Supine Registration - Workflow/

Hip 6.0

The Document “Supine Registration – Workflow” is a surgical technique about the use of the Hip 6.0 Software.

SETUP

Choose the right patient data (gender, left or right hip)

Mount the T-array on the Iliac Crest treated side and the pinless femur array on the femur. To fix the pinless femur array we recommend to bond the plate with a bonding foil (e.g. Barrier Incise Drape from Mölnlycke Health Care) on the leg and do the drape above. Because of a sharp tip on the array, it can be easily adapted to the plate over the drape. Ensure visibility of all needed reference arrays and instruments. For obese patients the camera needs to be higher!
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**SPINA TREATED SIDE**

Acquire the ASIS point on side to be treated. Try to approach the point with your hand from anterior w/o a drape. Thus the soft tissue does less account for the registration.

**SPINA NON TREATED SIDE**

Acquire the ASIS point on the non–treated side. Try to approach the point with your hand from anterior w/o a drape. Thus the soft tissue does less account for the registration.
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PRE – OP LEG ALIGNMENT

Mark a reference point with a screw on the proximal femur, bring the leg in a neutral position and acquire this landmark. This landmark is used after implantation to verify leg-length and offset changes.

ACETABULAR FOSSA

Acquire points in the acetabular fossa region. No need to remove osteophytes unless the fossa is completely covered by osteophytes and before initial reaming. Acquire 15 points in the deepest region of the acetabulum; stay in the middle but not to inferiorly! It acquired to inferior redo it!

Point is used for anterior pelvic plane and mid-sagittal plane reconstruction!
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**ACETABULAR CAVITY**

Acquire points on the acetabular cavity before the reaming. Perform the acquisition in a specific pattern (ZIG ZAG) and complete whole acetabular cavity.

**INFERIOR PEAK OF PSOAS VALLEY**

Acquire the point of the inferior peak of the Psoas valley. Before initial reaming and after removing osteophytes.

The psoas Valley represents the recess of the acetabular rim in which the psoas tendon runs.

Look at the midpoint of the TAL (notch), take it as a 6 o’clock position and acquire the psoas point at 9 o’clock position for left hips or 3 o’clock position for right hips.

Point is used for anterior pelvic plane and mid-sagittal plane reconstruction!

Reference point used for Pelvic plane reconstruction!
PLANNING AND NAVIGATION

Proceed with the planning and navigation steps.

The Software shows the Lewinnek Safe Zone $40^\circ \pm 10^\circ$ Inclination and $15^\circ \pm 10^\circ$ Anteversion for orientation. Adjust the planned values.

When the inserter is recognized by the camera the Software goes automatically from the planning page to the navigation page. The value of inclination and anteversion are shown in blue and the planned value below in yellow. When you insert the cup in the right position store it.
Bring the leg back in the pre-operative stored position (align the two crosses) and reacquire the marked reference landmark. Verify the values for leg length and offset and if necessary change the implants and redo this step.