Entire posterior wall isolation in an unusual case of common ostium between the right inferior and left inferior pulmonary veins

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A 47-year-old male patient was referred for pulmonary vein (PV) isolation. The pre-procedural cardiac computed tomography (CT) scan showed an unusual common ostium between the right inferior and left inferior PVs, on the mid-postero-inferior wall of the left atrium. Because of its proximity to the esophagus, we performed isolation of the entire posterior wall with a single ring of ablation lesions extending anteriorly to encompass the ostia of all PVs to minimize lesions on the posterior wall. After completing the circumferential ablation line, we demonstrated electrical isolation of the entire posterior wall and all four PVs. The three-dimensional reconstruction of the CT scan is shown in figure, displaying the lesion set and the common ostium (asterisk). Several case reports described isolation of this type of common ostium, but the lesion sets performed all involved ablation of the posterior wall. We describe the first reported single ring ablation approach for this unusual variant of common ostium involving the inferior PVs to reduce ablation lesions in close proximity to the esophagus to minimize the risk of oesophageal injury.

The full-length version of this report can be viewed at: http://www.escardio.org/communities/EHRA/publications/ep-case-reports/Documents/Entire-posterior-wall-isolation.pdf.