

# Are You Living with Hip Pain?



MAKOplasty<sup>®</sup>  
may be the right  
treatment option  
for you.

Hip pain  
shouldn't keep  
you from doing  
the things  
you love.



If you are one of the millions of Americans who suffer from hip pain from degenerative joint disease (DJD), there are treatment options available that can enable you to maintain an active lifestyle and quality of life.

This brochure is designed to help you learn more about DJD and how MAKOplasty® using Robotic Arm technology for Total Hip Replacement may be the right treatment option for you. Be sure to discuss all treatment options with your doctor.

### **What is degenerative joint disease?**

Degenerative joint disease (DJD) is a common cause of hip pain. DJD is a chronic condition affecting millions of Americans, often resulting in loss of an active lifestyle and quality of life. There are different types of DJD that may cause hip pain. These include but are not limited to:

- Osteoarthritis (OA), also called “wear-and-tear arthritis”, in which cartilage wears down over time
- Post-traumatic arthritis, which results from a severe fracture or dislocation of the hip
- Rheumatoid arthritis (RA), an inflammatory arthritis of the joints
- Avascular necrosis (AVN), a condition where the “ball” or femoral head has lost a healthy supply of blood flow causing the bone to die and the femoral head to become misshapen
- Hip dysplasia, a condition where bones around the hip did not form properly, which may cause misalignment of the hip joint

### **What causes degenerative joint disease?**

The risk of developing symptomatic DJD is influenced by multiple factors such as age, gender and inherited traits that can affect the shape and stability of your joints. Other factors can include:

- A previous hip injury
- Repetitive strain on the hip
- Improper joint alignment
- Being overweight
- Exercise or sports-generated stress placed on the hip joint



### **What are the symptoms?**

The most common symptom of DJD of the hip is pain, which may occur in four places:

- Groin
- Outside the hip
- Lower area of the back
- Thigh to the knee (or below)

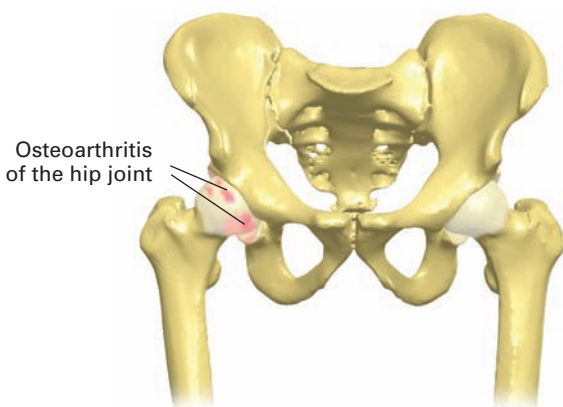
Pain from the hip is commonly mistaken for back pain, and may be treated as such until the diagnosis of DJD is made.

## What causes the pain?

DJD of the hip is a loss of cartilage, or lining, of the hip joint. The cartilage serves as a cushion and allows for smooth movement of the hip.

When the cartilage wears away, the ball-and-socket bones touch, creating bone-on-bone contact. This contact creates pain from rubbing together, swelling, and stiffness.

## Front (anterior) view of the pelvis



## How is DJD treated?

For hip pain, non-surgical treatment options are often the first line of defense. This can include resting the hip from overuse, gentle exercise (such as swimming), or over the counter medicines to manage the pain.

If your symptoms aren't responding to non-surgical solutions, be sure to speak with your doctor. You may be a candidate for total hip replacement.

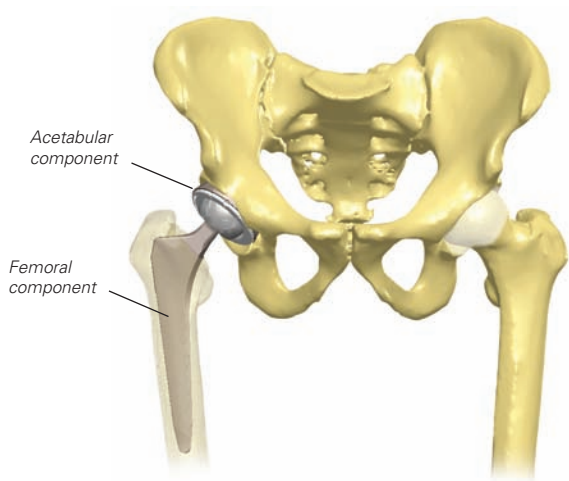
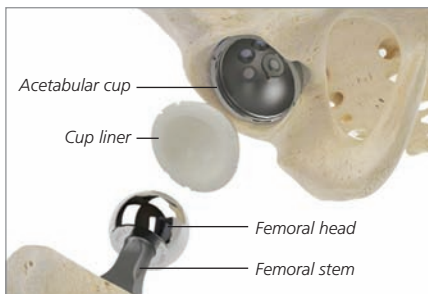
## What is total hip replacement?

Patients who have DJD may benefit from total hip replacement, also referred to as total hip arthroplasty. This is a surgical procedure in which the arthritic hip joint is replaced by implants, which include:

- A metal cup with a plastic liner, which replaces the socket (acetabulum) in the pelvis
- A metal femoral stem and head

The goal of total hip replacement is to increase mobility and ability to perform daily activities.

