

Artis zee - Study Protocol

Atrial Fibrillation with LA Injection and Rapid Pacing

Electrophysiology

Supported by

- *syngo* DynaCT Cardiac
- *syngo* iPilot
- *syngo* InSpace3D
- *syngo* InSpaceEP

Courtesy of

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System & Software

Artis zee with 30 x 40 FD
syngo X Workplace

Case Description

Left atrium segmentation for ablation treatment

Diagnosis

Paroxysmal atrial fibrillation

Treatment

Ablation therapy

Tips and Tricks

- Prevent cardiac motion during image acquisition through rapid right ventricular pacing.
- Breathhold maneuver: apnea was induced during acquisition to reduce respiratory motion artifacts.
- Metallic cables should be removed from the field of view.
- Arms can be kept in normal position beside the body.

Protocol content:

- Rapid pacing, started at 240 bpm.
- After verification of good capture, a contrast solution is injected in the left atrium.
- After 2 seconds, actual image acquisition is started automatically.
- After the acquisition is completed, pacing is stopped.

“Visualization of the left atrium, ostia of the pulmonary veins and atrial appendage commonly used for guidance in atrial fibrillation procedures.”

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Acquisition Protocol	5sDCT Card
Number of Projections:	248
System Dose:	0.54 μ Gy/f*
Increment in Degrees:	0.8 °/f
Injection Protocol	
Catheter Position:	Left Atrium
Contrast Medium (CM):	370 mg Iodine/ml
Test Bolus:	w/o
Dilution:	60 %
Injection Volume:	100 ml (60 ml CM/ 40 ml Saline)
Injection Rate:	20 ml/s
Duration of Injection:	5 s
X-ray Delay:	2 s
Power Injector Used:	Yes

Reconstruction	
VOI Size:	Full
Slice Matrix:	256 x 256
Kernel Type:	HU
Image Characteristics:	Normal
Reconstruction Mode:	Nat Fill
Viewing Preset:	Golden
Secondary Recon	No

*For software version VC14 and higher, 0.36 μ Gy/f is used for all 5-second protocols. (Except for low-dose protocols)

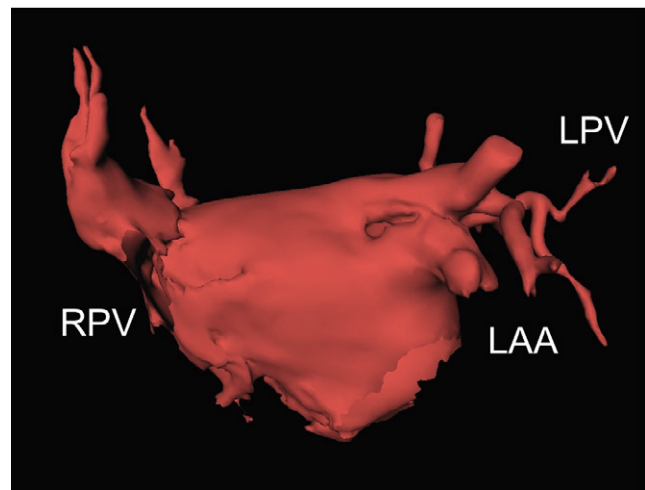
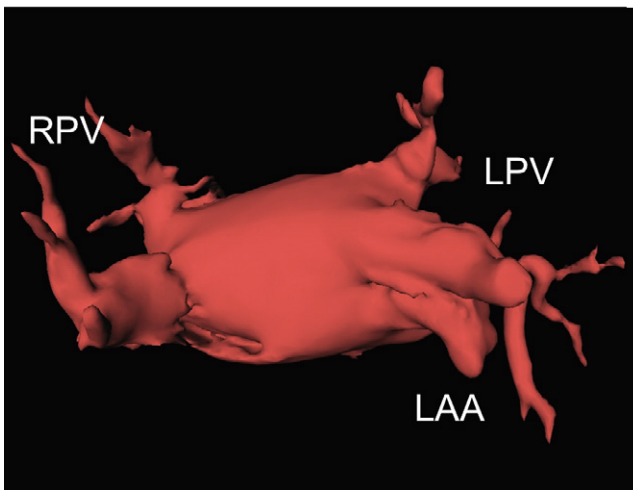


Image segmentation of the left atrium (acquisition during rapid ventricular pacing); left: superior view, right: anterior view.

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