

January 30, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 7967-review.doc).

Title: Partial Splenic Artery Embolization in Cirrhotic Patients

Author: Tyson Hadduck, Justin McWilliams

Name of Journal: *World Journal of Radiology*

ESPS Manuscript NO: 7967

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 reviewers:

- Regarding comments made by reviewer 02712666:
 - "This manuscript includes splenic embolization for traumatic patients. However, concept and techniques of embolization of splenic injury are deferent from PSE for cirrhotic patients. Therefore, I think it would be better to describe PSE for cirrhotic patients alone."
 - We agreed that the paper ought to focus on specifically on PSE in cirrhotic patients; the Schnüriger et al. study which referenced splenic embolization in traumatic patients has been removed.
 - "Paragraph of "Analysis of PSE in the Literature" should be included in "Clinical application"."
 - We agreed that the section titled "Analysis of PSE in the Literature" was more appropriate in the "Clinical Applications" section. We adjusted the content, and added sub-sections which focus on specific clinical applications of PSE. We have also provided a section dedicated to PSE complications.
 - "Introduction Although the authors say use of splenectomy in the management of cirrhotic patients has been limited by an increased surgical risk amongst patients with advanced liver disease, as well as numerous post-operative complications, including portal vein thrombosis and a strong predilection for sepsis. Recent development in minimal invasive surgery, laparoscopic splenectomy can be done in cirrhotic patients without serious complications. The authors should refer to some recent surgical results in splenectomy."
 - We agreed that laproscopic splenectomy is an effective approach for the treatment of splenomegaly in some cirrhotic patients, and made appropriate changes in our paper. Additionally we have added a reference that describes the outcomes of splenectomy amongst cirrhotic patients.
 - "Clinical application of PSE Study by Amin: The authors should state the publication date and follow-up period of his study."
 - We agreed that the publication date and follow-up period of the Amin study should be stated and have revised the text accordingly.
 - "Similar to above, follow-up periods is important and should be given. Long-term efficacy (durability) should be discussed. Short term efficacy of PSE is well known.

However, it would be limited to temporal effect in some cases.”

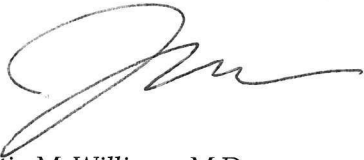
- We agreed that follow-up periods should be added to Table 1 and have included them.
- “Techniques “Sub-selection of the superior spleen is associated with post procedural pneumonia and atelectasis, consequently, the inferior spleen is frequently isolated.” This sentence should be supported by references. Or should be note as author’s opinion.”
 - We agreed that the statement “Sub-selection of the superior spleen is associated with post procedural pneumonia and atelectasis, consequently, the inferior spleen is frequently isolated,” should be supported by references, and we have added appropriate documentation.
- Of the contemporary studies reviewed for this paper(,) seven noted whether a distal or proximal approach was utilized. In discussion of techniques of distal and proximal PSE, it should be stated that the selection of either technique may be depend on the purpose and condition of patients. For traumatic splenic injury with acute bleeding, immediate hemostasis is required. When catheterization to the distal splenic segment prolong the procedure time, proximal embolization would be better. On the other hand, well-designed distal embolization (with predicting the volume of splenic infarction) would be better for PSE in cirrhotic patients. As described before, I feel it would be better this paper focus to PSE for non-traumatic patients.
 - We agreed that proximal versus distal PSE depends varies with the clinical situation and have made appropriate revisions, and as previously noted have removed references to non-traumatic patients.
- “For particle embolization, it is useful for readers to describe sizes of particle commonly used or recommended.”
 - We agreed that it is useful to note specific sizes of microspheres and have included them in the text
- “Coils, coils and particles, or NBCA have been used for distal splenic embolization.”
 - We agree that NBCA is occasionally used in distal splenic embolization, but have not seen this commonly described in the literature. Additionally, we found that gelfoam is frequently cited as an embolic agent and have included it in out text.
- Regarding comments made by reviewer 01218680:
 - “ Specific comments Background - The background should be documented more precisely.
 - We have ensured that the background is well documented.
 - “What is the clinical question?”
 - As a review of PSE in cirrhotic patients our goal was to shed more light on the topic and to explore current research, uses, and summarize outcomes of recent studies.
 - “The indication should be clearly documented: what grading of hypersplenism for partial splenic embolization (PSA)?”
 - PSE is not indicated only based on specific grading of hypersplenism, but is a clinical tool which may be applicable in a variety of clinical scenarios as outlined by our paper.
 - “What is the best technique for partial splenic embolization.”
 - There are currently a number of variables in performing PSE. In our paper we described the basic approach of performing PSE as well as some of the variables different interventionalists employ (proximal vs. distal, type of embolic material,

- etc.)
- "What is the outcome?"
 - We summarized the outcomes of PSE in the article and highlighted the outcomes of various studies in the current literature (Tables 1 and 2).
 - "What are the main complications?"
 - While we had originally discussed the major complications of PSE, we felt it should be more easily identified within the paper, and have placed it in its own section.
 - "Different studies compared the outcome of splenectomy and partial splenic embolization. Other studies have shown that PSA decreases splenic blood flow, splenic venous pressure."
 - We agree with this statement by the reviewer, and had included similar statements in our paper.
 - "In the introduction specific hints to the used technique should be given."
 - We respectfully disagree, and feel that a discussion of the technique used in PSE is more appropriately placed later in the article. We feel that beginning the article with a brief synopsis of PSE in cirrhotic patients with a historical perspective of the procedures development is a more appropriate introduction to the paper.
 - "Other studies demonstrated PSA to be elected as a preoperative therapy before liver surgery and/or ablation prior to other treatment options."
 - We agree with this statement by the reviewer, and had included similar thoughts in the paper.
 - "Questions regarding the technique remain whether a proximal or distal embolization is better, whether targeted embolization should be performed."
 - We agree with this statement by the reviewer, however, the studies comparing proximal and distal PSE in cirrhotic patients have not been completed. While the literature does address proximal versus distal PSE, it is in the setting of trauma, and we sought to focus our paper on patients with cirrhosis.
 - Regarding comments made by reviewer 02663375:
 - Background: it should be clear to the readers of the journal that splenomegaly is not the definitive treatment in all cirrhotic patients. Please, modify this statement.
 - We have complied with this recommendation.
 - References should be numbered and the numbers should be given for all the cited articles.
 - All cited articles are included in the reference section and are numbered
 - The manuscript has track of all the changes that were made!
 - Apologies, our final version has been submitted.
 - Reference #39 (SMITH) is a review like this one, not an original article, and it should be acknowledged that the structure of Smith review is similar to that of the present review. The article is cited on the second line of the TECHNIQUE paragraph.
 - We agree, and have changed the text to highlight that the Smith article was a review.

One reference was added, one reference was removed, and the order in which some of the material was presented was adjusted. Additionally, small revisions as detailed above were made.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Jm', with a long horizontal flourish extending to the right.

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