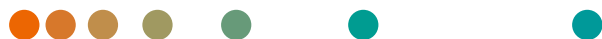


Intraoperative Imaging with Cios Fusion

Clinical Cases



Hospital Nuremberg South, Germany



Clinical Case

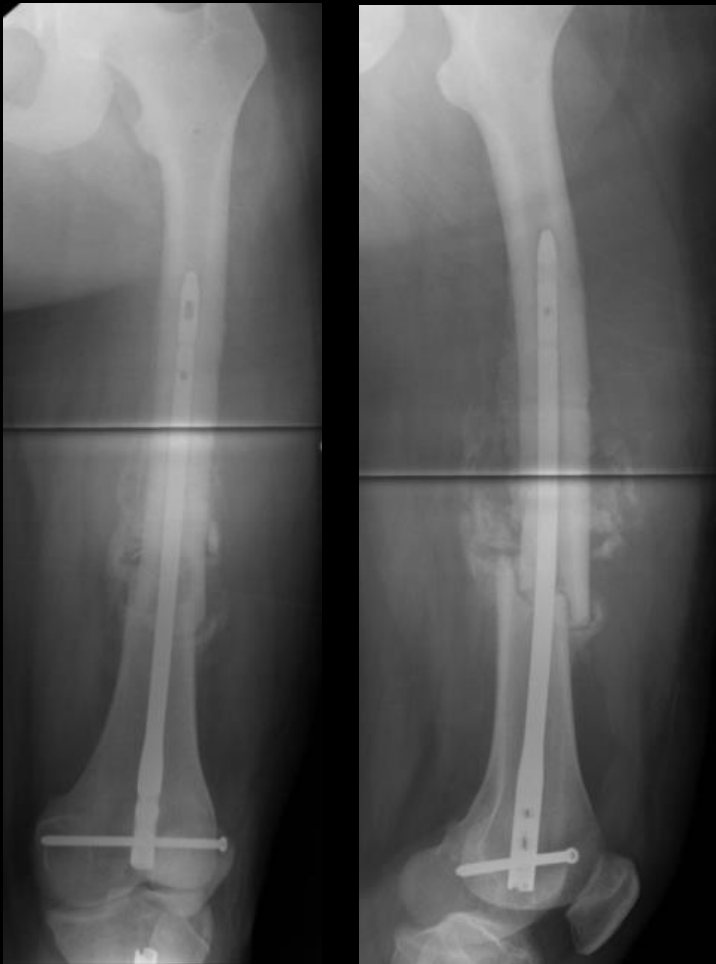
Femur shaft fracture

Patient history and preoperative findings

Preoperative X-ray

Diagnosis: 40° increased external rotation and shortening of the femur after nail fixation of an open fracture of the femoral shaft with a distal femoral nail

Gender	Male
Age Group	19 - 30
Remarks	Violent pain of the upper leg, patient ASA 1*; Patient had an accident two months before

