



ORTHOGRID

HIP AI[®]

AP HIP: IMAGING CHECKLIST

Set up:

- Put Calibration array on the c-arm (**Only needed for Round C-Arm, not Flat panel**). The black knob works like a binding on a snowboard boot. Pull out to release, push in, and crank clockwise to tighten. Push up on the periphery, not in the middle.
- Plug the OrthoGrid machine into the wall power and turn it on.
- Connect the appropriate cable to the C-Arm monitor cart.
 - a. Display port for Flat Panel
 - b. BNC for Round
- **Select the “Hip AI” Icon, Type in MRN, Date & Surgeon**
- **Select “Start,” C-Arm Type (Round or Flat), Select Operative Side (Left or right).**
- You are ready to take your A /P Pelvis.

Baseline Images

1. Get the A/P Pelvis to match the functional pelvic pitch as close as possible to the Standing film from the clinic.
2. Once the desired pelvic position is achieved, “Select **“Save Reference”**.
 - a. Ensure that the cross hatches are precisely on the teardrops and equidistant from the edges of the operators. Ensure the center line bisects the pubis and sacrum (middle of the pelvis) to ensure proper rotational alignment.
 - b. To re-set, go to the camera roll and delete the **“Ref”** image.
3. Pull back and Center the C-Arm over the non-operative hip. Select **“Lock LT.”** Now push over and Center the operative hip in the field of view. Adjust rotation and abduction as desired. select **“Set Ipsi.”**
4. ***Important:** Teardrop and lesser trochanter orientation is critical to getting good & reproducible data. Remain diligent throughout the case recreating the view seen in the beginning **“Reference image.”**
 - a. **Matching the position of the teardrop to the ilio-ischial line will help will hemipelvis symmetry**

CUP Analytics

1. This will be automated.

- a. Ensure “Radiographic” is selected
2. Works “best” if non-op tear drop is in field of view (2/3 view of the pelvis).
3. Pay attention to the delta between the Teal “T” (reference image) and the Dark Blue “T” current position. Adjust as needed to make them coalesce.
4. After verifying the cup position, reset calibration by selecting “**Cal**” using the Cup with the circle tool. (enter cup size)

Trial

5. Repeat steps 1 & 2a from “**Baseline images.**”
 - a. Pay attention to the delta between the Teal “T” (reference image) and the Dark Blue “T” current position. Adjust as needed to make them coalesce.
6. Center the C-Arm over the operative hip. Leg Length and offset for the operative hip will be presented.
 - a. If not, calibrate, as this step may have been skipped during the cup insertion.
7. Repeat as needed for the final.

Overlay option:

8. To overlay, capture an image of the operative hip, then select the overlay button
9. on the native operative of the non-operative hip previously saved to the camera roll. Adjust as needed to approximate cortices. If done properly, the yellow dot will represent your most recent image.

Done!

- To save to an external disc, put the USB in the free slot, hit the “**Finish case**” button at the bottom right, “**Select All**”, choose image type (**JPG & DICOM**), and then hit “**Export.**”