A CASE OF SUDDEN CARDIAC ARREST DUE TO WOLF-PARKINSON-WHITE SYNDROME

Sule Akin Enes, Anis Aribogan, Pinar Ergenoglu, Asli Karsli

Baskent University Medical Faculty, Department of Anesthesiology and Reanimation,
Ankara, TURKEY

Purpose of the study:

- Wolff-Parkinson-White (WPW) syndrome is characterized by a wide spectrum of clinical conditions: many subjects remain asymptomatic during the whole life, others suffer from paroxysmal episodes of atrioventricular tachycardia.
- In case report, a sudden cardiac arrest was introduced in a patient with undiagnosed WPW who underwent bilateral thoracic sympathectomy due to hyperhidrosis

Materyal and Methods:

- Endoscopic thoracic sympathectomy was performed in a 19-year-old healthy young patient for axillary hyperhidrosis.
- No problem was occurred during the surgery under general anesthesia.
- Before the endotracheal extubation, a polymorphic ventricular tachycardia developed and diagnosis of WPW was detected with typical ECG findings. Amiodarone infusion was started and the extubation was abandoned.
- Meanwhile, ventricular fibrillation occurred and cardiopulmonary resuscitation was initiated. according to the recommendations of the ERC guidelines.
- In 30 minutes, Return of spontaneous circulation was performed in the patient.
- He underwent percutaneous coronary intervention but no coronary artery pathology was detected.
- Unfortunately Ejection fraction was lower($EF < 20$) The patient was immediately reoperated and the sympathectomy clips were removed bilaterally. Then arrhythmia decreased but hypotension continued
- After 4 hours, consciousness of the patient returned but He died of cardiopulmonary shock in 48 hours.
- In postmortem investigation, the patient's family history revealed heart disease that was not mentioned in the preoperative evaluation.
- The patient's family also remember that he had some syncopes which was never investigated during his childhood.

Result:

- WPW can be a life-threatening arrhythmia by deterioration into ventricular fibrillation.
- Decrease in the sympathetic effect on the heart with a surgery in a patient with probable cardiac transmission problems may increase the possibility of peri arrest arrhythmia such as WPW

Conclusion

- There is no obvious structural heart disease, it is possible that some of these individuals died because of a cardiac arrhythmia

References

- Am Coll Cardiol 2004;43:1137
- Medicine 2018 ; 97(51): e13248.