AMIS Experience
ANTERIOR MINIMALLY INVASIVE SURGERY IN HIP REPLACEMENT
The **AMIS Experience** is much more than a surgical technique. It is a **complete set of services** that delivers **healthcare efficiency** with no additional costs.
With the patient in mind, our innovations are designed to become part of their life experience.
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AMIS Experience

The anterior approach is the only approach that follows both an intermuscular and internervous path, potentially reducing the risk of damage to periarticular structures, including muscles, tendons, vessels and nerves. Its use in Total Hip Replacement goes back many years\(^1\) and advantages have been extensively reported in the literature\(^2\). However, we recognise that it can be challenging to adopt\(^3\).

Convinced of the value of the anterior approach for improving patient wellbeing, but at the same time acknowledging the potential challenges, an international group of expert surgeons (now the AMIS Education Board), in collaboration with Medacta, set out to optimize and standardize the anterior approach, to make it more straightforward and enhance its reproducibility.

The result of this collaboration was the AMIS (Anterior Minimally Invasive Surgery) technique, created in 2004, along with the development of dedicated instrumentation to facilitate the procedure.

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When it was clear that the AMIS had the potential to deliver important clinical advantages, effective and comprehensive education of the technique became the goal.

The **M.O.R.E. (Medacta Orthopaedic Research and Education) Institute** was created and, together with the AMIS Education Board, became responsible for the **development and continuous improvement** of the **AMIS Education Program**, with a mission to:

- provide ongoing surgeon training and proctorship
- encourage the sharing of experiences between surgeons
- reduce challenges in the early phase of the learning curve as much as possible
More than an Anterior Approach

SURGICAL TECHNIQUE
AMIS is an evolution of the anterior approach: simpler, more reproducible and less invasive.

MEDICAL EDUCATION
The M.O.R.E. AMIS Education Program has proven to be of the highest standard of extensive medical education, capable of effectively easing the learning curve.

DEDICATED IMPLANTS
Specifically designed to facilitate implantation through the anterior approach, with success evidenced by clinical outcomes and customer satisfaction.

ADVANCED INSTRUMENTATION
Developed specifically to make the AMIS technique easier and more reproducible.

TOOLS & SERVICES
Extras provided by Medacta to further support the surgeon.

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Surgical Technique

The AMIS technique is a minimally invasive anterior approach, following an INTERMUSCULAR AND INTERNERVOUS pathway, protecting and preserving periarticular structures.

Consequently, the AMIS technique potentially delivers the following advantages for the patient:

- Significantly shortened rehabilitation
- Faster return to daily activities
- Decreased post-operative pain
- Immediate post-operative muscle tone preservation
- Decrease in blood loss
- Shorter hospitalization
- Reduced risk of dislocation

These advantages are predominantly experienced by the patient in the short-term, however, the approach may deliver potential MEDIUM - TO LONG -TERM BENEFITS.

Literature shows that with the AMIS approach:

- Patients feel no residual trochanteric pain or limping
- There is a reduced risk of muscle degeneration
- There are potential advantages for revision surgery

Conventional approach | AMIS approach
---|---

MRI one year post-op

1. Femoral nerve
2. Gluteal nerve
The AMIS technique is seen as an evolution of the anterior approach.

It is quite different to other MIS anterior approaches. This unique procedure is differentiated by specific surgical steps:

- **Avoidance of an excessive use of retractors**
  - Reduced risk of damaging soft tissue and less need for extra instruments

- **Easier osteotomy of the femoral head**
  - No need to dislocate the hip or perform a double osteotomy

- **Possible capsule preservation**
  - Patients may feel their hip is more stable

- **Easier femoral exposure, with fewer releases**
  - Simplified surgical technique, with improved joint stability

The AMIS Experience allows the surgeon to truly maximize the benefits of using the anterior approach.
The M.O.R.E. Institute offers effective and continuous education to surgeons, with an aim to improve patient outcomes and surgical proficiency. Close collaboration between Experts and the M.O.R.E. Institute has resulted in the on-going development and evolution of the Educational programme.

The M.O.R.E. Institute was founded on, and encourages the concept of, sharing experiences across the international medical community. It has become a unique and global education platform, tailored to the individual’s needs.
M.O.R.E. Opportunities

**INSTRUCTIONAL LEVEL**
Reference Center Visits, Standard Learning Center, Proctoring, Fellowship, Young Surgeon Meetings, Nurse Courses, Intensive Week

**INTERNATIONAL MEDICAL NETWORK**

**MASTER LEVEL**
Revision Learning Center, Reference Center Visits, Proctoring

**ADVANCED LEVEL**
Reference Center Visits, Advanced Learning Center, Proctoring, Product Club

**SCIENTIFIC LEVEL**
M.O.R.E. Symposia, Congress, Side Events, User Meetings, General Practitioner Meetings, Road Shows, Hospital Open Days, Webcast
INSTRUCTIONAL LEVEL

1. By attending a Learning Centre
   - DEEPEN: the scientific knowledge of the Anterior Approach
   - PRACTICE: the technique during assisted cadaver workshops

2. By visiting a Reference Centre
   - EVALUATE: Surgical Technique
   - EXPLORE: Medacta Products/Services

3. By taking advantage of Proctoring
   - EXPERIENCE: a network of Experts, with mentoring of initial cases
   - EVOLVE: with the M.O.R.E. continuous education program

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ADVANCED LEVEL

SHARE
your experience, improve your technique and widen patient selection

By meeting with Experts

MASTER LEVEL

EXPECT MORE
with an Education Path tailored to your needs

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MASTER
the AMIS Surgical Technique and Medacta Products

