

Study Protocol

syngo Dyna3D DSA imaging of right hip after surgery

Interventional Radiology



A *syngo* DualVolume visualization was used to show vessels in relation to the anatomical structures to find the bleeding.

Courtesy of

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Supported by

syngo Dyna3D

System & Software

Artis Q ceiling VD10
syngo X Workplace VC10

Case Description

Patient history

Arterial bleeding after Gamma nail insertion in right hip.

Diagnosis

Immediately after surgery there was swelling of the upper leg. Deep femoral artery bleeding was suspected. CT angio showed a blush in muscle and the patient was transferred to the angio suite for exact localization of the bleeding and further treatment.

A *syngo* Dyna3D DSA run was performed and after fully automated reconstruction of all volumes, visualized in *syngo* DualVolume mode to show vessels in relation to the anatomical structures to find the bleeding.

Treatment

The bleeding had stopped in the meantime, so treatment was not necessary.

General comments

Due to the metal artifacts of the Gamma nail we decided for a high-contrast *Dyna3D* DSA run, rather than using a soft-tissue *syngo* DynaCT run.

This turned out to be a nice 3D volume, and even nice MPR views of the bony tissue.

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Acquisition protocol	5sDSA Body
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Injection protocol

Catheter position	Selective in arteria iliaca communis
Contrast medium (CM)	270 mg iodine/mL
Dilution (CM/Saline):	No
Injection volume	24 mL
Injection rate	4 mL/s
Duration of injection	6 s
X-ray delay	1 s
Power injector used	Yes

Reconstructions

Primary

Name	Dyna3D DSA Dual Body
VOI size	Full
Slice matrix	512 × 512
Kernel type	EE for sub volume/HU for mask volume
Image characteristics	Auto
Reconstruction mode	Dual
Viewing preset	DualVolume

Clinical Images

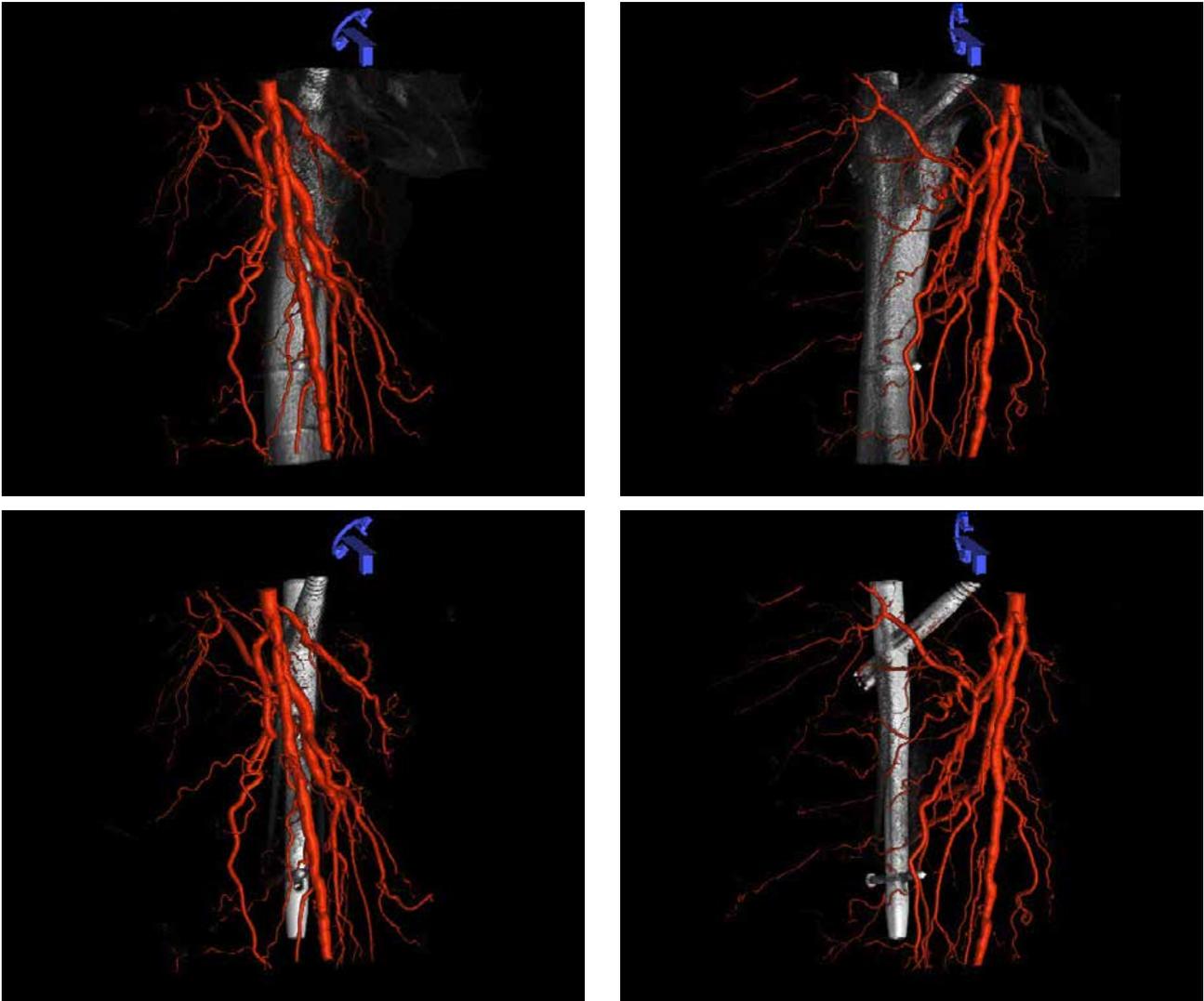


Figure 1: syngo DualVolume
Combines the reconstruction of mask run with the subtracted reconstruction to show vessels in relation to bones in any angulation

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