



Letters to the Editor

To the left–to the right: Sustained ventricular bigeminy from the “right” ventricular outflow tract in a patient with dextrocardia



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ARTICLE INFO

Article history:

Received 20 September 2013

Accepted 21 December 2013

Available online 4 January 2014

Keywords:

Dextrocardia

Right ventricular outflow tract

Premature ventricular contractions

Bigeminy

A 43-year-old nurse presented with dyspnea and severe palpitations that had been ongoing for more than 48 h and had begun while she was doing her exercise. She reported that she had several similar episodes within the last five years.

The examination and laboratory tests of the hemodynamically stable patient revealed no abnormality – except right-sided heart sounds and a mildly elevated level of NT-pro-BNP. The initial electrocardiogram (Fig. 1) exhibited right axis deviation with an inversion of the electrical waves in I, aVR and aVL and multiple monomorphic ventricular premature contractions (sustained bigeminy), inferior axis with LBBB-morphology, and retrograde VA-conduction. Radiography of the chest

revealed dextrocardia with situs inversus. Echocardiography revealed a moderately reduced “left” ventricular ejection fraction (LVEF; 55%). Comprehensive cardiologic workup revealed no structural heart disease and the patient was thus referred for catheter ablation of symptomatic idiopathic premature ventricular contractions (PVC; Fig. 2).

After optimal pace-mapping in the “right” ventricular outflow tract (Fig. 3) with a match of all 12 surface leads during pacing (Fig. 4), successful radiofrequency catheter ablation was performed. Ventricular ectopy could no longer be induced by ventricular stimulation, not even under orciprenaline infusion. Additionally, no premature ventricular contractions were observed for the subsequent 30 min (Fig. 5) of intraprocedural time as well as for the rest of the hospital stay. A repeat echocardiogram of the asymptomatic patient was performed after 3 months, showing complete normalization of left ventricular function (LVEF 72%). PVC-induced cardiomyopathy is not infrequent and has been shown to resolve after successful ablation [1,2], however, a case of “R”VOT-PVC-ablation in dextrocardia has thus far not been reported.

References

- [1] Yarlagadda RK, Iwai S, Stein KM, et al. Reversal of cardiomyopathy in patients with repetitive monomorphic ventricular ectopy originating from the right ventricular outflow tract. *Circulation* 2005;112:1092–7.
- [2] Huizar JF, Kaszala K, Potfay J, et al. Left ventricular systolic dysfunction induced by ventricular ectopy: a novel model for premature ventricular contraction-induced cardiomyopathy. *Circ Arrhythm Electrophysiol* 2011;4:543–9.

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Herzfrequenz	74/min
PQ Intervall	148ms
QRS Dauer	104ms
QT/QTc	414/459ms
P-QRS-T Winkel	119/166/-61°
P Dauer	112ms
RR/PP Intervall	1196/810ms



Fig. 1. Standard-ECG on hospital admission.

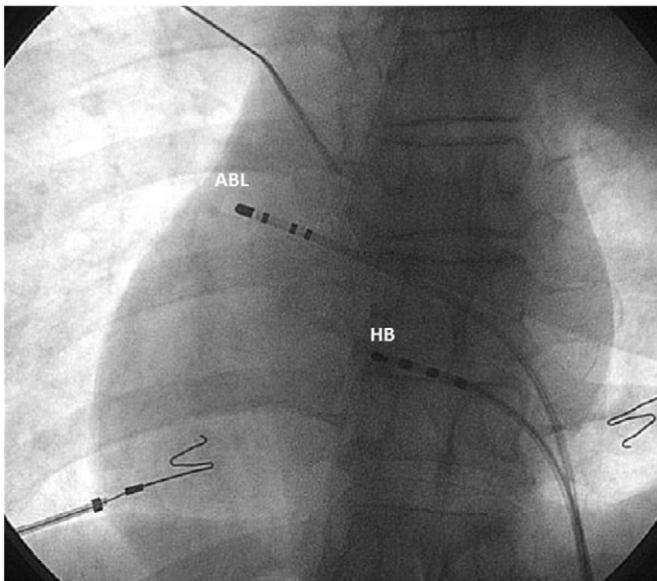


Fig. 2. Fluoroscopic image exhibiting the endocardial ablation site (AP-projection) in a patient with dextrocardia. A mapping catheter is positioned at the His-bundle (HS), the ablation catheter is positioned at the RVOT-focus (ABL).

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