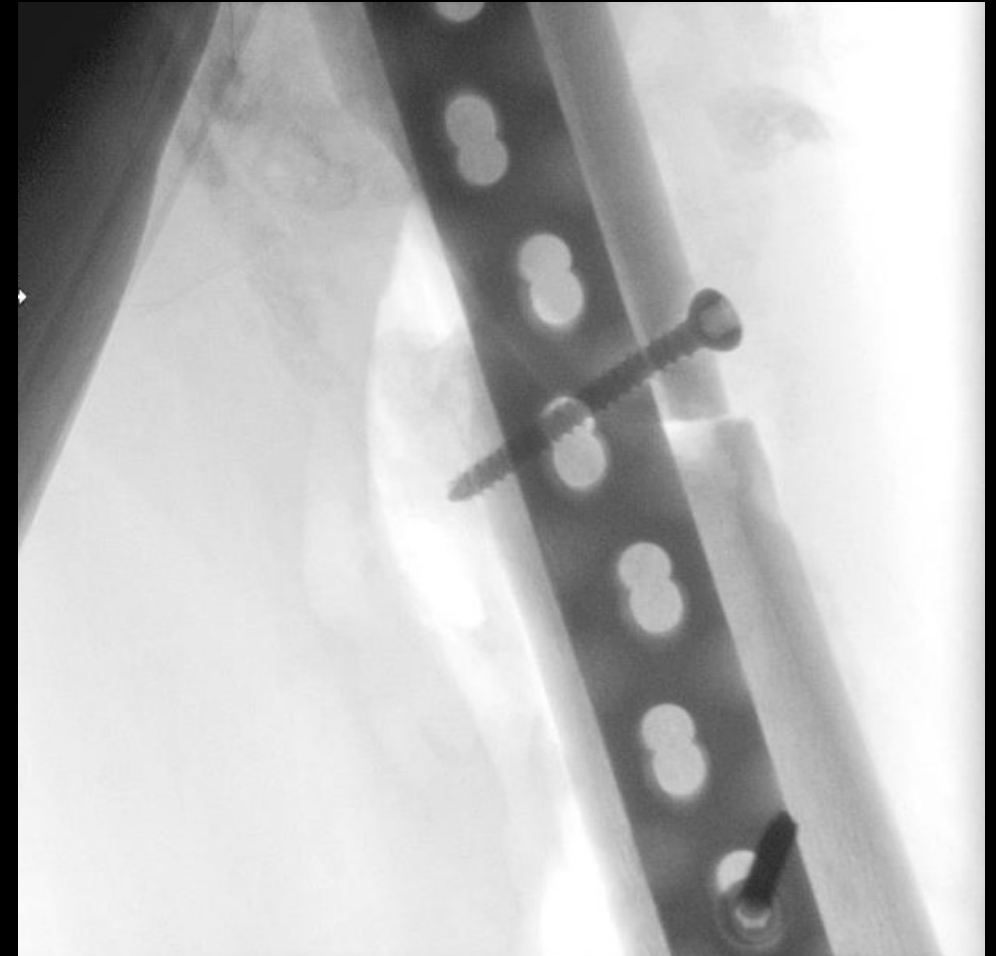


* American Society of Anesthesiologists ASA physical status – ASA1 means normal and healthy patient
Courtesy: Hospital Nuremberg South, Germany

Surgical procedure

Insertion of lag screw

After extraction of the nail and fracture reduction a lag screw was inserted to hold the correct repositioning



Surgical procedure

Control of results – anterior view

Proximal femur



Distal femur

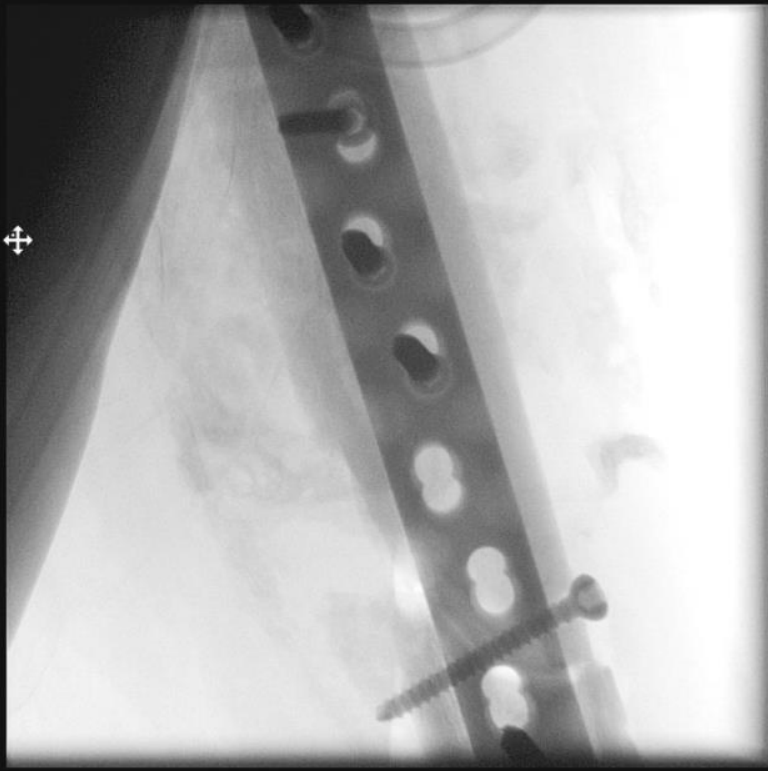


Anatomical reduction of the fracture and the correct position of the plate are verified by X-ray

