

REDEFINING THR: THE AMIS SYNERGY

The anterior approach, strengthened by years of clinical experience, is the only technique which follows a path both **intermuscular and internervous** and therefore lowers the risk of damaging periarticular structures such as muscles, tendons, vessels and nerves.

Medacta International is the world leader for educating and supporting surgeons in their pursuit of Anterior Minimally Invasive Surgery (AMIS). **Reference Centers, located throughout the world**, provide the necessary AMIS educational experience and Medacta offers **continuous support for surgeons**, as well as constantly improving and developing the industry's most specialized instrumentation platform.

Using AMIS-K you can enter Medacta International's world of AMIS. Discover:

- The definitive MIS approach: AMIS;
- Dedicated AMIS instrumentation;
- The **AMIS Mobile Leg Positioner**: the original extension table included as part of the instrumentation that makes the surgery easier and reproducible;
- The **AMIS Education Programme** based on Medacta's proven educational methods.

AMIS



The AMIS Mobile Leg Positioner will be supplied as part of the instrumentation to help ensure effective and reliable positioning of the leg during surgery. Traction, adduction and hyperextension have never been so easy.

CEMENT RESTRICTORS

MedactaPlug



- Completely absorbable plug in biocompatible gelatine
- Ideal fit to the shape of the medullary canal



FLEXIBLE INSERTER

MedactaPlug PE



- Non-absorbable UHMWPE cement restrictor
- Disc shape design with spiral slanted cuts
- Radiopaque wire in stainless steel
- One size fits different medullary canal diameters

REFERENCES

[1] Hamadouche M, Lhague B A, Kerboull L, Jalubowitz E - Length of clinically proven cemented hip stems: State of the art or subject to improvement? - International Orthopaedics - September 2014; 2:11 - DOI: 10.1007/s00264-014-2522-8 [2] El Masri F, Kerboull L, Kerboull M, Courpied J P, Hamadouche M - Is the so-called 'French paradox' a reality? - THE JOURNAL OF BONE AND JOINT SURGERY - MARCH 2010; VOL 92B, No. 3 [3] Delaunay C - Prothèse totale de Charley : où en est aujourd'hui le "Gold Standard" de l'arthroplastie primaire de hanche ? - Maîtrise Orthopédique N°83 - Avril 1999 [4] Wicblewski B M, Siney P D, Fleming P A - Charley low-frictional torque arthroplasty, THE JOURNAL OF BONE AND JOINT SURGERY - MAY 2002; VOL 84B, NO. 4; 543-540 [5] Kerboull L, Hamadouche M, Courpied J P, Kerboull M - Long-term results of Charley Kerboull hip arthroplasty in patients younger than 50 years - Lippincott Williams & Wilkins - JANUARY 2004; No. 418, 112-1118 [6] Schulte K R, Callaghan J J, Kelley S, Hill C, Johnston R C - The outcome of charley total hip arthroplasty with cement - THE JOURNAL OF BONE AND JOINT SURGERY - JULY 1993; VOL 75A, NO.7; 975-961 [7] Mounsey E J, Williams D H, Howell J R, Hubble M J - Revision of hemiarthroplasty to total hip arthroplasty using the cement-in-cement - THE JOURNAL OF BONE AND JOINT SURGERY - DECEMBER 2015 VOL 97B, No. 12, 1627-1623 [8] Langlais F, Kerboull M, Sedel L, Ling R S M - Annotation - THE 'FRENCH PARADOX'; THE JOURNAL OF BONE AND JOINT SURGERY - JANUARY 2003; VOL 85B, No. 1; 20-17 [9] Kerboull L, Hamadouche M - Est-il possible de réduire la longueur originale d'une tige Charley-Kerboull cimentée? Maîtrise Orthopédique, N°255 - Juin/Jullet 2016, P16-18 [10] Hamadouche M, Scemama C, Kerboull L - The Influence Of Stem Length on Rotational and Tiling Stability after Line-to-Line Cementation - Orthopaedic Research Society, September 2013. [11] Hamadouche M, Baque F, Lelevre N, Kerboull M - Minimum 10-year Survival of Kerboull Cemented Stems According to Surface Finish - Springer, February 2008; Vol 466, N 2; 466:332-339 DOI 10.1007/s11999-007-0074-6 [12] Thomsen M, Lee C - In-vitro Rotational Stability of Cemented Stem Designs - Part III - Modern Cementing Technique - Chapter 7.4; Springer/483/196-205 [13] Glyn-Jones S, Gill H S, Beard D J, McLardy-Smith P, Murray D W - INFLUENCE OF STEM GEOMETRY ON THE STABILITY OF POLISHED TAPERED CEMENTED FEMORAL STEMS - THE JOURNAL OF BONE AND JOINT SURGERY - Jan 2011; 44(1):22-7 doi: 10.1016 [14] Postel M, Kerboull M, Evard J, Courpied J P - Kerboull M : La prothèse Charley-Kerboull. In Arthroplastie totale de hanche. Springer-Verlag Ed., Berlin, Heidelberg, New-York, Tokyo; p.14 - 19, 1985

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AMIS-K: THE SHORTENED CHARNLEY-KERBOULL STEM

The AMIS-K has been developed by Dr L. Kerboul and Professor M. Hamadouche, incorporating their own experience with the Charnley-Kerboul femur implant. Based on the same concept, the AMIS-K includes modifications aimed at simplifying implantation.

