

# Feasibility and safety of the zero-fluoro, “apron-less” approach to repeat pulmonary vein isolation procedures using radiofrequency energy after initial cryoballoon ablation

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**Introduction:** We aimed to investigate the feasibility and safety of zero-fluoro approach for the repeat atrial fibrillation (AF) procedures after initial cryoballoon (CB) ablation.

**Patients and Methods:** We have performed a retrospective study on patients that have undergone repeat pulmonary vein isolation (PVI) procedures in our institution since zero-fluoro program was initiated in 2020. All patients received CB ablation for the initial procedure. Repeat procedures were performed under conscious sedation and with intracardiac echo (ICE) and 3D mapping system - without the use of fluoroscopy and lead aprons.

**Results:** We have analysed in total 50 patients (76% male, 57.9±10.2 years old), 50% of which suffered from paroxysmal AF. All procedures were successfully performed without the use of fluoroscopy. The mean procedure time was 93.9 ± 27.1 min and the mean RF time was 825 ± 468 sec. The mean of 0.98 ± 0.91 veins was reconnected per patient and 36% of patients did not have PV reconnections. In all patients successful PV isolation was performed, confirmed by entry and exit block. No major periprocedural complications were observed. After the mean follow up of 12.5 ± 3.4 months: 68% of mixed AF population patients were free from AF after one year.

**Conclusion:** In our cohort of patients, zero-fluoro, apron-less approach for repeat PVI procedures after index cryoballoon ablation proved to be feasible and safe. Index CB ablation resulted with low rates of PV reconnections and mid-term results after repeat procedures are favourable.<sup>1</sup>

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**LITERATURE** 

1. Debrececi D, Janosi K, Bocz B, Turcsan M, Lukacs R, Simor T, et al. Zero fluoroscopy catheter ablation for atrial fibrillation: a systematic review and meta-analysis. *Front Cardiovasc Med.* 2023 Jun 16;10:1178783. <https://doi.org/10.3389/fcvm.2023.1178783>