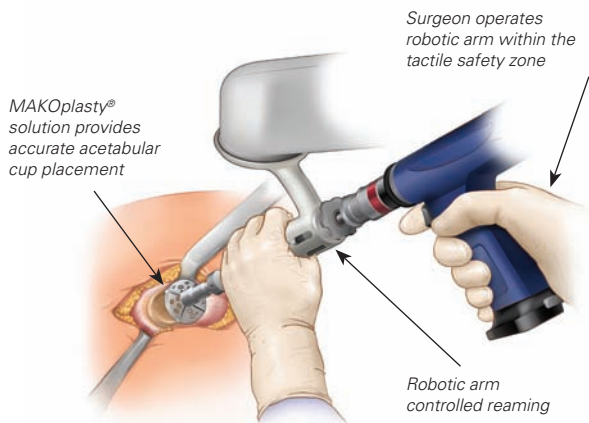
## Components of a hip replacement



## What is MAKOpasty® Total Hip Replacement?

MAKOpasty is an innovative, breakthrough solution for those suffering with painful DJD of the hip and need a total hip replacement. MAKOpasty, powered by the RIO® Robotic Arm Interactive Orthopedic System, allows your surgeon to treat your specific hip condition with accuracy and precision.

## MAKOpasty® procedure



During surgery, the robotic arm guides your surgeon in preparing your socket in the pelvis and positioning the implants. Real-time information and images allow your surgeon to know and control accurate implant placement, which can be difficult to achieve using traditional surgical techniques without a robotic arm.

MAKOpasty benefits may include:

- Accurate placement of your hip implant using the surgeon-controlled robotic arm system, which can reduce the likelihood of hip dislocation
- More consistency in leg length, potentially decreasing the need for a shoe lift
- Decreased risk of the implant and bone abnormally rubbing together – this may improve the lifetime of the implant

### **How does MAKOpasty® work?**

If your surgeon determines that you are a good candidate for the MAKOpasty procedure, one or two weeks prior to your surgery date you will receive a CT scan of your hip. This is used to create a 3-D model of your hip pelvis and femur.

The surgeon uses the RIO® software with information from the model to plan your surgery based on your unique anatomy. During surgery, the software provides real-time information to optimize implant positioning and alignment, and the robotic arm is used to prepare your socket and guide placement of the implants.

### **Who is a good candidate for the MAKOpasty® Total Hip procedure?**

If you have one or more of the following symptoms, talk to your doctor – you may be a candidate for MAKOpasty.

- Pain while putting weight on the affected joints
- Limping to lessen the weight-bearing pressure on the hip
- Hip pain or stiffness during walking or other impact activities
- Failure to respond to non-surgical treatments or pain medication



## **If I undergo MAKOplasty® Total Hip Replacement, what can I expect?**

A typical hospital stay for a total hip replacement is determined by your MAKOplasty surgeon. Your surgeon will also determine what physical therapy may be prescribed for you.

As a total hip replacement procedure, MAKOplasty is typically covered by Medicare. Check with your private health insurance to verify coverage.

## **What is the lifespan of a MAKOplasty® implant?**

All implants have a life expectancy that depends on several factors including the patient's weight, activity level, quality of bone, and compliance with physician's orders.

Proper implant alignment and precise positioning during surgery are also very important factors that can improve the life expectancy of an implant. Through the use of the RIO System, implants can be optimally aligned and positioned to ensure the longest benefit.

The information provided herein is not meant to substitute for the in-depth consultation you should have with your physician. Only a licensed physician can adequately diagnose and explain your underlying orthopedic condition, the natural history of the condition without intervention, the MAKOplasty® procedure, medically acceptable alternative procedures, and the potential complications and risks of any procedure and/or operation. In every case your physician must guide you on all aspects of your surgery, including pre- and post-operative care. Individual results will vary.

All claims of product performance and indications for use contained within this document relate only to data submitted to and reviewed by regulatory authorities in those jurisdictions in which clearance(s) and/or approval(s) have been obtained, including the United States. No product performance claims or indications for use are made for jurisdictions in which such clearance(s) and/or approval(s) have not been obtained.

# 8 Tips

## **to Help You Manage Your Degenerative Joint Disease**

1. Maintain a healthy weight to reduce levels of painful swelling in the joints.
2. Know your physical limitations and how to reduce activity when pain persists.
3. Take medications prescribed by your doctor and be sure to follow the specific regimen exactly as prescribed.
4. If advised, use assistive devices such as a walker or cane to put less stress on your joints.
5. Maintain good posture to reduce the strain placed on your joints.
6. Wear comfortable, properly fitting shoes that support your weight.
7. Keep a positive outlook to help manage stress and maintain control of your treatment.
8. Maintain a proactive role in managing your disease so that you can live as close to your normal lifestyle without aggravating your condition.

For more patient information,  
please call **877.411.MAKO** or visit  
**makoplasty.com**

# Questions

## to Ask Your Surgeon

- What are the factors causing my hip pain?
- Will reducing activity, taking pain or prescription medication, getting injections or adding physical therapy help ease my pain?
- Would a total hip replacement procedure provide relief from my hip pain?
- Am I a candidate for the MAKOpasty<sup>®</sup> total hip replacement procedure?
- What are the benefits and risks involved with traditional total hip replacement or the MAKOpasty procedure?
- How long will it take to recover from a total hip replacement? From a MAKOpasty total hip replacement procedure?
- How long can I expect the implant to last?
- How does my age affect the proper treatment for my condition?

For more patient information,  
please call **877.411.MAKO** or visit  
**makoplasty.com**



*Restoring Quality of Life Through Innovation®*

**MAKO Surgical Corp.**  
2555 Davie Road  
Fort Lauderdale, FL 33317  
Phone: 866.647.6256

For more information, please visit us at  
**makosurgical.com**