

Dual Mobility

# Range of Patients

Clinical Summary





# Dual Mobility

## Range of Patients

Dual Mobility cups hip arthroplasty as a treatment for displaced fracture of the femoral neck in the elderly. A prospective, systematic, multicenter study with specific focus on postoperative dislocation.

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Adam P, Philippe R, Ehlinger M, Roche O, Bonnomet F, Molé D, Fessy MH. Orthop Traumatol Surg Res. 2012;98:296–300.<sup>1</sup>

A multi-centre, prospective study examined the use of Dual Mobility cups in the treatment of displaced fracture of the femoral neck

The study included 214 hips in 214 patients from 11 hospitals. The mean age was 83 years (70-103) and follow up was conducted at 3, 6 and 9 months.

There were 3 cases of dislocation (1.4%). In all cases the dislocation was treated conservatively and there was no re-occurrence.

There was one re-operation required following a peri-prosthetic fracture.

Dual Mobility cup reduces dislocation rate after arthroplasty for femoral neck fracture.

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Tarasevicius S, Busevicius M, Robertsson O, Wingstrand H. BMC Musculoskelet Disord. 2010;11:175.<sup>2</sup>

A retrospective comparative study that examined the dislocation rate in acute femoral neck fracture patients.

A consecutive series of 56 standard THRs were compared to 42 consecutive Dual Mobility THRs out to 1 year follow up.

The groups were similar with respect to age and gender distribution.

There were 8 dislocations (14%) in the standard group, compared with 0 dislocations in the Dual Mobility group (p=0.01).

# BI-MENTUM™

DUAL MOBILITY SYSTEM

Currently available evidence indicates that a Dual Mobility implant is becoming a leading treatment option to address instability for complex primary<sup>5-7</sup> fracture neck of the femur (FNOF)<sup>1-2,8</sup> and revision hip surgery.<sup>9-11</sup>

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® Dual Mobility System under the brand name BI-MENTUM™ Dual Mobility System.

SERF is the original developer of the Dual Mobility implant with over 40 years of clinical experience.<sup>12</sup>

## Comprehensive Cup Platform

 <b>BI-MENTUM</b> <b>Dual Mobility System</b> Pressfit Ø 43-69	 <b>BI-MENTUM</b> <b>Dual Mobility System</b> Cemented Ø 43-63	 <b>BI-MENTUM</b> <b>Dual Mobility System</b> Plus Ø 41-69	 <b>BI-MENTUM</b> <b>Dual Mobility System</b> Revision Ø 43-69
for use with BI-MENTUM Plus & Revision			
		Pegs 	Cortical Screws 
22mm head PE Liner 		28mm head PE Liner 	

BI-MENTUM Size (OD/mm)	BI-MENTUM Pressfit	BI-MENTUM Plus	BI-MENTUM Revision	BI-MENTUM Cemented	22mm PE liner	28mm PE liner
41		*			*	
43	*	*	*	*	*	
45	*	*	*	*	*	
47	*	*	*	*	*	*
49	*	*	*	*	*	*
51	*	*	*	*	*	*
53	*	*	*	*	*	*
55	*	*	*	*	*	*
57	*	*	*	*	*	*
59	*	*	*	*	*	*
61	*	*	*	*	*	*
63	*	*	*	*	*	*
65	*	*	*	*	*	*
67	*	*	*	*	*	*
69	*	*	*	*	*	*

Pegs, Screws and Hook can be used in combination with the BI-MENTUM Pressfit Ti Plasma / HA Coating to provide additional fixation

# Dual Mobility Range of Patients

Dual Mobility cup reduces dislocation and re-operation when used to treat displaced femoral neck fractures.

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Bensen AS, Jakobsen T, Krarup N. *Int Orthop.* 2014 Jun;38(6):1241-5.<sup>3</sup>

Two consecutive groups of patients treated for displaced femoral neck fractures were studied.

171 patients (mean age 84.1 years) were treated with bipolar Hemi Arthroplasty (HA), followed by 175 patients (mean age 75.2 years) treated with THA using Dual Mobility Cups.

The two groups were comparable except in age (bipolar HA - 84.1, Dual Mobility - 75.2,  $p < 0.001$ ). The mean follow-up was 36.3 months for Hemi-arthroplasty and 21.7 months for Dual Mobility.

25 dislocations (14.6%) took place in the Hemi-Arthroplasty group, while 8 dislocations (4.6%) occurred in the Dual Mobility group ( $p = 0.002$ )

32 re-operations (18.7%) were required in the Hemi-Arthroplasty group, while 16 reoperations (9.1%) occurred in the Dual Mobility group. ( $p = 0.01$ )

Primary and Revision Total Hip Arthroplasty in Patients with Parkinson's Disease Using Dual Mobility Implants and Cementless Fixation.

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Lazennec J, Kim Y, Pour A Poster 0103, AAOS March 8-9th 2018. Full details available at: <https://aaos.apprisor.org/><sup>4</sup>

Sixty-three THA were performed in 59 patients (34 men, 25 women, mean age 72.5% years, range: 55–79). All patients had been diagnosed with Parkinson's Disease.

Indications were 42 primary THA (osteoarthrosis) and 21 revisions (11 recurrent dislocations, 6 acetabular polyethylene wears, 4 femoral loosening). All patients were implanted with Dual Mobility cementless cup and cementless hydroxyapatite coated femoral stems.

There were no implant loosening. Four patients sustained periprosthetic femoral fractures due to falls which required reoperations, but not revision of THA components.

## References

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