SIEMENS Healthineers

Posterior impingement of the hip following acetabular fracture

Multitom Rax Real3D[1] clinical case
Trauma Center BGU-Murnau, Germany

The products/features mentioned herein are not commercially available in all countries. Their future availability cannot be guaranteed.
Results from case studies are not predictive of results in other cases. Results in other cases may vary.
[1] Option

Clinical background and indication for Multitom Rax Real3D[1] examination

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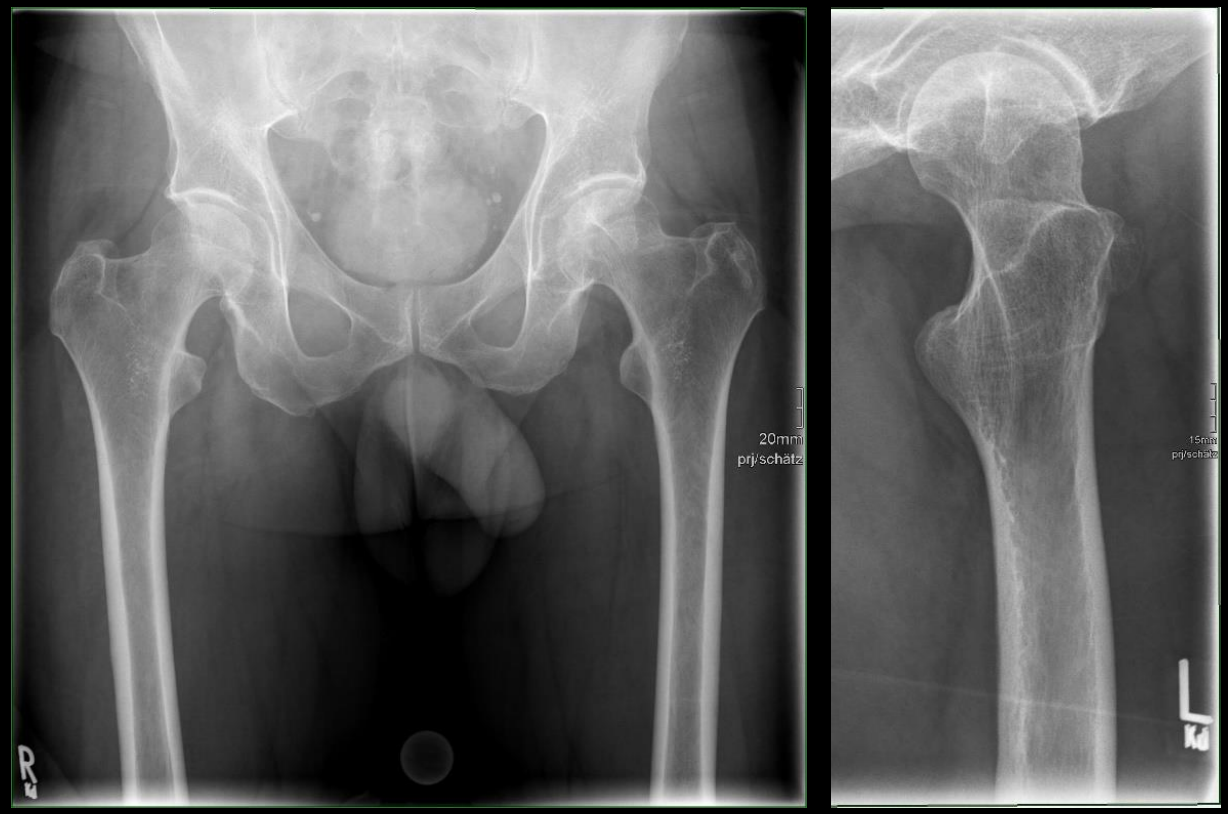
Patient
Male | *Age* 50-60 years | *BMI* 25-30 kg/m²

Anamnesis
The patient has a history of an acetabular fracture on the left side. The patient is now presenting with increasing dorsal hip pain when standing.

Indication for Real3D[1] examination
The examination aims to evaluate the presence of osteoarthritis in the hip and to assess the posttraumatic configuration of the hip joint in a weight-bearing upright position.



Conventional X-ray examination

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Multitom Rax Real3D[1] Settings

Settings for upright scan using Standard Protocol

Tube voltage	133 kV
Current time product	551 mAs
Dose area product	3765 µGy·m²
Calculated value for $CTDI_{vol,32}$	30 mGy
Scan time	16 sec
Number of projections	434

Reconstruction settings for sectional views

Pixel size	0.4 mm
Reconstruction kernel	medium
Slice thickness	0.4 mm

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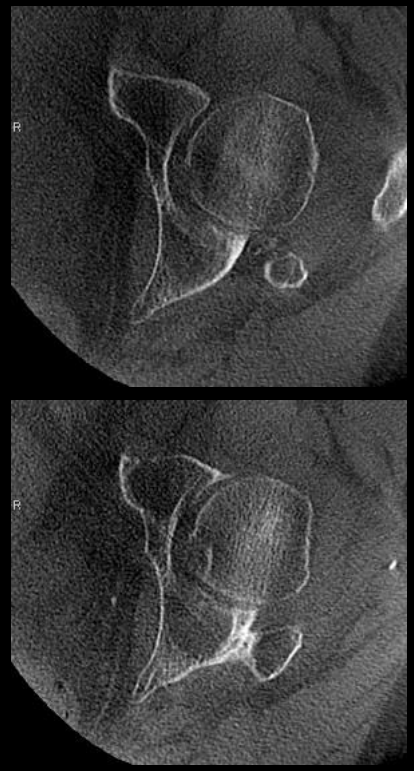
Multitom Rax Real3D[1] Diagnostic findings

The superior joint line of the left hip in weight-bearing upright position is preserved, indicating no typical degenerative disease. Multiplanar reformations and 3D reconstruction clearly reveal a remaining posttraumatic posterior step in the posterior acetabular pillar, resulting in significant posterior femoroacetabular impingement.

Coronal view



Axial view

VRT (volume rendering technique)

Study ID 5aag191

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[1] Option

"Osseous impingement along the joints of the lower limbs can be visualized in a weight-bearing upright patient position, even in the hip."[1]

Dr. Michael Scherr
Trauma Center BGU-Murnau, Germany

[1] The statements by Siemens Healthineers customers described herein 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.

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Real3D is an option.

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Dr. Michael Scherr is employed by an institution that receives financial support from Siemens Healthineers for collaborations.