

# Multi-fragment injury of the talus bone

Multitom Rax Real3D<sup>1</sup> Clinical Case  
University Hospital Wuerzburg, Germany



<sup>1</sup>Option



Study ID 5aab345

# Clinical background and indication for Multitom Rax Real3D<sup>1</sup> examination

## Patient

Female | \*1990 | BMI 21.8 kg/m<sup>2</sup>

## Anamnesis

Patient fell while horse riding. She suffered a concussion and reported left ankle and back pain.

## Indication for Real3D<sup>1</sup> examination

Initial X-rays of the left ankle were inconclusive. Despite considerable pain and swelling, no clear fracture dislocation or luxation could be ascertained. A fracture of the medial talus bone was suspected; however, the fracture pattern could not be sufficiently judged with radiography.



AP view

*Conventional X-ray examination*



Lateral view

Study ID 5aab345

Multitom Rax is not yet commercially available in all countries.  
Its future availability cannot be guaranteed. Please contact your local  
Siemens Healthineers organization for further details.

<sup>1</sup> Option

# Multitom Rax Real3D<sup>1</sup>

## Settings



Study ID 5aab345

### Settings for scan around the table with High Quality Protocol

<i>Tube Voltage</i>	80.5 kV
<i>Current Time Product</i>	430 mAs
<i>Dose Area Product</i>	1071 $\mu\text{Gy}\cdot\text{m}^2$
<i>Calculated value for <math>\text{CTDI}_{\text{vol},32}</math></i>	8.2 mGy
<i>Scan Time</i>	16 sec
<i>Number of Projections</i>	434

### Reconstruction settings for sectional views

<i>Pixel size</i>	0.4 mm
<i>Reconstruction Kernel</i>	sharp (equivalent to Br69)
<i>Slice Thickness</i>	2 mm

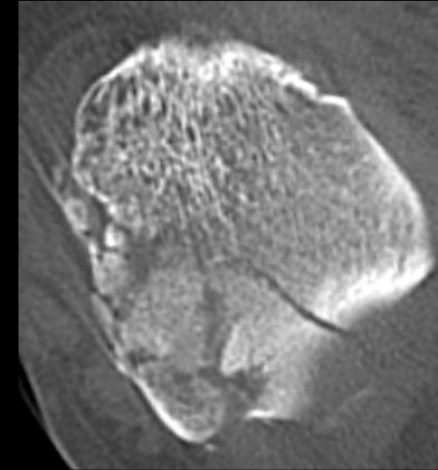
Multitom Rax is not yet commercially available in all countries.  
Its future availability cannot be guaranteed. Please contact your local  
Siemens Healthineers organization for further details.

<sup>1</sup> Option

# Multitom Rax Real3D<sup>1</sup>

## Diagnostics findings

Real3D<sup>1</sup> images in the lying position displayed a multi-fragment injury of the talus bone with articular involvement of the upper ankle joint and smaller dislocated fragments at the medial side. Considerable soft tissue hematoma were present. Due to the dislocated fracture pattern, the patient was advised to undergo surgery. Open reduction and internal fixation (ORIF) was performed several days later.



Axial view



Sagittal view



Coronal view

Study ID 5aab345

Multitom Rax is not yet commercially available in all countries. Its future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

<sup>1</sup> Option



***“Images possess good resolution with easily discernable bone microarchitecture. The fracture lines and even smaller fragments are clearly visible and appear sharp without blurring.”<sup>1</sup>***

**Jan-Peter Grunz, MD**  
University Hospital Wuerzburg, Germany

<sup>1</sup>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.





Multitom Rax is not yet commercially available in all countries.  
Its future availability cannot be guaranteed.  
Please contact your local Siemens Healthineers organization for further details.

Results from case studies are not predictive of results in other cases. Results in other cases may vary.

Dr. Jan-Peter Grunz is employed by an institution that receives financial support from Siemens Healthineers for collaborations.