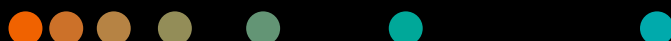
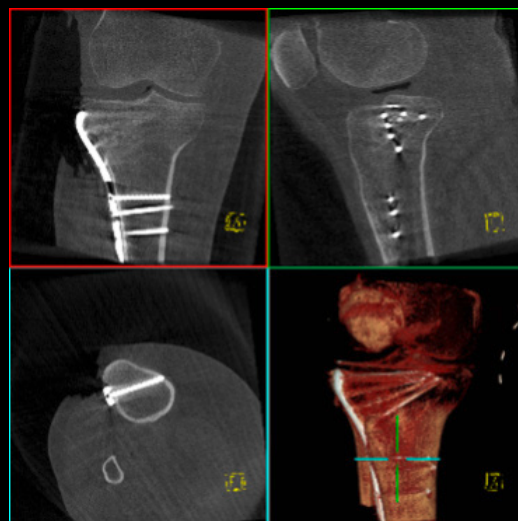


Study protocol

Proximal tibia fracture

Ortho/trauma surgery



Case description

Patient history

Male, age 61-75 years.
Pedestrian involved in a car accident.
Pressure pain lateral knee joint region and proximal tibia. Lateral knee joint instability. Severely limited range of motion of the knee joint. No peripheral motor or neurological deficits.

Diagnosis

Lateral fracture of the right tibia plateau type 21-B3 (Fig. 1)

Surgical procedure

ORIF – plate with angular stability: reduction of articular surface, filling of defect or adjustment osteotomy, plate fixation (Figs. 2-6)

