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8th December 2016

Dear Editor,

Please find enclosed the edited manuscript in word format (File Name: 30491-Revised manuscript.docx).

Title: Computed Tomography Pulmonary Angiography (CTPA) using a 20% Reduction in Contrast Medium Dose Delivered In a Multiphasic Injection

Authors: Mitchell Chen, Gaith Mattar, Jamal A. Abdulkarim

Name of Journal: World Journal of Radiology

ESPS Manuscript NO: 30491

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

Comments to Author from Reviewer #1:

Overall: This study utilised a lower dose (60ml) of contrast agent compared to the normal dose (75ml) currently used in clinical practice. The experimental results have shown that a reduction in contrast agent dose can be achieved without adversely affecting pulmonary arterial enhancement in CTPA. They demonstrated that using a reduced dose of contrast medium (60ml vs 75ml) is a clinically feasible without adversely affecting the image quality and diagnostic value of CTPA for PE. They proposed the lower contrast dose of 60ml should be used as standard practice in all patients undergoing CTPA. The dose reduction is intended to enhance patient safety as well reducing the overall scanning cost. The dose reduction is a hot issue at present. This is a useful paper for the patient's health care.

Many thanks for reviewing our manuscript and for your kind opinion.

Comments to Author from Reviewer #2:

Major revision

Thanks for reviewing our manuscript. We would be grateful if you could offer some comments on areas needing improvement and we would happily revise our submission accordingly.

Comments to Author from Reviewer #3:

Comments To Authors The idea of this work is interesting and number of patients in this study is enough. The authors have done the error analysis so I only have the following minor comments: 1. Abstract and authors' information cannot be found in the manuscript. 2. There is no CTPA image showing with and without reduction of contrast. 3. The authors should justify why they decided to reduce the contrast dose by 20% but not other values.

Many thanks for reviewing and commenting on our manuscript. 1) We have now included the authors' details and a full abstract, in line with WJR submission protocol. 2) Comment Acknowledge. We have included figures illustrating the main pulmonary arteries on the standard and reduced dose CTPA. 3) Duly noted. The dose reduction to 60ml was decided on recommendation from the CT manufacturer, Siemens. We have now included an explanation on this in the manuscript.

Yours sincerely,

Regards,

M Chen, G Mattar and JA Abdulkarim