Surgical procedure

Control of results – lateral view

Proximal femur



Distal femur



Anatomical reduction of the fracture and the correct position of the plate are verified by X-ray

Cios Fusion

System overview

160% more image coverage** and crystal-clear visualization of anatomical details thanks to **full view Flat Detector technology**

Automatic optimization of dose, brightness and contrast thanks to **IDEAL (Intelligent Dose Efficiency Algorithm)**

Operation of the system directly at table-side from within the sterile field with **remote user interface***



Completely flexible system control with a large preview image and intuitive operability thanks to **touch user interface**

Fully integrated workflow support, with features such as unique Live Graphical Overlay*, SmartView*, and injection trigger* with **clinical versatility**

Easy maneuvering and positioning of the system and excellent patient access thanks to **compact and lightweight design**

*Option

**Compared to today's conventional 23 cm / 9 inch image intensifiers

Clinical Case

Proximal tibia fracture

Patient history and preoperative findings

CT image

Diagnosis: 3° open proximal tibia fracture on the right leg

Gender	Male
Age Group	31 - 45
Remarks	Violent pain of the upper leg, patient ASA*1; Patient had an accident two months before



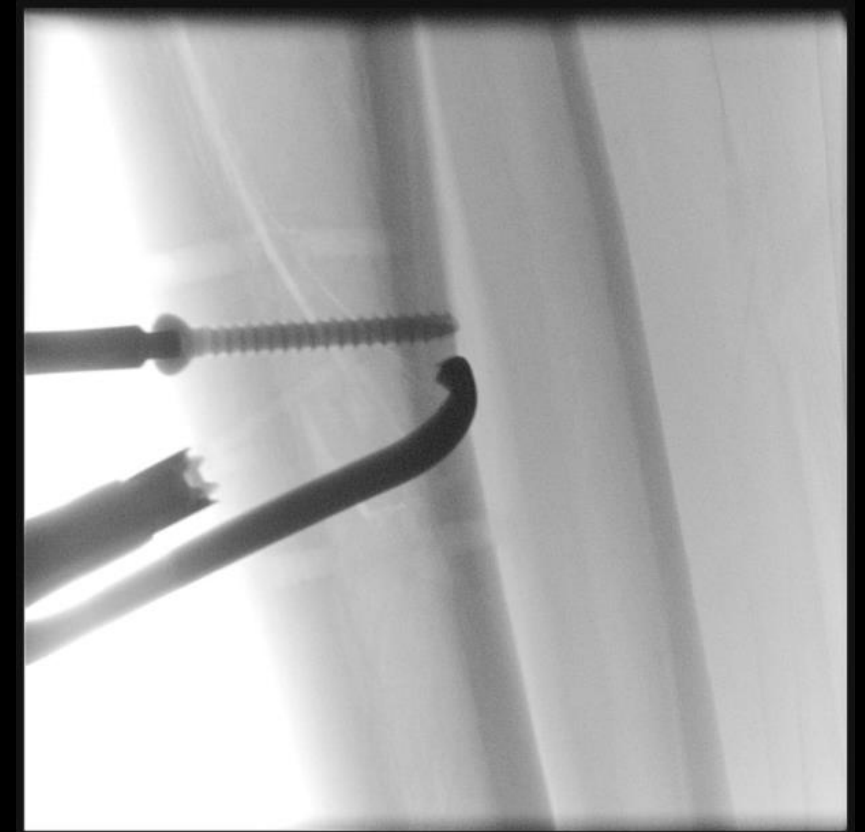
* American Society of Anesthesiologists ASA physical status – ASA1 means normal and healthy patient
Courtesy: Hospital Nuremberg South, Germany

Surgical procedure

Fracture reduction and insertion of lag screws



Removal of the external fixator, anatomical fracture reduction was ensured with a reduction clamp



