



Arthrography of lunatomalacia of the right wrist using *syngo* DynaCT Micro

Special Procedures

Study Protocol

Courtesy of

PD Dr. Jan Hinrichs, MD
Institute for Diagnostic and
Interventional Radiology,
Hannover Medical School,
Germany

Supported by

syngo DynaCT Micro

System & Software

ARTIS pheno VE 1
syngo Application Software VD2

Case Description

Patient history

27-year-old female with grade 4 lunatomalacia of the right wrist with chronic pain. Radial shortening surgery performed in 2015.

Procedure description

Arthrography of right wrist for diagnostic workup. Detailed imaging of the articular cartilage.

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

syngo DynaCT Micro cone beam CT (CBCT) scan in Zoom 3.

Known grade 4 lunatomalacia 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 us to visualize all anatomical structures of the human wrist in detail.

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

Tips and tricks

To acquire a CBCT scan of the wrist, special positioning of the patient is necessary.

The patient should lie in a prone position with the arm extended overhead ("Superman" position) and the other arm down alongside the trunk.

Arthrography of lunatomalacia right wrist using syngo DynaCT Micro

Acquisition protocol	6sDCT HeadMicro (Zoom 3)
Injection protocol	
Catheter position	Intraarticular
Contrast medium (CM)	300 mg iodine/mL
Dilution (CM/Saline):	N/A
Injection volume	8 mL
Injection rate	N/A
Duration of injection	N/A
X-ray delay	N/A
Power injector used	No

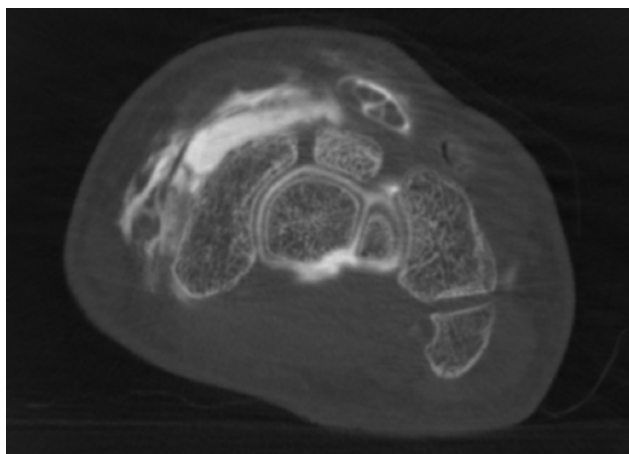
Reconstructions	Primary	Secondary
Name	DCT Head Clear	DCT Head Clear
VOI size	Manual	Manual
Slice matrix	512×512	512×512
Kernel type	HU	HU
Image characteristics	Normal	Sharp
Reconstruction mode	NatFill	NatFill
Viewing preset	DCT Head	DCT Head



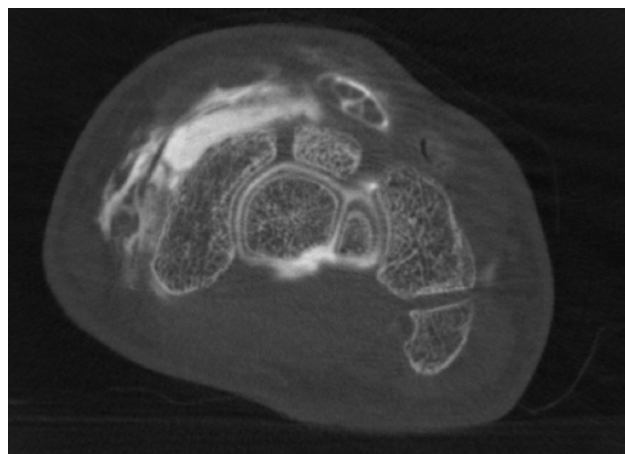
Coronal MPR – primary reconstruction



Coronal MPR – secondary reconstruction



Axial MPR – primary reconstruction



Axial MPR – secondary reconstruction

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
 Henkestr. 127
 91052 Erlangen, Germany
 Phone: +49 913184-0
 siemens-healthineers.com

The statements by Siemens' customers presented here are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this case are available throughout the Siemens sales organization worldwide.
 All rights reserved.