

**IMAGING**

**TECHNIQUE**

**X-ray**

**bodycad**



## **IMPORTANT NOTE**

This procedure provides only the information required by Bodycad to design and manufacture personalized restorations. The procedure described in this document may differ from the procedure used for diagnostic purposes. The physician is responsible for determining whether further tests are required for diagnostic purposes.

### **Introduction and purpose**

Through its mission, The Pursuit of Orthopaedic Perfection™, Bodycad aims to bring to market personalized restorations designed from a virtual 3D model of the patient's anatomy. Radiograph of the patient are used to have perfect understanding of patient situation and improve quality of the planning. More specifically, the present protocol provides healthcare professionals with information on scanning requirements for the capture of patient x-rays of the lower extremities, for use in Bodycad planning process.

It is important to closely follow this protocol, as this will produce a more accurate planning and enhance the precision of the personalized restoration. A high-quality image will provide the best results in terms of a high level of accuracy. A Bodycad representative will be on standby to answer any questions you may have and provide any additional information you may need.

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# Long standing AP radiograph

## Applicable Product



(osteotomy around the knee system)

## General Patient Position

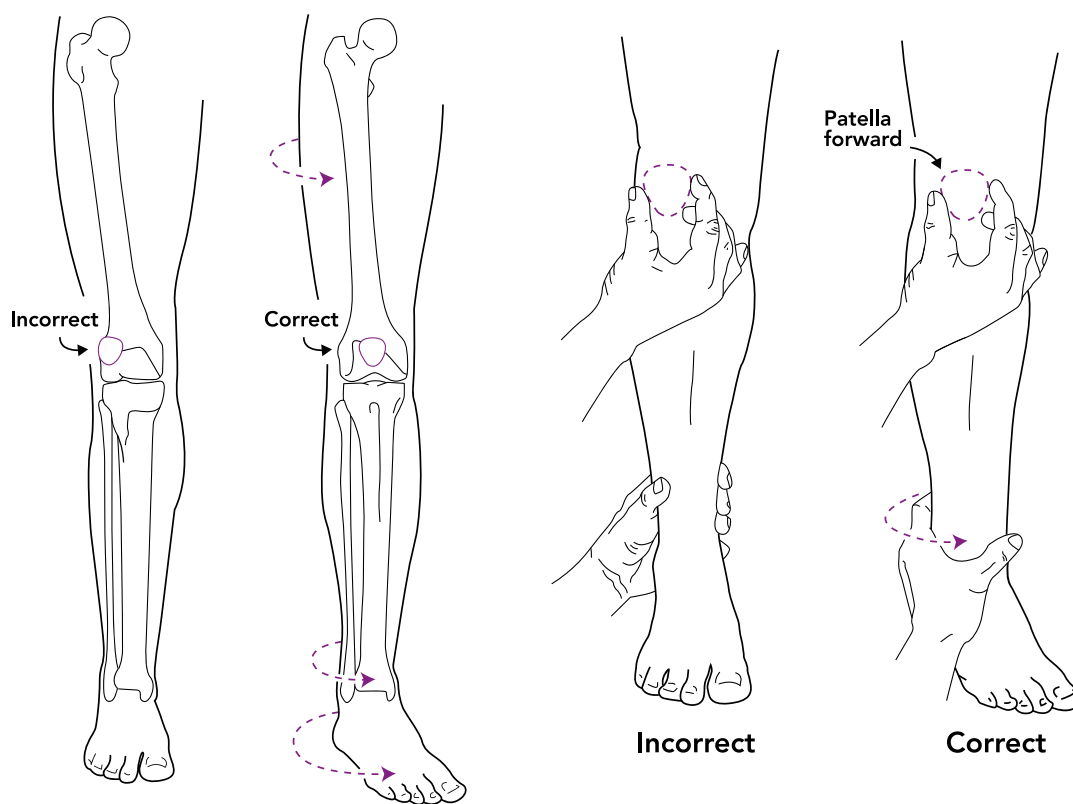
- The patient should be in a standing and weight-bearing position.
- The patient's weight should be evenly distributed between the legs.
- The arms are folded upward to the head.



Full leg standing AP radiograph

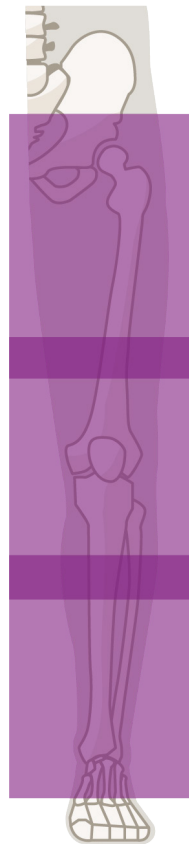
## Limb position

- The knees should be in full extension, without rotation.
- The patient's patellae are placed forward. Malrotation must be avoided by aligning the patellae to the front, centered between the femoral condyles.
- The legs should be as parallel as possible, without rotation.