Insertion of the first lag screw

Surgical procedure

Fixation of compression plate



Shaping of the locking compression plate to the bone



Insertion of cortical and locking screws

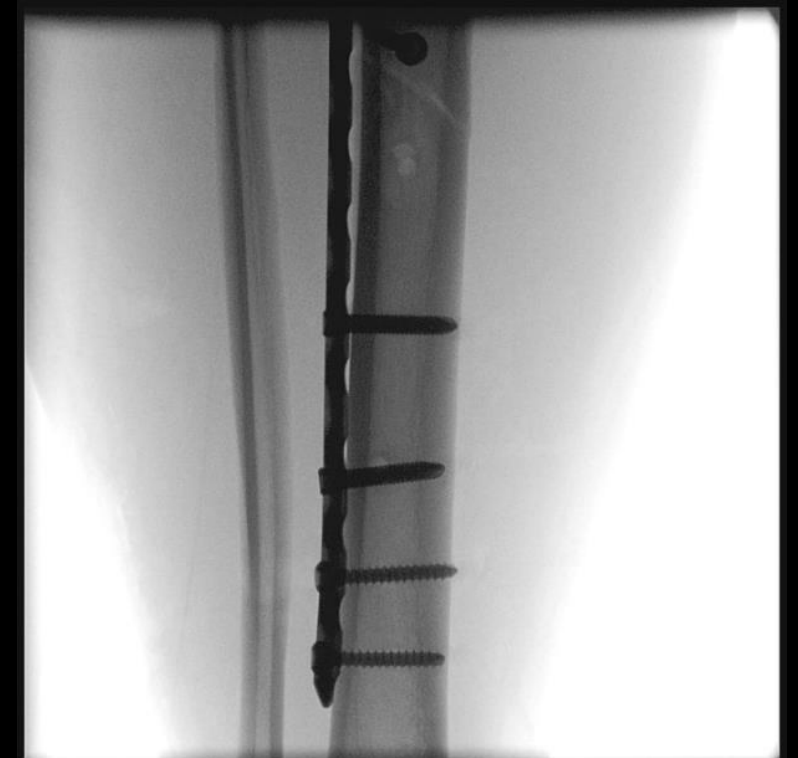
Surgical procedure

Control of results – anterior view

Proximal tibia



Distal tibia

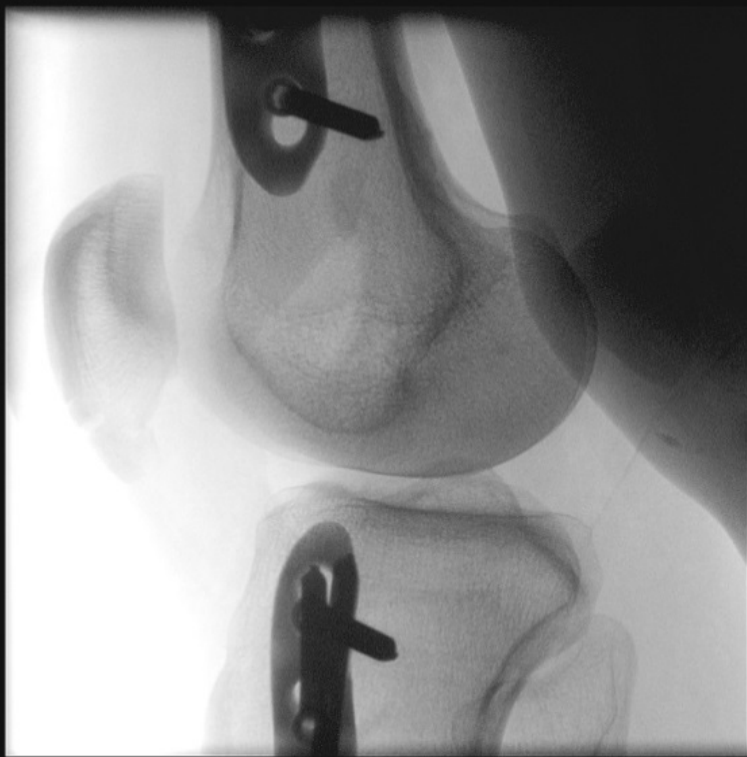


Anatomical reduction of the fracture and the correct position of the plate are verified by X-ray

