Reviewer’s report

Title: A novel real-time IVUS double-lumen microcatheter for recanalization of chronic total occlusion: A case report

Version: 0 Date: 27 Apr 2019

Reviewer: Yugandhar Reddy Manda

Reviewer's report:

1. Do you believe the case report is authentic? Yes

Yes/No

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.

Comments: NOne

3. Does the Introduction explain the relevance of the case to the medical literature? Yes

Yes/No

4. Does the article report the following information? Where information is missing, please specify.

a. The relevant patient information, including:

- De-identified demographic information (age, gender, ethnicity)
- Main symptoms of the patient
- Medical, family and psychosocial history
- Relevant past interventions and their outcomes

b. The relevant physical examination findings
c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at T = 0, follow up at T = 1 month.

d. Diagnostic assessments, including:
- Diagnostic methods
- Challenges (e.g., financial, language/cultural)
- Reasoning and prognostic characteristics (e.g., staging), where applicable

e. Types and mechanism of intervention

f. A summary of the clinical course of all follow-up visits

Comments:
Yes

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments:
Yes

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below. YES

Yes/No

7. Is the Abstract representative of the case presented? YES

Comments:

8. Does the case represent a useful contribution to the medical literature? YES

Comments:
9. Additional comments for the author(s)?

Well presented article, but will need major correction for English grammar and sentence rewriting in accepted scientific literature.

Some words also need to be revised Like Ostium instead of ostial.

Also you need to mention the manufacturer of this device. If this is not commercially made, then you have insert the patent numbers and the company that helped put it together.

**Level of interest**
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

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

Not suitable for publication unless extensively edited

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

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None
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Were you mentored through this peer review?

No