By focusing on Revision Cases
Dedicated **Implants**

Medacta implants are designed to be **AMIS friendly** and reduce potential challenges during implantation. They are well established and **their reliability is supported by clinical evidence and customer success.**
More than 10 years of clinical success
First stem specifically designed for AMIS

AMIStem-H  AMIStem-H Collared  AMIStem-C

98.4%
survival rate for aseptic loosening at minimum 8 years.
All cases done with AMIStem-H through AMIS approach^{11}

More than 15 years of clinical success

AMIStem-H  QUADRA-H

99.6%
of cases had no aseptic loosening after 10 years.
All cases done with QUADRA-H through AMIS approach^{12}

98.8%
survival rate for aseptic loosening at minimum 2 years.
All cases done through AMIS approach^{15}

VERSAFITCUP CC TRIO

VERSAFITCUP DM

99.6%
of cases had no aseptic loosening after 10 years.
All cases done through AMIS approach^{12}

100%
survival rate for aseptic loosening at minimum 5 years.
All cases done through AMIS approach^{15}

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Advanced **Instrumentation**

The **AMIS specific instrumentation** streamlines, **simplifies and facilitates reproducibility** of the anterior approach.

**AMIS MOBILE LEG POSITIONER** THE NEVER SLEEPING ASSISTANT
This orthopaedic table extension is the main facilitator of the AMIS technique: it provides for an easy and stable leg positioning, which allows a simple and reproducible procedure.

Benefits:
- **Patented automatic traction release**
- **NO additional costs**
- **Easy connection to all operating tables**
- **Radio transparency**
- **Ease of use**
- **Improved kinematics**
  - Deep hyperextension
  - Optimal rotation centre
  - Excellent rotational stability
- **AMIS shoe, easy to assemble**
Patented automatic traction release

Radio transparency

Easy connection to all operating tables

Improved kinematics

Patented automatic traction release
In addition to the AMIS Mobile Leg Positioner, the set of AMIS instruments are included at **NO additional cost**:

**SELF-RETAINING RETRACTORS**
Avoids the excessive use of Hohmann or Cobra retractors, reducing the risk of soft tissue damage.

**RADIO-TRANSPARENT SOLUTIONS**
To make fluoroscopy easier.
As we continue to develop and improve the AMIS technique, the AMIS instrumentation consequently evolves. It is Medacta’s commitment to keep developing solutions that will continue to develop the learning curve, reduce possible technical complications and optimize reproducibility of the procedure.

OFFSET REAMERS AND CUP IMPACTOR
For easier access to the hip joint

AMIS BROACH HANDLE
Designed at 45° to avoid the need for extra femoral releases to effectively expose the femur
Tools & Services

Medacta is committed to finding innovative solutions that can contribute to improving and enhancing patient care and experience, in addition to delivering economic value to the healthcare system. Medacta has developed several additional solutions/services to support the AMIS surgeons and add value to their practice.

**MYPRACTICE DEVELOPMENT PLAN**
A unique package of services to enable surgeons to organise educational meetings with patients, general practitioners and caregivers. It assists surgeons in the promotion of their practice and patient education, with a series of patient-oriented documents and marketing tools.
MYHIP*  
MyHip is one of Medacta’s 3D-printed, patient specific solutions, developed to improve accuracy in implant sizing and positioning, potentially reducing the risk of complications for Hip Replacement Surgery.

It consists of a 3D preoperative planning platform (with complete online management) and patient-specific guides for both the femoral and acetabular stage of the procedure. The 3D planning platform enables the surgeon to predict possible challenges before surgery.

The complete in-house development guarantees a personal technician for each surgeon and only 3 weeks lead time.

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*Availability depending on country specific registrations
Economic benefits

The AMIS technique is a procedure that delivers economic benefits, with potential for the hospital to gain return on investment.

NO ADDITIONAL COSTS
Pursuing the AMIS Experience comes at NO additional cost to either the surgeon or the hospital!

ECONOMIC SAVINGS
The clinical benefits of the AMIS technique potentially translate into economic benefits. It is possible to reduce the cost of hip replacement by 40% using AMIS when compared to a standard approach.\(^{17}\)

IMPROVED O.R. EFFICIENCY
The AMIS technique only requires 1 assistant; the overall cost of the procedure can be reduced by reducing the size of the O.R. team.

EXCELLENT MARKETING TOOL
The frequently reported benefits of the AMIS approach make it a procedure often requested by patients. It is possible for surgeons to double their practice\(^{18}\) in an average of two years.
Surgeon Testimonies

“...I had thought anterior approaches were all kind of the same but when I did the Medacta lab, I realized it was a very different procedure. AMIS was much more controlled – a much better procedure."  
(Surgeon from USA)

“...The intensity of training with Medacta was much greater and much better. (...) The engagement (with AMIS expert surgeons) was incredibly helpful in speeding up the learning curve."  
(Surgeon from USA)

“...With AMIS I operate without stress. This technique brings financial advantages for the patient, for the surgeon, for the clinic/hospital and for the insurance."  
(Surgeon from Germany)

“...I only need one assistant, the post-operative care is considerably less and the stationary treatment and the rehab requirement (outpatient/inpatient) are shorter. (...) In the last 3 years I operated on about 99% of patients with AMIS."  
(Surgeon from Germany)

“...(since starting with AMIS) My practice has grown immensely."  
(Surgeon from USA)
REFERENCES