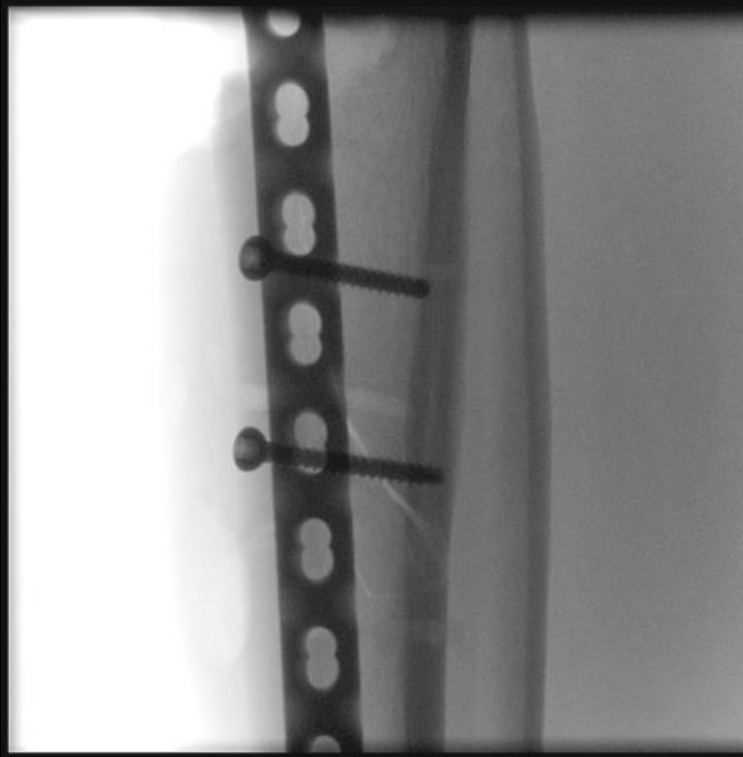
Surgical procedure

Control of results – anterior view

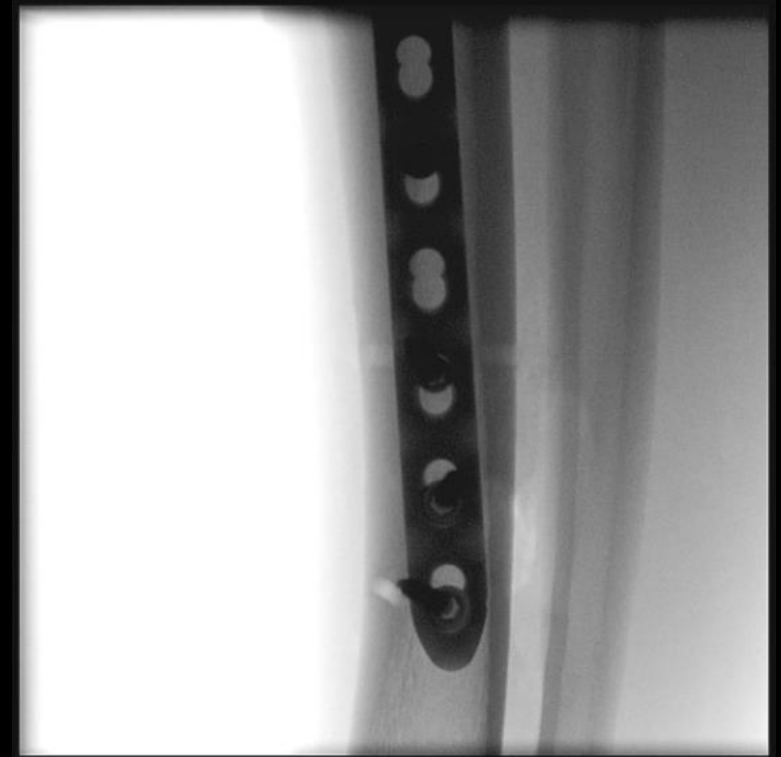
Proximal tibia



Tibia shaft



Distal tibia



Anatomical reduction of the fracture and the correct position of the plate are verified by X-ray

