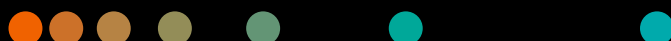
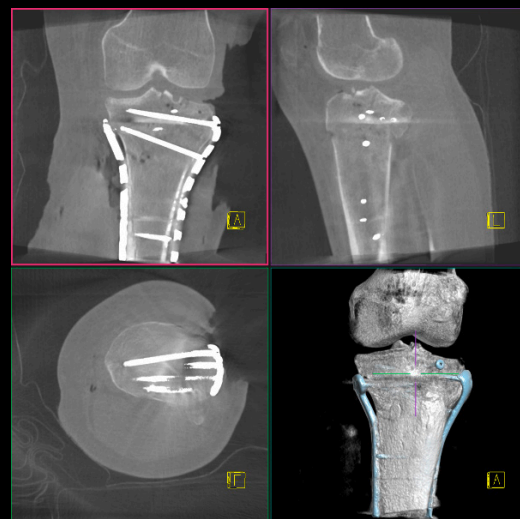


Study protocol

# Fixation of proximal tibia fracture

Ortho/trauma surgery



## Case description

### Patient

Female, aged between 18 and 30 years  
BMI range: 25–30

### Diagnosis

Proximal tibia fracture  
AO classification: 41C3.1  
Complete articular fracture, fragmentary articular (Fig. 1)

### Surgical procedure

Fixation of proximal tibia fracture: after assessing the fracture, K-wires were used to temporarily transfix the fracture. Double plating on the proximal tibia was then used to assure absolute stability. (Figs. 2–8)

### Benefits of CIARTIC Move

No C-arm technologist was needed, the surgeon operated the system from within the sterile field using **Smart Control**.

With **Position Assist** it is possible to store up to 12 procedure-specific positions, making surgical workflows more efficient.

The dose area product was 601.69  $\mu\text{Gy}\cdot\text{m}^2$  and the radiation time was 236.7 seconds.

**3D imaging** played a vital part in confirming the success of the surgery.

---

### Courtesy of

BG Trauma Center Ludwigshafen, Germany

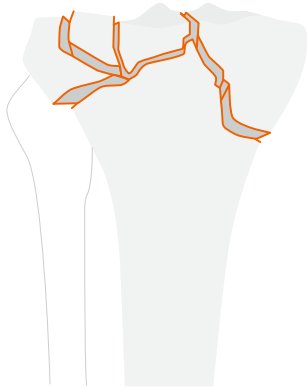
### System and software

CIARTIC Move, VB10A

---

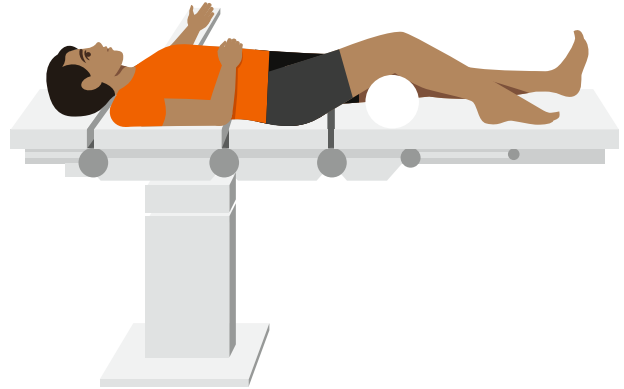
## Clinical illustrations

Fig. 1



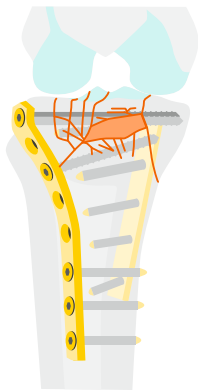
Fracture assessment and decision-making

Fig. 2



Patient prepared in supine position for surgery

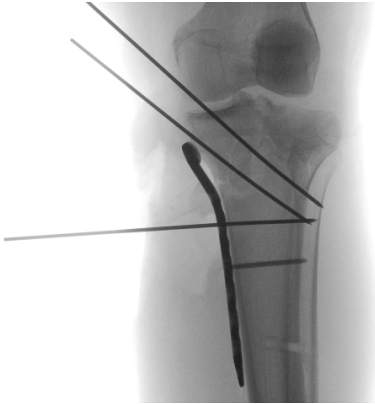
Fig. 3



Double plating on proximal tibia to achieve absolute stability

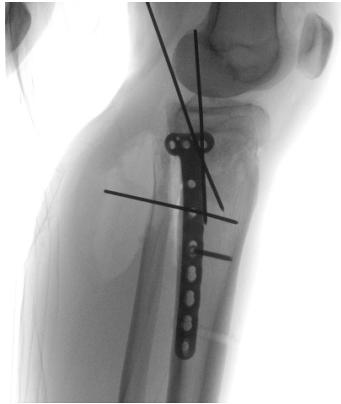
## Clinical images

**Fig. 4**



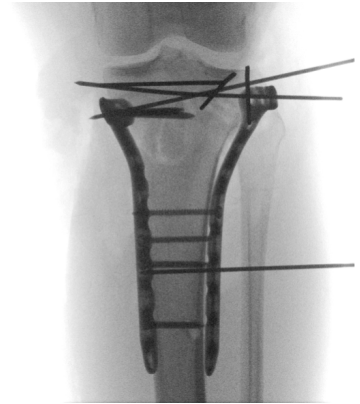
**Intraoperative image, anterior-posterior:** medial temporary transfixation using Kirschner wires and fixation with medial plate

**Fig. 5**



**Intraoperative image, lateral:** medial temporary transfixation using Kirschner wires and fixation with medial plate

**Fig. 6**



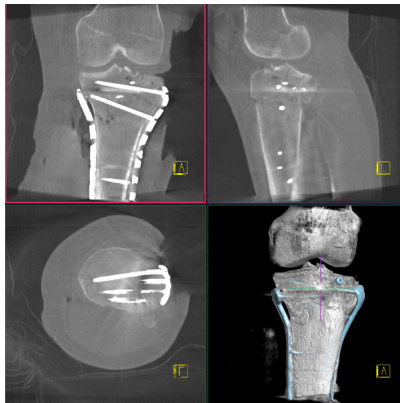
**Intraoperative image, anterior-posterior:** lateral temporary transfixation and support with lateral tibial plate

**Fig. 7**



**Intraoperative image, lateral:** insertion of medial and lateral plate with additional small-fragment lag screw for fixation of ventral fragment

**Fig. 8**



**Intraoperative 3D scan:** checking reduction of joint surface and confirming implant position. Correct reduction is shown and intra-articular screw position can be ruled out.

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)