## Acquisition parameters

- The X-ray must include at least the anterior inferior iliac spine to the talus (full-length).
- The patient must not move at any time during the scan. If the patient moves, the scan must be restarted.
- Any non-fixed metallic objects worn by the patient must be removed.
- Support handles may be required for some patients.
- Place a marker indicating the left or right side of the patient.
- Use enough density to show the superimposed bones and to obtain well-defined cortical outlines.
- The soft tissues must be shown.



FOV after striching

# Knee standing AP radiograph

## Applicable Product



(medial unicompartmental knee system)

## General Patient Position

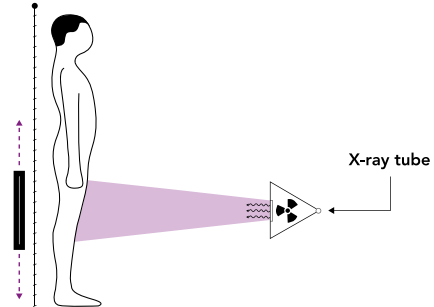
- The patient should be in a standing and weight-bearing position.
- The patient's weight should be evenly distributed between the legs.
- The arms are folded upward to the head.



Knee standing AP radiograph

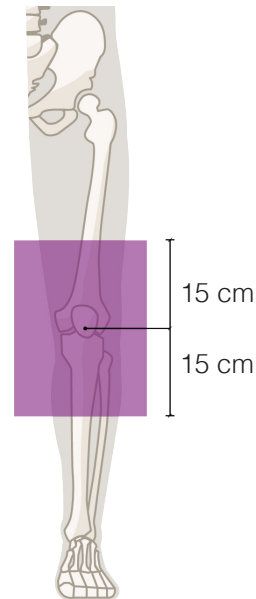
## Limb position

- The knees should be in full extension, without rotation.
- The patient's patellae are placed forward. Malrotation must be avoided by aligning the patellae to the front, centered between the femoral condyles.
- The legs should be as parallel as possible, without rotation.



## Acquisition parameters

- The X-ray must be at least 15 cm above the knee joint and 15 cm below the knee joint.
- The patient must not move at any time during the scan. If the patient moves, the scan must be restarted.
- Any non-fixed metallic objects worn by the patient must be removed.
- Support handles may be required for some patients.
- Place a marker indicating the left or right side of the patient.
- Use enough density to show the superimposed bones and to obtain well-defined cortical outlines.
- The soft tissues must be shown.





# Knee Rosenberg method radiograph

## Applicable Product



(osteotomy around the knee system)

## General Patient Position

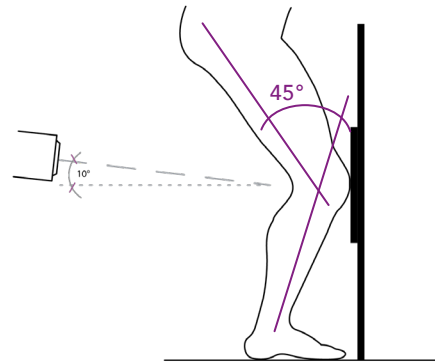
- The patient should be in a standing and weight-bearing position.
- The patient's weight should be evenly distributed between the legs.
- Support handles may be required.



Knee Rosenberg method  
radiograph

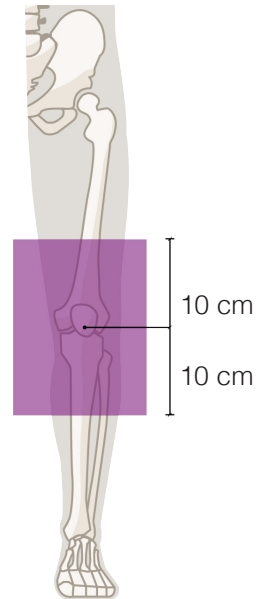
## Limb position

- The knees should be flex at 45 degrees, without rotation.
- Anterior aspect of patient knee's could be in contact with vertical grid device.
- The ray points the knee joint and is oriented a 10 degrees over the horizontal.



## Acquisition parameters

- The X-ray must be center on the knee joint with 10 cm above and below knee joint.
- The patient must not move at any time during the scan. If the patient moves, the scan must be restarted.
- Any non-fixed metallic objects worn by the patient must be removed.
- Place a marker indicating the left or right side of the patient.
- Use enough density to show the superimposed bones and to obtain well-defined cortical outlines.
- The soft tissues must be shown.



## Data anonymization and privacy

- Be sure that the required rights for transmitting data to Bodycad are respected.
- The patient name and ID must be kept in the transmitted data.
- The transmitted data will be anonymized by Bodycad before the whole process of personalized restoration begins. This anonymization follows the established Bodycad quality procedure and patient privacy guidelines.

## Transmission of images

### File format and instructions :

- Use only DICOM format, without lossy compression.
- Provide the images with the parameters, the scout view, additional images, notes.
- Return all images to referring physician.
- Ensure that the CD or DVD is packaged appropriately in order to avoid breakage during transport.



Please direct all questions to [preptech@bodycad.com](mailto:preptech@bodycad.com)  
or call **418 527-1388** and ask for a PREP Tech.

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