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Clinical Case

Comminuted radial head fracture

Patient history and preoperative findings

Preoperative X-ray

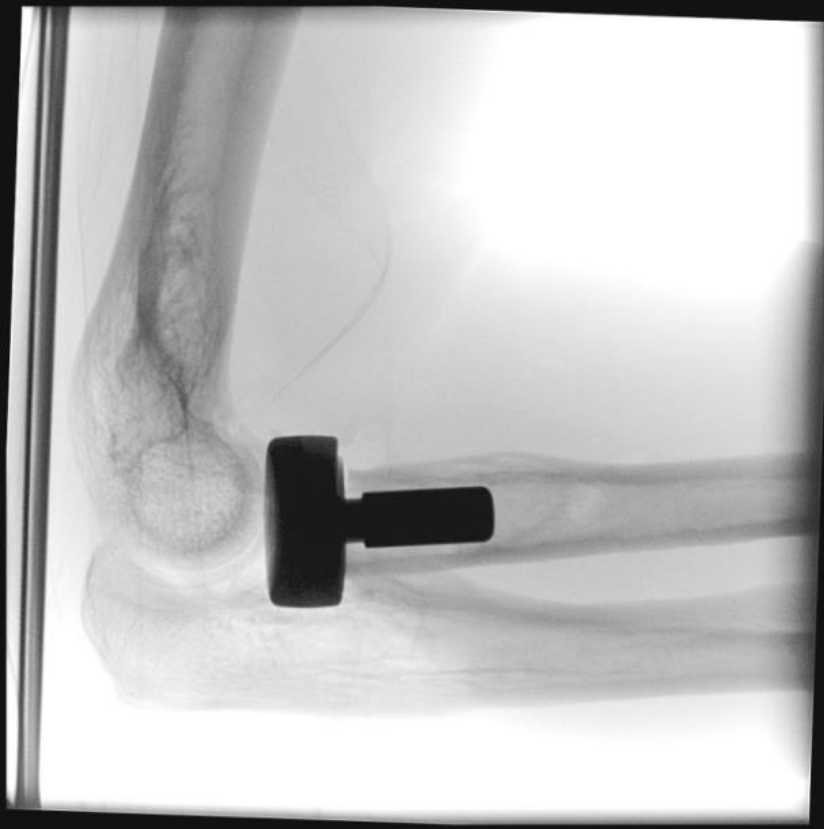
Radial head fracture type 3* (Regan & Morrey Classification)

Gender	Male
Age Group	46 - 60
Remarks	Patient fell on his right elbow from a height of 1.5 m



Surgical procedure

Resection and trial prosthesis



Evaluation of trial prosthesis in flexion

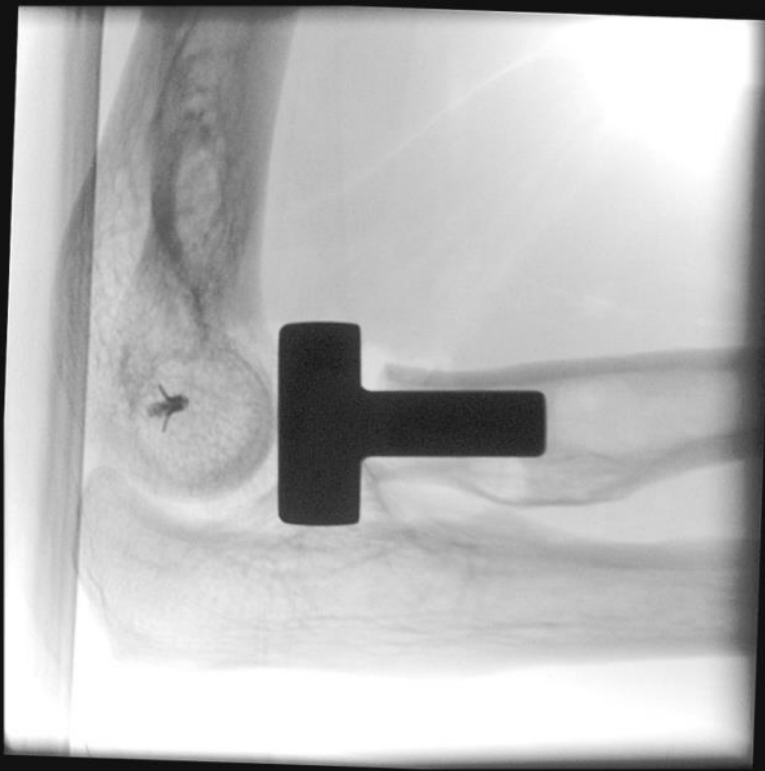


Evaluation of trial prosthesis in extension

Surgical procedure

Control of correct placement

Radius head in flexion



Radius head in extension



Correct placement and length of the prosthesis in extension verified by X-ray
Radial collateral ligament fixed with an anchor

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Thank you for your enthusiasm!

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