgeons are appropriate to review MDCT images. The surgeons do that routinely, not only for the study.

[1] Turrini O, Wiebke EA, Delpero JR, et al. Preservation of replaced or accessory right hepatic artery during pancreaticoduodenectomy for adenocarcinoma: impact on margin status and survival. *J Gastrointest Surg.* 2010;14(11):1813-9.

(4) Line 155: smartprep software: manufacturer/developer is not mentioned

REPLY: This correction has been made in the revised manuscript.

(5) Line 199: Figure 1 is difficult to interpret because patient numbers 458 and 181 representing the patients who met the inclusion criteria (as mentioned in the text) are not depicted in it.

REPLY: We appreciate this comment and have interpreted these numbers in the revised manuscript.

(6) I think recently many surgeons or physician often check the variants of the artery, thus I do not feel that this study itself is novel.

REPLY: We agree with the reviewer that many surgeons or physician check the variants of the artery in clinical practice. However, according to a recent study [1], the detection rate of R/A RHA by radiologists was 29%, and that by surgeons was 51%. The reason for such a low detection rate may relate to not enough attention paid to the arterial variants by clinicians, in addition to technical aspects. Although CT angiography and conventional angiography are effective imaging tools evaluating arterial variants, they were often not available for excessive workload of radiologists, lack of interest in some cases, lack of consolidated multidisciplinary teams, or invasive nature. Few studies have previously investigated the ability of routine MDCT without arterial reconstruction, which is more commonplace in usual medical practice, in the assessment of peri-pancreatic arterial variants prior to surgery. Thus, this study has a novelty.

[1] Turrini O, Wiebke EA, Delpero JR, et al. Preservation of replaced or accessory right hepatic artery during pancreaticoduodenectomy for adenocarcinoma: impact on margin status and survival. *J Gastrointest Surg.* 2010;14(11):1813-9.

(7) The authors described that limitation for evaluating CAS is existing. The authors do not describe their opinion about this. Is Angiography needed to all patients?

REPLY: We highly appreciate this comment and agree with the reviewer's suggestion. We have discussed this in the revised manuscript. Considering the limitation for evaluating CAS, we recommend that angiography should be needed for patients scheduled for pancreaticoduodenectomy who have extensive pancreatic arterial collateralization on preoperative CT imaging.

3 References and typesetting were corrected

4 Our manuscript has been reviewed for grammatical clarity and appropriate vocabulary by Sabin Subedi (now in St. Michael Hospital, Shanghai) whose native language is English.

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