

unique

custom femoral prosthesis



- Optimal fit to stabilising bone
- Excellent primary stability
- Improved physiological stress transfer
- Individual design of the neck
- Safe and precise implantation

CONCEPT

The objective of the custom femoral prosthesis *unique*® is to achieve:

- An exact fit to stabilizing endo-cortical bone
- Proximal load transfer
- Optimal primary stability

Individual design of the neck gives possibilities to optimise the extra-medullary geometry of the hip joint with regards to:

- Anteversion
- Leg length
- Medial offset

INDICATIONS

unique® is especially well suited for young and active patients, and for those who have abnormal extra- and intra-medullary geometry of the hip joint

CONSTRUCTION

Individual design of *unique*® is based on CT-images. A precise fit of the stem is obtained through an exact 3-D reconstruction of the femoral canal. The design is modified with respect to the insertion path for a safe implantation of the stem. This gives a contact area of up to 60% to endo-cortical bone.

unique® is manufactured in titanium alloy (Ti₆Al₄V), and provides a 12/14 EURO taper as standard. Proximally *unique*® is coated with a porous Ti-layer and 50 µm of HA.

SURGICAL PROCEDURE

The implantation of *unique*® is based on conventional surgical techniques. By using a resection guide, an easy to use navigation tool, it is possible to achieve the pre-planned resection level intra-operatively. The femoral canal is prepared with standard and custom rasps.

CLINICAL STUDIES

Since the first custom prosthesis was implanted in 1995, more than 420 *unique*® prostheses had been implanted by February 2003. *unique*® prostheses are included in multi centre clinical studies, as well as non-randomised and randomised studies. Follow up is evaluated with clinical function score, post-operative x-rays, DEXA and RSA measurements.

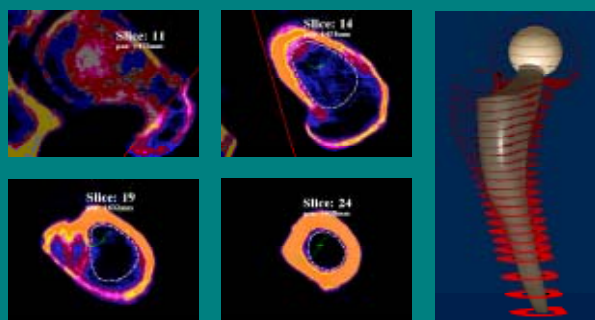
CLINICAL RESULTS

- No revisions or loosening to date
- Three intra operative fissures (1,3%)
- One periprosthetic femoral fracture three months post-op
- One patient with moderate thigh pain >24 months
- Three luxations after fall injuries (1,3%)
- The prosthesis is completely stable (RSA studies)
- Increase in BMD twelve months post-op (DEXA studies)

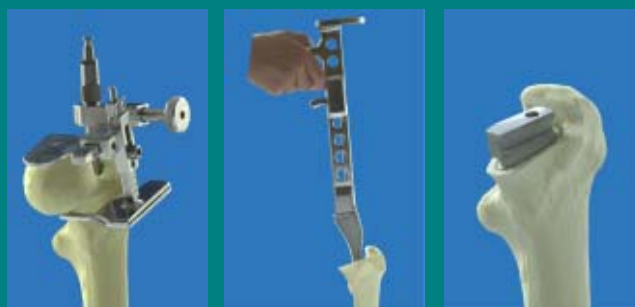
SUMMARY

- Optimal fit to stabilising bone tissue
- Improved physiological stress transfer to proximal femur
- Favourable conditions for bone remodelling
- Enhanced anchoring to host bone
- Greater contact area to stabilising bone than standard prostheses
- Individual neck design optimises the biomechanics of the hip joint
- Excellent pre-operative planning
- Safe and precise implantation
- A good alternative for young and active patients, as well as difficult cases.

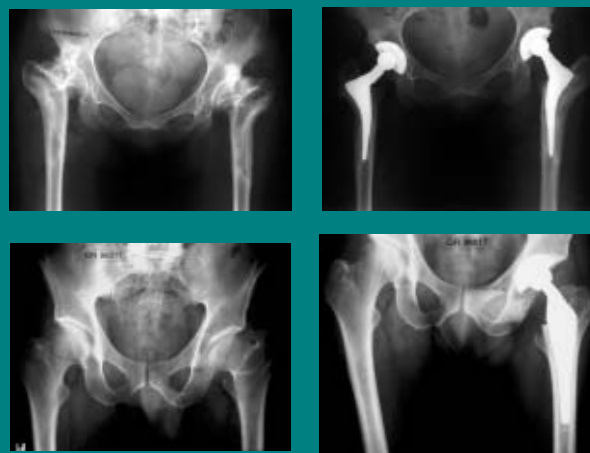
unique



Contour lines are generated for every CT-image



Resection guide. Preparation of femur with custom rasps



Pre- and post-operative x-ray of *unique*®

For more information:

WWW.SCP.NO

support@scp.no

Scandinavian Customized Prosthesis as

Hornebergv. 7A
N - 7038 Trondheim
Norway
tel: +47 73 40 17 70
fax +47 73 96 31 90