Clinical Graphics
See Beyond

Details

Your reference:	anonymous
Our reference:	122044
Requested for:	anonymous
Requested by:	anonymous
Date job requested:	30 Jul 2013
Date job completed:	11 Aug 2015
Job processed by:	MNO
Joint side:	Right (of both)

Summary

Simulated motion was limited.

Alpha angles are larger than normal (max 73.9°).

Acetabular version is lower than normal (10.8°).

Femoral inclination is normal.

Acetabular coverage is normal.

The LCE angle is normal.

Disclaimer

This report was computed using analysis software and represents a simplified model of clinical reality. While we took great care in its production, it may happen that your clinical findings deviate from aspects of this report. For this reason we ask you to please take note of the disclaimer on Page 5.

This is the interactive 3D view

1. Viewing the 3D motion simulations requires Adobe Reader 9.0 or newer.
   You can download Adobe Reader from
   get.adobe.com/reader

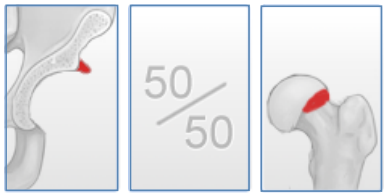
2. Apple computers are shipped with a viewer that is not suitable for this report.
   Please install Adobe Reader for Mac OS.

3. For further support please visit
   www.clinicalgraphics.com

Click here to activate the 3D view,
then use the mouse to interact

AP L R TOP

CT



RESECTION

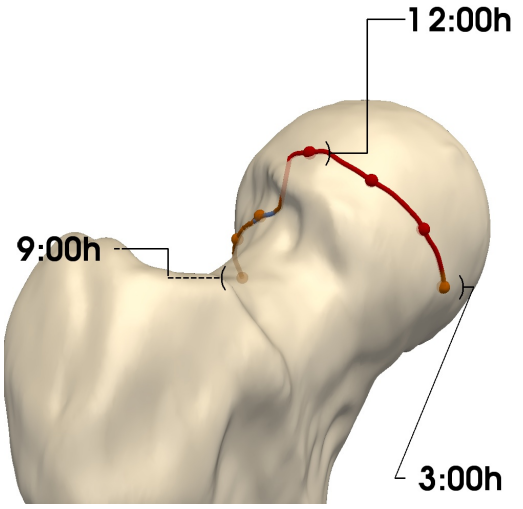
FLEXION	117° of 120°
ABDUCTION	48° of 50°
INTERNAL	50° of 50°
IN with 50 ABD	0° of 40°
EXT with 50 ABD	0° of 40°
IN with 90 FL	12° of 30°
IN with 30 FL, 20 AD	43° of 50°
IN with 60 FL, 20 AD	18° of 40°
IN with 90 FL, 20 AD	0° of 30°
EXT with 15 EXL	15° of 15°
NEUTRAL	

Femur

Head diameter:	51 mm	
Neck diameter:	39 mm	Normal:
Neck inclination:	126.6°	(123.0°-135.4°)*

*(Toogood et al., 2009)

Alpha angles



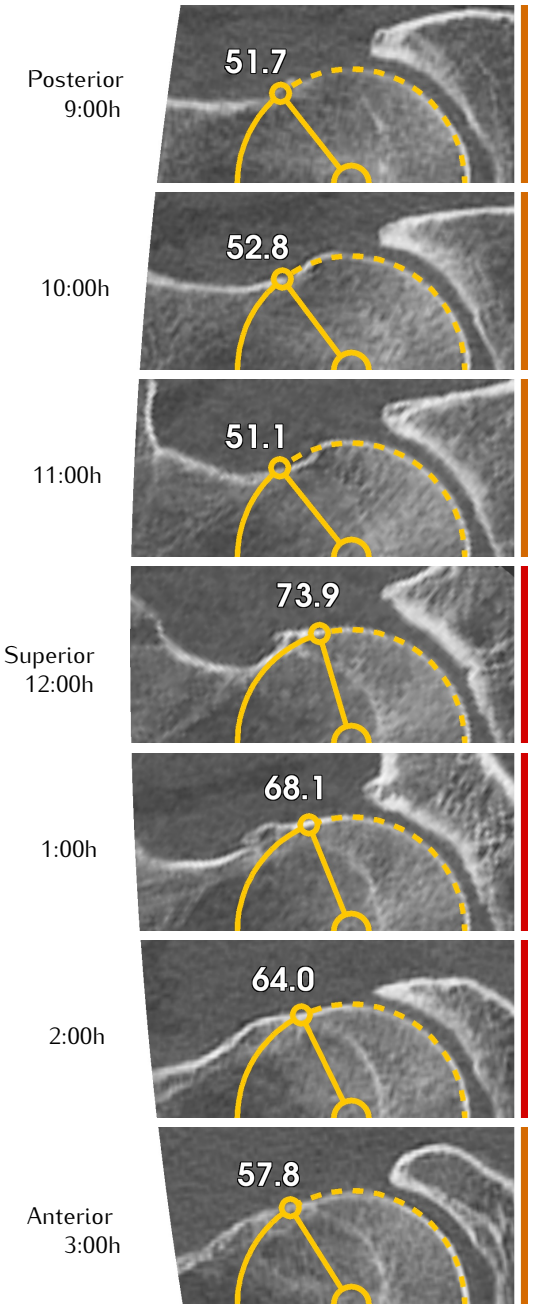
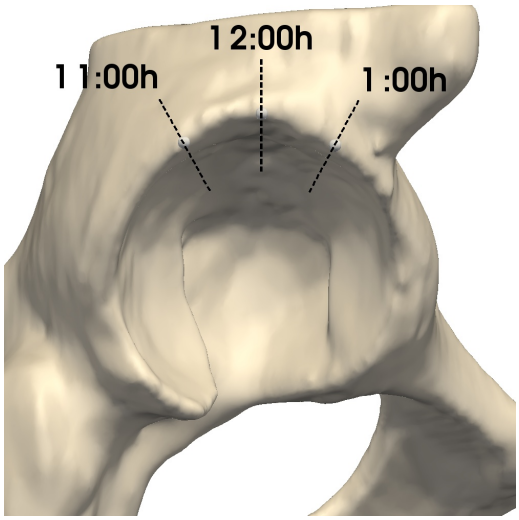


