Reviewer's report

Title: Cardiac arrest associated with Sildenafil ingestion in a patient with an abnormal origin of the left coronary artery: Case report

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Reviewer: Thorsten Reffelmnn

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Manuscript “Cardiac arrest associated with Sildenafil ingestion in a patient with an abnormal origin of the left coronary artery: Case report”, by Huber BC et al.

This is a brief case report describing a 59-year old patient with cardiac arrest and ventricular fibrillation after sexual intercourse and 50 mg oral sildenafil. The cardiac work up revealed an abnormal origin of the left coronary artery with an interarterial course between the aorta and pulmonary artery.

The case report is interesting, even if it remains of question whether the exercise during sexual activity, sildenafil administration, the coronary artery disease of a combination was the trigger for ventricular fibrillation.

Specific points:

Minor essential revisions:
- “However, Patients with known coronary artery disease using PDE5 inhibitors are at risk of developing myocardial infarction after receiving sildenafil due to prolonged and exaggerated vasodilatation and hypotension [5].” Where does this statement come from? I am not aware of significant hypotension after sildenafil without concurrent use of nitrates, alpha-blockers or with low-blood pressure at baseline. Stable patients with coronary artery disease not requiering the use of nitrates may be prescribed sildenafil.
- A literature research on vasodilating drugs and their consequences in patients with anomalous coronary artery originin could substantially improve the paper. Had this patient taken vasodilating medication before? Was he regularly engaged in sports? What was the medical history and the cause of erectile dysfunction? Was it vascular-type erectile dysfunction?
- It is of potential interest that the cardiac arrest occurred at the age of 59. What is the median age when this coronary anomaly usually becomes symptomatic? Is this patient particularly old for his first manifestation?
- The medical history including drugs, coronary risk factors, etc. should be described in detail.
- Reference range for troponin, CK, and CK-MB should be provided.
- LV-EF should be specified (not impaired left ventricular function). Did EF recover or maybe there was preexisting reduction of EF (by what cause?).
- “Impotence” should be replaced by the word: “erectile dysfunction”.

**Level of interest:** An article of limited interest

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
'I declare that I have no competing interests'