Anaesthesia for patients with Arrhythmogenic Right Ventricular Dysplasia-mini review

Revision notes

Dear Dr Ji

Thank you for reviewing our paper. We found reviewers' comments and suggestions valuable and have addressed all of them in our revised manuscript. The details of our revision are listed in the revision note submitted.

Ivett Blaskovics

Kamen Valchanov

1. Reviewer #1 comments that under the Pathogenesis and Genetics section the last paragraph is a repetition.

   Action: We have modified our manuscript and removed the paragraph.

2. Reviewer #1 suggested that adding an electrocardiogram demonstration epsilon-wave would be valuable

   Action: We have added an ECG selected from our patient population with established diagnosis of ARVD showing epsilon waves in the precordial leads (V1-V3).

3. Reviewer #1 comments that there is no evidence for right ventricular angiogram being the gold standard method for diagnosing ARVD.

   Action: We have considered and modified the manuscript reflecting that right ventricular angiography is an invasive method indeed. We have also emphasised that cardiac MRI and 3D echocardiography is an easily repeatable and non-invasive method to diagnose ARVD.

4. Reviewer #1 comments that there is a typographical error on Page 7

   Action: we have corrected to hypotension.

5. Reviewer #1 asks if Dopamine is the best choice of vasoactive agent in this patient population due to its significant arrhythmogenic effect.

   Action: Dopamine is highly arrhythmogenic indeed and we have provided reference in the revised manuscript. We have also emphasised that in a case series Dopamine was successfully used in patients with ARVD to maintain arterial perfusion pressure in the perioperative period and it was not associated with adverse effect or perioperative loss.

6. Reviewer #2 comments that adding a table summarising the perioperative management of the patient with established diagnosis of ARVD

   Action: We have added a table summarising anaesthetic management of this patient population.

7. Reviewer #2 askes to provide more details about postoperative care including treatment of adverse events occurring in postoperative period

   Action: We have modified our manuscript and provided more details about postoperative management including analgesia, maintenance of arterial blood pressure and gas exchange. We have also added some recommendation how to deal with arrhythmias and cardiovascular collapse occurring in high dependency unit.

8. Review #2 asks if we could add a paragraph providing guidance to the reader how to apply this knowledge in the routine clinical practice

   Action: We have modified our manuscript and summarised the most important elements of perioperative planning emphasizing that awareness about AVRD, understanding the pathophysiology, maintaining physiology near to normal, anticipating and promptly responding to adverse events help to avoid perioperative loss.