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IMAGE FOCUS



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Accessory pathway (AP) ablation often remains a challenging procedure, requiring a precise localisation of this pathway along the valvular annulus. Most of these procedures are still performed with conventional fluoroscopy only, which implies a substantial irradiation of the patient. As this procedure generally applies to young patients, concerns exist about the risk of stochastic effects of irradiation. In order to minimise X-Ray use and improve the precision of the ablation, a 3D reconstruction of the atrium and valvular annulus can be used.

The panel shows a 3D reconstruction and activation map of the left atrium and mitral annulus during posterolateral left-sided AP ablation (LAO: left anterior oblique; RPV: right pulmonary veins; LAA: left atrium appendage; LSPV: left superior pulmonary vein; LIPV:

left inferior pulmonary vein; MA: mitral annulus; LPO: left posterior oblique; LPV: left pulmonary veins).

Stimulating with a quadripolar electrode in the right ventricle outflow track at high frequency (to make sure that the retrograde conduction takes the AP only), we measure in many points along the mitral annulus the delay of the atrial depolarisation. Then, the software assigns each point a colour code, with the latest activated zones in purple and the earliest (thus the AP) in red.

This allows for a substantial reduction in fluoroscopy use and a very precise localisation of the AP in order to guide its ablation. Right-sided AP can also be localised by this technique.

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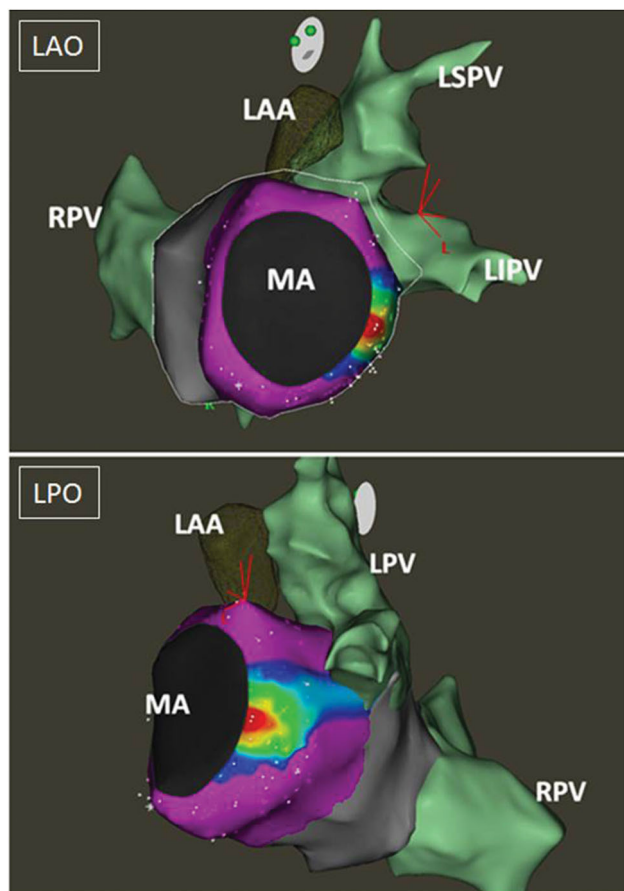


Figure 1.