Reviewer’s report

Title: Acute aortoiliac occlusive disease during percutaneous transluminal angioplasty in the setting of STEMI: a case report

Version: 0 Date: 26 Nov 2017

Reviewer: Y Law

Reviewer's report:

1. Do you believe the case report is authentic?

Yes

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: IRB and patient consent were obtained as stated in the manuscript.

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

Yes

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) Yes
   - Main symptoms of the patient Yes
   - Medical, family and psychosocial history Yes
   - Relevant past interventions and their outcomes Yes
b. The relevant physical examination findings Yes

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.

Chronological order was clear. No long term follow up data was given.

d. Diagnostic assessments, including:

- Diagnostic methods Yes
- Challenges (e.g., financial, language/cultural) Not applicable
- Reasoning and prognostic characteristics (e.g., staging), where applicable Not applicable

e. Types and mechanism of intervention Yes. Some information was missing.

f. A summary of the clinical course of all follow-up visits No long term data was available.

Comments:

Finding of peripheral artery disease is not uncommon during cardiac intervention. To me, this case was an iatrogenic injury in a pre-existing aorto-iliac stenosis. Please elaborate how the interventional cardiologist inserted the wire and catheter. Did they perform angiogram/aortogram for roadmap or insert blindly? It is a very common practice for cardiologist to insert wire and catheter blindly till the ascending aorta.

An isolated stenosis of infrarenal aorta is also rare. Did the patient had inflammatory vascular disease? Was this an iatrogenic aortic dissection caused solely by wire and catheter injury?

How's the femoral pulses pre-intervention? Is there any ultrasound examination or guidance during femoral sheath insertion?
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

7. Is the Abstract representative of the case presented?

Comments: Yes

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

Comments: Very limited contribution as vascular surgeon received calls from cardiologist for this kind of access problem frequently.

9. Additional comments for the author(s)?

The authors suggested: A history of vascular claudication, impotence, weak femoral pulses, and/or significant cardiac risk factors can help stratify the probability of either of these occurring and we encourage interventional cardiologist to consider using the radial artery as an alternative approach.

In this particular case, patient had no history of claudication or impotent. Bilateral posterior pedial pulses palpable. The only hint would be cardiac risk factors which supposed to be present for all myocardial infarction patients. The authors suggestion would not make any change in practice.

Instead of using the radial access, I would suggest routine angiogram for roadmap and careful manipulation of wire and catheter. Otherwise, similar could have happened in radial access.
**Level of interest**
Please indicate how interesting you found the manuscript:

An article of limited interest

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

Acceptable

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

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal