Reviewer’s report

Title: Cone-beam CT findings during prostate artery embolization for benign prostatic hyperplasia-induced lower urinary tract symptoms: a case report

Version: 0 Date: 19 Apr 2017

Reviewer: Ari Isaacson

Reviewer's report:

Overall: Good case of PAE with nice imaging including CBCT images. The case report would be improved if it was focused on how CBCT was helpful to the case and less about PAE in general. It needs more detail about the imaging and how the images were used.

Title: Recommend changing to "benign prostatic hyperplasia"

Abstract:

Background:Pg 3 Line 10- There have been a couple prior reports on CBCT--see Bagla et al, JVIR 2013, Bagla, Sterling CVIR 2014, Wang et al Radiology 2016 (you cited this one). I would remove the statement that starts "To the best of our knowledge..." Replace with CBCT can be helpful for PAE to determine correct artery for embolization.

Case presentation: pg 3 line 17 change to "imaging findings"

Background:

P4 line 17 change to "prostatic artery embolization"

line 36 change "that was" to "that were"

Case Presentation:

pg 4 line 46-would remove "without underlying disease"

line 58 Why were medical therapies not tried first?
pg 5--would recommend providing details of the contrast injection rates (manual or power injector) for each of the CBCTs performed. These are important details for this report which is about CBCT.

line 41-43 change "near total occlusion" to "near stasis" And why did you choose near total occlusion instead of total occlusion? Did you dilute the particles prior to injecting?

pg 6 line 2 change "besides" to "in addition"

line 12 Did you consider other techniques to avoid injuring the rectum, such as using larger particles? or advancing the catheter distal to these branches?

line 31--the more common self limiting side effect for non target embolization to he rectum is bleeding--mucus-containing stools sounds more like infection. Is this a possibility?

line 34--what was the time interval after the procedure that the IPSS was remeasured?

Discussion:

Pg 6 line 58--need a reference for the statement about prostatectomy

pg 7 line 3--need references

I would suggest that you don't necessarily need the first two paragraphs of the discussion. I would cut straight to the imaging aspect of it.

pg 8 line 1--Could you be more specific about how using the CBCT and the contrasted foley balloon helped identify the prostatic arteries? This should be the focus of the discussion.

Figures:

1- In this image it looks like the LPA is arising from the internal pudendal artery

2- I do not think images b or c are helpful. I would just keep A and D. In D, it looks again as of the LPA is arising from the internal pudendal artery

3- There appears to be contrast in the bladder wall as well--is it possible there was non-target embolization to the bladder?

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes
**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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