Courtesy of

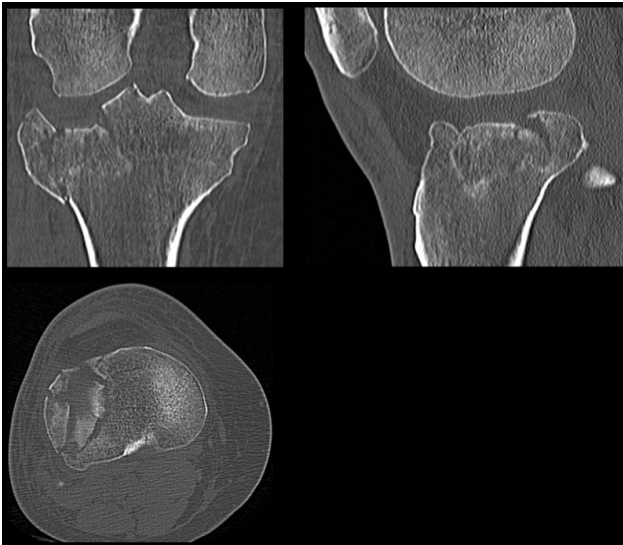
BG Trauma Center Ludwigshafen, Germany

System

Cios Spin mobile C-arm

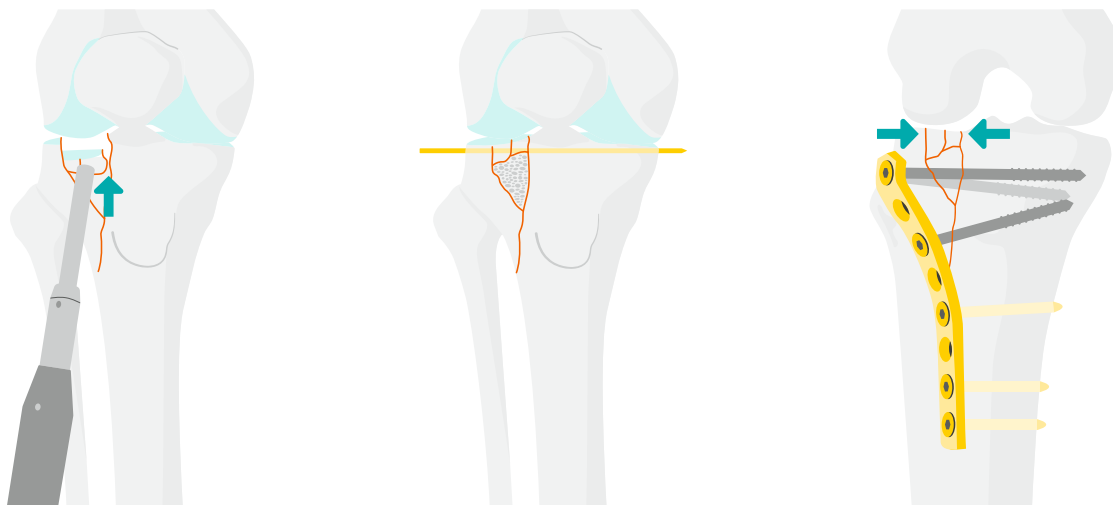
Clinical images and illustrations

Fig. 1



Preoperative CT: coronal/sagittal/axial view of right knee joint.
Multifragmentary fracture of the tibial plateau. Impression of articular surface

Fig. 2



ORIF – plate with angular stability

Clinical images

Fig. 3



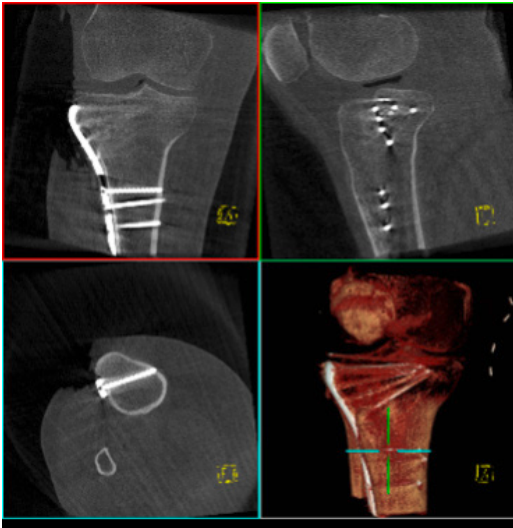
AP view of right knee joint: anatomical reduction of tibia plateau alignment. Correct plate position. No intra-articular screw penetration. Good bony contrast despite metal objects

Fig. 4



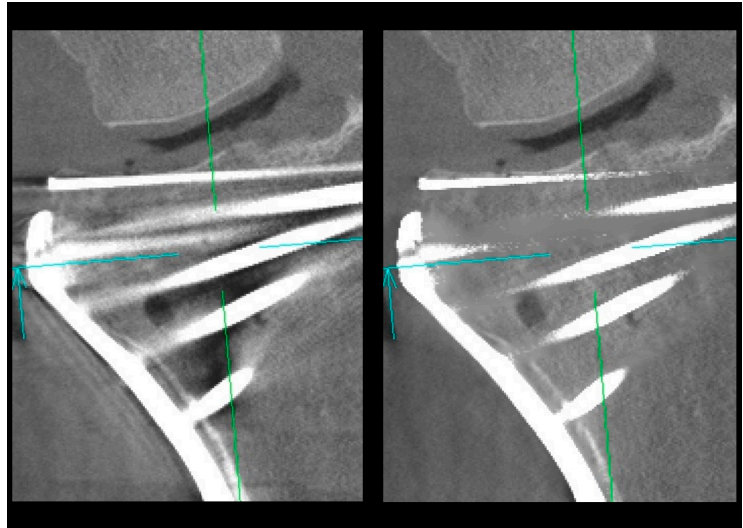
Lateral view of right knee joint: correct plate position. No intra-articular fragments or screw penetration. Good field of view

Fig. 5



3D scan of the knee joint: good bony contrast. Minor metal artifacts. Anatomical reduction of articular surface. No intra-articular fragments or screw penetration

Fig. 6



3D scan of right knee joint. Before artifact reduction (left): joint surface of lateral tibia plateau cannot be clearly defined due to metal artifacts. After artifact reduction (right): joint surface of lateral tibia plateau is now clearly delimited

The information presented in the study protocol is for illustration only and is not intended to be relied upon by the reader for instruction as to the practice of medicine. Any healthcare practitioner reading this information is reminded that they must use their own learning, training, and expertise in dealing with their individual patients. This material does not substitute for that duty and is not intended by Siemens Healthineers to be used for any purpose in that regard.

The statements by customers of Siemens Healthineers 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 Healthineers sales organization worldwide.

The product names and/or brands referred to are the property of their respective trademark holders.

All rights reserved.

Siemens Healthineers Headquarters

Siemens Healthineers AG
Siemensstr. 3
91301 Forchheim, Germany
Phone: +49 9191 18-0
[siemens-healthineers.com](https://www.siemens-healthineers.com)