30 YEARS OF CLINICAL EXPERIENCE

The first Charnley-Kerboul stems were released in 1972. They are characterised by their cervico-diaphyseal angle of 130°, and adaptation of the stem prosthesis to the dimensions of the medullary canal. This tapered stem is larger in diameter at the top than the bottom and different versions cater for various anatomical shapes. [3, 4, 5, 6, 8, 9, 11, 14]



FRENCH PARADOX

The AMIS-K stem is in keeping with the design of the Charnley-Kerboul implant with its very thin cement mantle (1 - 2 mm) - French Paradox. [2, 8]

AMIS FRIENDLY DESIGN

The length of the AMIS-K has been reduced by approximately 12% compared to Charnley-Kerboul type stems. In vitro mechanical tests have confirmed that the reduced length did not affect the stability of the implant compared to the standard length implant. [1, 10]

This reduction in length is intended to preserve bone stock and facilitate insertion of the femoral implant through a minimally invasive procedure such as AMIS. [9]

SIMPLIFIED REVISION CASES

The AMIS-K is compatible with the 'cement-in-cement' technique. It makes possible to leave the distal cement in place, thereby reducing the complexity of the operating procedure. [7]



INSTRUMENTATION

- Dedicated AMIS instrument set
- Broaches and trial stems
- Cement mixing system

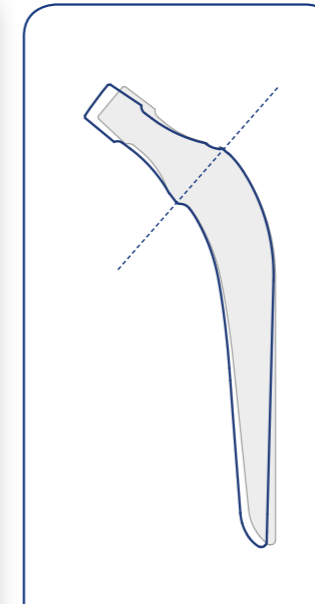


PRODUCT RANGE

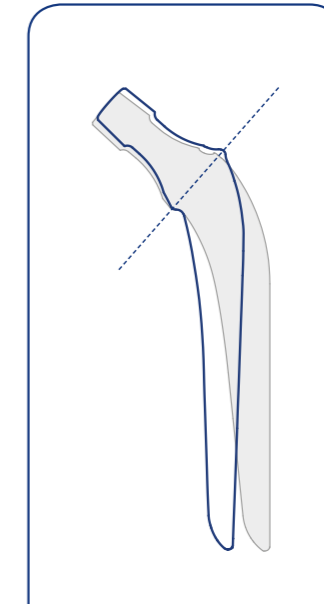
The AMIS-K is a cemented stem prosthesis with a modular head, available in 22 sizes and various different versions : Standard (STD), Lateralized (LAT), Dysplastic (DYS), Revision (REV).



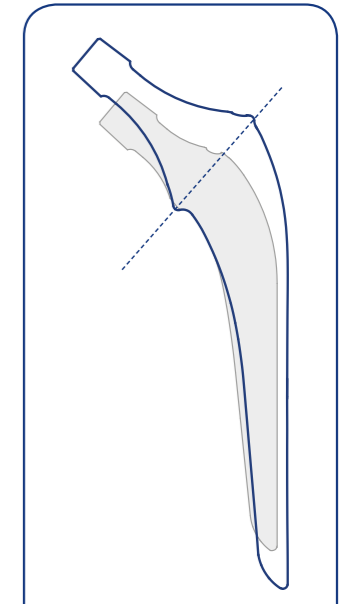
STD



STD - LAT



STD - DYS



STD - REV

TECHNICAL PROPERTIES

COLLAR

- Intended to help monitor the level of insertion of the stem. [1, 9]

SHAPE

- The **double-tapered** design, with a gradually tapering section in the frontal and sagittal planes, is believed to impose mainly radial compressive loads on the cement and to allow rotational stability. [8, 12]
- The **rectangular section** is aimed at improving rotational stability. [8, 13]
- The **round edges** are intended to prevent the risk of stress concentration in the cement mantle. [8, 12]

SURFACE TREATMENT

- The mirror polished surface allows the reduction of friction between the cement and the implant. [8, 12]

MATERIALS

- Forged High Nitrogen Steel (ISO 5832-9), mirror-polished surface.

