Supplementary material

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Table S1

Major complications of ablation procedures					
1. Valvular damage					
2. Tamponade					
3. Myocardial ischaemia/ myocardial infarction					
4. Thromboembolism					
5. Heart block					
6. Vascular access complications					
7. Any other complication requiring procedural interventions					
Minor complications of ablation procedures					
1. Any complications other than major ones listed above					

Table S2.	Radiofrequency	ablation (RFA)	outcomes	and left	ventricle	ejection	fraction
(LVEF)							

LVEF	Baseline	Short term follow-up	Long term follow-up	
All	60.0	60.9	62	
	[54.5; 65.0]	[55.5; 65.0]	[58.0; 65.2]	
Successful ablation	60.0	61.3	62.0	
	[55.0; 65.0]	[57.0; 65.0]	[60.0; 65.0]	
Unsuccessful ablation	55.0	54.0	53.5	
	[45.0; 62.5]	[46.5; 63.0]	[50.0; 65.5]	

There were no significant differences in LVEF in the follow-up as compared to baseline and with regard to the ablation outcome.

Continuous variables are expressed as medians [interquartile ranges: Q1 to Q3].



Figure S1. 26-year-old male referred for RFA due to the idiopathic ventricular arrhythmia (48188 PVC and frequent nsVT in 24-hour Holter monitoring). The ablation starts from the right site mapping with LAT preceded by the -20ms PVC onset on tricuspid annulus above the His bundle potential. After 200s of unsuccessful RF applications, the ablation catheter was removed and retrogradely advanced into the aortic root. Detailed mapping from RCC revealed better sharper potentials preceded by -21ms PVC onset. After a successful ablation of this focus, the appearance of new PVC morphology was confirmed with the best LAT (-48 ms) in the LCC - the third site of ablation was mapped and validated. The intraprocedural valsalvography was performed to determine the ablation target and the left main (LM) artery location; having confirmed safe distance from LM, a successful ablation was performed (the total fluoroscopy duration for these procedures was 28 sec, <32 mGy). In the long-term follow-up, there was no recurrence of arrhythmia. **A** – 3D-electroanatomical ablation map in

LAO 30° (on the left) and RAO 30° (on the right) view: HIS- His bundle potential mapped (blue dots); RV abl - first ablation from tricuspid annulus (red dots); NCC abl - ablation from NCC (yellow dots); LCC first/final - first/final application on LCC target (red, orange and pink dots); LM-mapped - LM after valsalvography (yellow dots). Other dots represent operator's anatomical landmarks; **B** – morphology of PVC arising from NCC in a standard 12-lead ECG; **C** – morphology of PVC arising from LCC in a standard 12-lead ECG; **D** – intracardiac recording: earliest local activation for PVC arising from NCC. LAT preceded by the -21ms QRS onset; **E** – intracardiac recording: earliest local activation for PVC arising from LCC. LAT preceded by the -48ms QRS onset; **F** – valsalvography; **G** – fluoroscopy view of RF catheter position at the LCC ablation target below the LM.