

CUSTOMIMPLANTS[®]

CT FOOT

PROTOCOL FOR COMPUTED TOMOGRAPHY

CUSTOMIMPLANTS®

INDEX

PRELIMINARY	4-5
Patient preparation	4
Recommendations for data collection	4
Scanning parameters	5
DATA MANAGEMENT	5



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CT scan quality can directly affect the design of guides and implants. Please, ensure that all protocol steps are followed for optimum scan quality.

PRELIMINARY

This CT protocol consists of a localizer and a detailed axial scan of the foot/feet. The CT scan quality –with clear bony edges and details- is critical to the production of accurate patient-specific surgical instruments. Deviations from this protocol may result in an unusable scan and delay of the surgery.

Please contact the CUSTOMIMPLANTS® support team if further clarification is required.

Patient Preparation

- ▷ Remove any non-fixed metal prosthesis, jewelry, zippers and/or any other metal piece that may interfere with the region to be scanned.
- ▷ Inform the patient on the procedure.
- ▷ Make him/her comfortable but always minimizing the movement.
- ▷ Patient positioning: supine with either feet, or the foot of interest in the center of the scanner; use a foot holder if available; toes pointing straight up; foot/feet endorotated slightly.
- ▷ If only one foot is of interest, bend the other leg to prevent a needless dose of radiation.
- ▷ In bilateral cases: place both feet in a symmetrical position.
- ▷ Place an RT marker near the right foot for identification purposes.

Recommendations for data collection

TABLE POSITION

Set the table height so that the area to be scanned is centered in the scan field. Do not raise or lower the table between the CT slices. Do not alter X/Y centering between scans.

FIELD OF VIEW (FOV)

All slices must have the same FOV, the same reconstruction center and the same table height. Use the smallest FOV possible (max. 20 cm) to capture all of the required bone regions. Capturing all of the soft tissue is not necessary.

BILATERAL IMAGES

Bilateral imaging can be accomplished with a single acquisition (FOV max. 32 cm).

RECONSTRUCTION

No secondary reconstructions; images must be scanned at the given parameters or more precise. No obliqueness, no gantry tilt and no oblique reconstructions. No reformatting into coronal or sagittal planes; no MPR's. If 3D reconstructions which may seem beneficial are available, submit them separately.

Parámetros de referencia radiológica

Region of interest	Just above the tibio-talar joint through to the carpal-metacarpal joint, dependent on the fracture region/region of interest.
Collimation	Slice thickness: 1.25mm or smaller Slice increment: 0.625mm (50% overlap)
kVp	120
mAs	As given by the automatic system
Pitch	1 or smaller
Field of view (FOV)	20cm or smaller (bilateral: try to fit in 32cm)
Matrix	512x512
Kernel/Algorithm	Moderate/soft tissue



ankle joint

DATA MANAGEMENT

Your site should keep and archive (PACS) copy of the CT exams, in uncompressed DICOM format and the original scanning parameters.



- ▷ Provide 1 localizer + 1 complete data set of images.
- ▷ For processing purposes, only uncompressed DICOM is accepted. No .jpg images or other formats are acceptable. Do not submit any other types of reconstructed or reformatted images.
- ▷ Lossy compression is NOT allowed. (ISO_10918_1, ISO_14495_1, ISO_15444_1 or ISO_13818_1).
- ▷ 3D images or similar that may seem beneficial for diagnosis are accepted, if available. Submit them separately.

- ▷ Do not erase patient name and ID.
- ▷ Ensure necessary rights are obtained for transfer of data to CUSTOMIMPLANTS®.
- ▷ Data will be anonymized by CUSTOMIMPLANTS® on receipt of the data, after cross-check with prescription of the surgeon to ensure images of the right patient are provided.



We recommend building a "CUSTOMIMPLANTS® clavicle protocol" in your CT with the appropriate ranges and parameters.

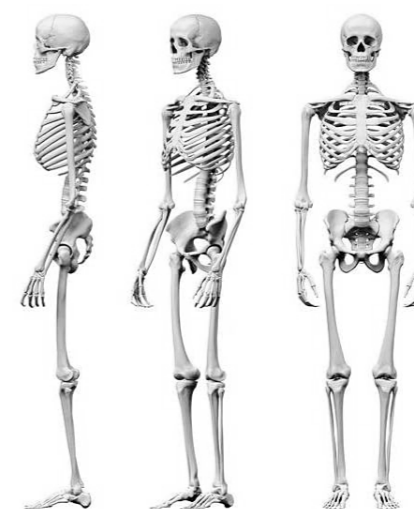
Disclaimer

The information is intended exclusively for healthcare professionals. A healthcare professional should always rely on his or her clinical and professional opinion when deciding which product is most suitable to treat a patient.

Custom Implants SL do not provide medical advice and recommend that healthcare professionals be trained in the use of any particular product before using it in a procedure or in surgery.

Before using any product from Custom Implants SL., the healthcare professional must always read the instructions which are inside the package, the label of the product and/or the instructions for use, included those for cleaning and sterilization, when applicable. The information provided is for the purpose of showing specific products as well as the wide range of Custom Implants products.

It may occur that not every product be available in all markets due to their availability is subject to the medical or regulatory practice.



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innovators you can count on