

Dual Mobility
Revision

Clinical Summary



Dual Mobility Revision

Dual Mobility Cups in Revision Total Hip Arthroplasty

Viste A, Desmarchelier R, Fessy M-H.
International Orthopaedics (SICOT). 2017 Mar;
41(3): 535-542¹

A retrospective study of 334 revision THAs performed with dual mobility cups from the NOVAE® product range (SUNFIT TH®, NOVAE E TH® and Novae Stick®). Femoral revision was also performed in 91 cases due to perceived loosening pre- or intra-operatively. In all cases of femoral revision, a stem from the CORAIL® product line was used.

The patient population was followed for a mean of 7 years (range: 5-10 years) and was made up of 179 females and 150 males.

At latest follow-up, there were 11 dislocations - 7 of which were recurrent, and 10 cases of cup aseptic loosening.

When all reasons for revision were combined, dual mobility cups demonstrated a 3.3% dislocation rate at 7 years in patients at high risk of dislocation.

Prevention of Dislocation in Total Hip Revision Surgery Using a Dual Mobility Design.

Philippot R, Adam P, Reckhaus M, Delange F,
Verdot F-X, Curvale G, Farizon F.
Orthopaedics & Traumatology: Surgery &
Research. 2009 Oct; 95(6): 407-413²

163 revision THAs were performed using a NOVAE® dual mobility cup (38 NOVAE SUNFIT®, 51 NOVAE Stick®, 58 NOVAE-1®, 16 NOVAE COPTOS®). The patient cohort had a mean age of 68.7 years (range: 34-92 years) and was 63.2% female.

After a mean follow-up of 60.4 ± 17.6 months the overall dislocation rate was 3.7%. In a sub-group of patients for whom the revision was conducted due to recurrent instability (n=26) the dislocation rate was 0%.

With failure defined as revision surgery for aseptic loosening, the 7-year survivorship for dual mobility cups in revision THA was 96.1% (95% CI: 92.8-99.2%).

BI-MENTUM™

DUAL MOBILITY SYSTEM

Currently available evidence indicates that a dual mobility implant is becoming a leading treatment option to address instability for revision hip surgery.^{3,5-6}

To further enhance the DePuy Synthes portfolio, a strategic co-operation and supply agreement has been formed with Société d'Etude, de Recherche et de Fabrication (SERF) to exclusively launch the SERF NOVAE® SunFit TH Dual Mobility System under the brand name BI-MENTUM™ Dual Mobility System.

SERF is the original developer of the dual mobility implant with over nearly 40 years of clinical experience.⁷



Range of Acetabular Defects

Paprosky 1



Paprosky 1 or 2A



Paprosky 2B or 2C



Paprosky 2C or 3A



Paprosky 3A or 3B



**From primary to more complex revision cases,
the BI-MENTUM Dual Mobility System addresses most surgeon needs**



Bi-MENTUM Pressfit



Bi-MENTUM Plus



Bi-MENTUM Revision



Bi-MENTUM Cemented
with BI-MENTUM Plate

Dual Mobility Revision

Treatment of recurrent THR dislocation using a cementless dual-mobility cup: a 59 cases series with a mean 8 years' follow-up.

Leiber-Wackenheim F, Brunschweiler B, Ehlinger M, Gabrion A, Mertl P. *Orthop Traumatol Surg Res.* 2011 Feb;97(1):8-13.³

Retrospective analysis of 59 patients undergoing revision THR due to recurrent dislocation using a cementless Novae dual mobility cup.

Implantations were performed between 1995 and 2001 and the mean follow up was 8 years (9-11).

There was one early dislocation. This was treated conservatively and there was no re-occurrence.

The crude dislocation rate was 1.7% and the survivorship with dislocation as the endpoint was 98% (95% CI 95-100%).

Revision Total Hip Arthroplasty Using a Reconstruction Cage Device and a Cemented Dual Mobility Cup.

Schneider L, Philippot R, Boyer B, Farizon F. *Orthopaedics & Traumatology: Surgery & Research.* 2011 Dec; 97(8): 807-813.⁴

A continuous series of 96 patients undergoing acetabular revision with an antiprotrusio cage and a cemented dual mobility cup (Novae Stick®). The patient population had a mean age of 69.9 years (range: 34-95 years) and was 74% female. During the study period, 15 patients died and 4 were lost to follow-up.

After a mean follow-up of 41.6 months (range: 1-101 months) the mean Postel Merle d'Aubigné score increased from 9.6 ± 3.06 to 15.5 ± 2.32 .

Overall, 10 dislocations occurred resulting in a dislocation rate of 10.4%. None of the cases of dislocation were intraprosthetic.

With all-cause acetabular component exchange as the endpoint, the survival rate at 8 years was 95.6% (95% CI: 93.3-97.7%).



References

1. Viste A, Desmarchelier R, Fessy M-H. Dual Mobility Cups in Revision Total Hip Arthroplasty. *International Orthopaedics (SICOT)*. 2017 Mar; 41(3): 535-542
2. Philippot R, Adam P, Reckhaus M, Delange F, Verdoot F-X, Curvale G, Farizon F. Prevention of Dislocation in Total Hip Revision Surgery Using a Dual Mobility Design. *Orthopaedics & Traumatology: Surgery & Research*. 2009 Oct; 95(6): 407-413
3. Leiber-Wackenheim F, Brunschweiler B, Ehlinger M, Gabrion A, Mertl P. Treatment of recurrent THR dislocation using of a cementless dual-mobility cup: a 59 cases series with a mean 8 years' follow-up. *Orthop Traumatol Surg Res*. 2011;97:8–13.
4. Schneider L, Philippot R, Boyer B, Farizon F. Revision Total Hip Arthroplasty Using a Reconstruction Cage Device and a Cemented Dual Mobility Cup. *Orthopaedics & Traumatology: Surgery & Research*. 2011 Dec; 97(8): 807-813
5. Guyen O. Constrained liners, dual mobility or large diameter heads to avoid dislocation in THA. *EFORT Open Rev* 2016;1:197-204.
6. Langlais FL, Ropars M, Gaucher F, Musset T, Chaix O. Dual mobility cemented cups have low dislocation rates in THA revisions. *Clin Orthop Relat Res*. 2008;466:389–395. [PMC free article] [PubMed]
7. Farizon F, de Lavison R, Azoulay J, Bousquet G. Results with a cementless alumina-coated cup with dual mobility. A twelve-year follow-up study. *Int Orthop*. 1998;22(4):219-24



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