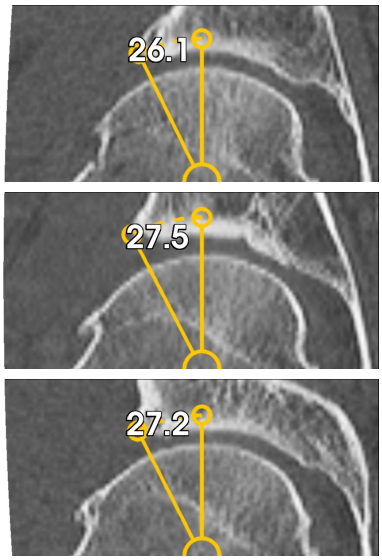
Figure 1: Clockwise alpha angles.

Acetabulum

Acetabular cup diameter: 56 mm

Center edge angle





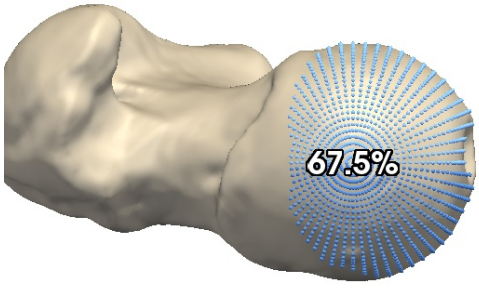
11:00h

Superior (LCE)
12:00h

1:00h

Expected range for LCE between 22° and 33° (Tannast et al., 2011)

Acetabular coverage



		Normal:
Posterior coverage:	35.6%	(35%-43%)
Anterior coverage:	31.9%	(30%-38%)
Total coverage:	67.5%	(66%-81%)*

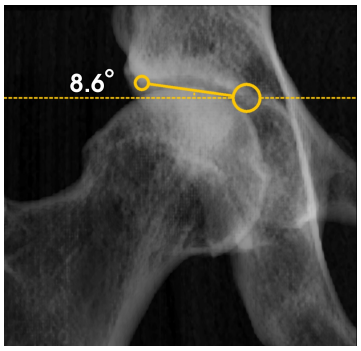
*(Dandachli et al., 2008)

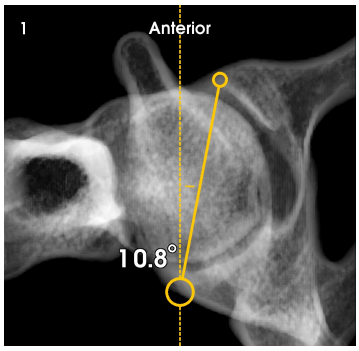
Acetabulum orientation

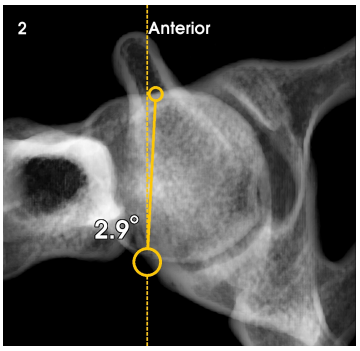
Sourcil Angle: 8.6°
NOTE: Not validated yet.

Version: 10.8°
Normal: 16° - 26°
(Köhnlein et al., 2009)

Version of
upper hemisphere*: 2.9°







* The version measurement in the right-most image is calculated halfway between the joint center and the roof of the acetabulum, corresponding to line number 2 in the left-most image.

Disclaimer

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Dandachli, W., Kannan, V., Richards, R., Shah, Z., Hall-Craggs, M., Witt, J., 2008. Analysis of cover of the femoral head in normal and dysplastic hips: New CT-based technique. J Bone Joint Surg Br 90-B, 1428–1434.

Köhnlein, W., Ganz, R., Impellizzeri, F., Leunig, M., 2009. Acetabular Morphology: Implications for Joint-preserving Surgery. Clinical orthopaedics and related research2 467 (3), 682–691.

Tannast, M., Albers, C., Steppacher, S., Siebenrock, K., 2011. Hip pain in the young adult. In: EFORT European Instructional Lectures. pp. 141–154.

Toogood, P., Skalak, A., Cooperman, D., 2009. Proximal femoral anatomy in the normal human population. Clinical orthopaedics and related research 467 (4), 876–885.

Have questions?

We will be happy to answer any questions you may have! Our phone lines are open during working hours (time zone GMT +1) at +31 15 744 0137. You may also contact us by e-mail: support@clinicalgraphics.com.