

## Study Protocol

# Arthrography of lunatummalacia right wrist using syngo DynaCT Micro

Special Procedures

## Case Description

### Patient history

27-year-old female  
Lunatummalacia grade 4 of right wrist with chronic pain, radial shortening surgery in 2015.

### Procedure description

Arthrography of right wrist for diagnostic work-up. Detailed imaging of the articular cartilage.

Injection of Iodine contrast in the distal radioulnar joint, the midcarpal row and the radioulnar joint after fluoroscopy guided puncture.

*syngo* DynaCT Micro cone beam CT in Zoom 3.

Known Lunatummalacia grade 4 with destruction of os lunatum.

Incomplete filling of the radiocarpal joint most likely due to adhesions of the joint in the ulnar parts.

### General comments

The high spatial resolution of *syngo* DynaCT Micro allows to visualize all anatomical structures of the human wrist in detail.

It is easy to diagnose cartilage damages or pathologies in the bony structures.

### Tips and tricks

To acquire cone beam CT of the wrist, there is a special positioning of the patient necessary.

Patient should lie in prone position and the arm overhead stretched ("superman position") the other arm down along the body trunk.

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### Courtesy of

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Germany

### Supported by

*syngo* DynaCT Micro

### System & Software

Artis pheno VE 10

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Acquisition protocol	6sDCT HeadMicro (Zoom 3)
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## Injection protocol

Catheter position	Intraarticular
Contrast medium (CM)	300 mg iodine/mL
Dilution (CM/Saline):	Yes
Injection volume	8 mL
Injection rate	N/A
Duration of injection	N/A
X-ray delay	N/A
Power injector used	No

Reconstructions	Primary	Secondary
Name	DCT Head Clear	DCT Head Clear
VOI size	Manual	Manual
Slice matrix	512×512	512×512
Kernel type	HU	HU
Image characteristics	Normal	Sharp
Reconstruction mode	NatFill	NatFill
Viewing preset	DCT Head	DCT Head

## Clinical Images



Figure 1: Coronal MPR – primary reconstruction



Figure 2: Coronal MPR – secondary reconstruction

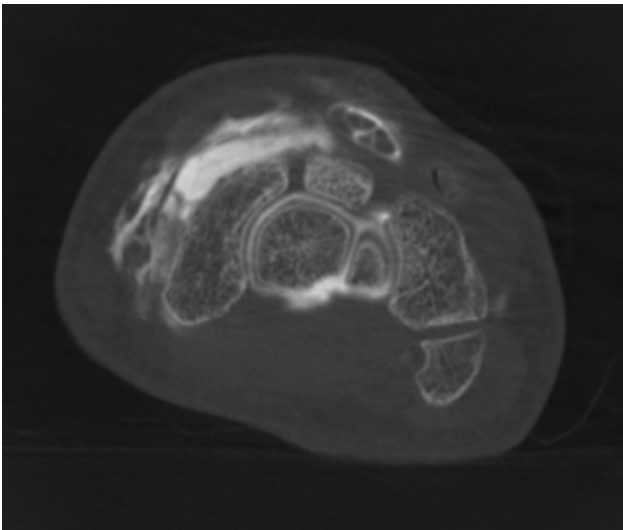


Figure 3: Axial MPR – primary reconstruction

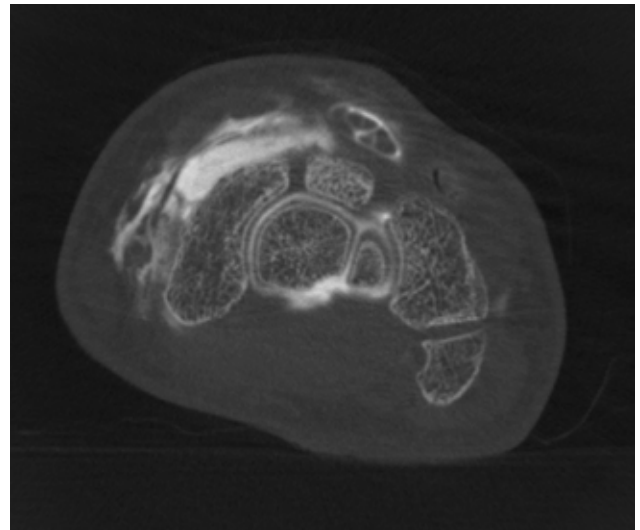


Figure 4: Axial MPR – secondary reconstruction

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