SHORT COMMUNICATION

Another Case of Atrial Septal Defect Associated with Arrhythmogenic Cardiomyopathy Detected by Simple Standard Electrocardiogram

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ABSTRACT

Another case of atrial septal defect with arrhythmogenic cardiomyopathy with typical ECG is presented.

Key words: Arrhythmogenic cardiomyopathy, atrial septal defect, epsilon wave

Uhl anomaly, a very rare and often fatal diagnosis, is often associated with other congenital heart diseases such as an atrial septal defect or other variants. Uhl anomaly is very rare, only a few patients survive to adulthood.

In arrhythmogenic right ventricular cardiomyopathy, a combination with congenital heart disease is a very rare event. Recently, a case of a large atrial septal defect in need for surgery was described in the literature.[1]

This is the case of a 33-year-old female patient who suffered from dyspnea at a moderate workload. A splitting of the second heart murmur was heard, suggestive of atrial septal defect. In the electrocardiogram (ECG) of the patient, epsilon wave and T-wave inversion in the right precordial leads were seen together with terminal activation delay.

Echocardiography could detect a large atrial septal defect with normal dimensions of the right atrium and right ventricle. The right ventricle was characterized by dilatation of the right ventricular outflow tract and inferior wall.

During heart catheterization, coronary angiography and left ventricular angiography were normal. In right heart catheterization, a shunt volume between the right and left atrium of 64% was determined.

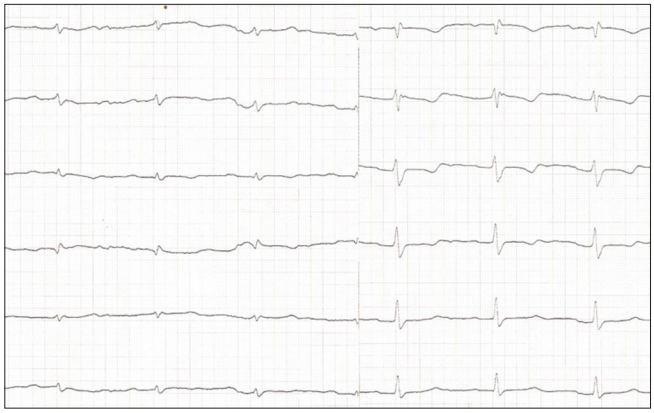

Figure 1: 12-lead electrocardiogram of the patient. Note: Epsilon waves in lead V2 and T-wave inversions in the right precordial leads, typical appearance in lead aVR suggestive of arrhythmogenic right ventricular cardiomyopathy. Leads I, II, III, aVR, aVL, and aVF on the left side, leads V1 – V6 on the right side

The patient was sent to heart surgery to the Heart Center of Coswig, Saxony-Anhalt, Germany, and was successfully operated without any complications.

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The electrocardiographic and echocardiographic findings suggest that a combination with additional arrhythmogenic right ventricular cardiomyopathy could be revealed in this special case. The ECG of the patient is demonstrated in Figure 1.

REFERENCES

1. Ren C, Fang Z, Zhao Y, Luo J. Congenital heart disease combined with arrhythmogenic right ventricular cardiomyopathy: A CARE compliant case report and literature review. Medicine 2020;99:e20279.

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