Disclaimer

This movie is an educational resource only and should not be used to manage Orthopaedic health. All decisions about the management of Hip Arthroscopy must be made in conjunction with your Physician or a licensed healthcare provider.
# MULTIMEDIA HEALTH EDUCATION MANUAL

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Normal Hip Anatomy</td>
<td>a. Introduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Normal Hip Anatomy</td>
<td></td>
</tr>
<tr>
<td>2. Hip Arthroscopy</td>
<td>a. Indications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Diagnosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Conservative Treatment</td>
<td></td>
</tr>
<tr>
<td>3. Surgical Procedure</td>
<td>a. Introduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Surgical Treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Post Operative Care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Risks &amp; Complications</td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

Arthroscopy is a surgical procedure in which an arthroscope is inserted into a joint. Arthroscopy is a term that comes from two Greek words, arthro-, meaning joint, and -skopein, meaning to examine.

Hip Arthroscopy, also referred to as keyhole surgery or minimally invasive surgery, is performed through very small incisions to evaluate and treat a variety of hip conditions. In order to understand hip arthroscopy, it is important to understand the normal anatomy of the hip.
Normal Hip Anatomy

The thigh bone, femur, and the pelvis, acetabulum, join to form the hip joint. The hip joint is a “ball and socket” joint. The “ball” is the head of the femur, or thigh bone, and the “socket” is the cup shaped acetabulum. The joint surface is covered by a smooth articular surface that allows pain free movement in the joint.

The cartilage cushions the joint and allows the bones to move on each other with smooth movements. This cartilage does not show up on X-ray, therefore you can see a “joint space” between the femoral head and acetabular socket.

Pelvis

The pelvis is a large, flattened, irregularly shaped bone, constricted in the center and expanded above and below. It consists of three parts: the ilium, ischium, and pubis.

The socket, acetabulum, is situated on the outer surface of the bone and joins to the head of the femur to form the hip joint.

Femur

The femur is the longest bone in the skeleton. It joins to the pelvis, acetabulum, to form the hip joint.

The upper part is composed of the Femoral head, Femoral neck, and Greater and Lesser trochanters.
Arthroscopy Indications

Hip Arthroscopy may be indicated for the following reasons:

- Debridement of loose bodies: Bone chips or torn cartilage debris cause hip pain and decreased range of motion and can be removed with hip arthroscopy.
- Removal of adhesions: Adhesions are areas of built up scar tissue that can limit movement and cause pain.
- Repair of torn labrum: The labrum lines the outer edge of the “socket” or acetabulum to ensure a good fit. Tears can occur in the labrum causing hip pain.
- Removal of bone spurs: Extra bone growth caused by injury or arthritis that damages the ends of the bones cause pain and limited joint mobility.
- Partial Synovectomy: Removal of portions of the inflamed synovium (joint lining) in patients with inflammatory arthritis can help to decrease the patient’s pain. However, a complete synovectomy requires an open, larger hip incision.
- Debridement of joint surfaces: Conditions such as arthritis can cause the breakdown of tissue or bone in the joint.
- Repair after Trauma: Repair of fractures or torn ligaments caused by trauma.
- Evaluation and diagnosis: Patients with unexplained pain, swelling, stiffness and instability in the hip that is unresponsive to conservative treatment may undergo hip arthroscopy for evaluation and diagnosis of their condition.

Diagnosis

Hip conditions should be evaluated by an Orthopaedic surgeon for proper diagnosis and treatment. Your surgeon will perform the following:

- Medical History
- Physical Examination

Diagnostic Studies may include:

- X-rays
- MRI
X-rays:
A form of electromagnetic radiation that is used to take pictures of bones.

MRI:
Magnetic and radio waves are used to create a computer image of soft tissue such as nerves and ligaments.

Conservative Treatment Options:
- Rest
- Activity Limitations
- Anti-inflammatory Medications
- Physical Therapy
- Injection of steroid and analgesic into the hip joint

Surgical Introduction

Hip Arthroscopy is a surgical procedure in which an arthroscope is inserted into the hip joint to assess and repair damage to the hip.

The arthroscope used in Hip Arthroscopy is a small fiber-optic viewing instrument made up of a tiny lens, light source and video camera. The surgical instruments used in arthroscopic surgery are very small (only 3 or 4 mm in diameter), but appear much larger when viewed through an arthroscope.

The television camera attached to the arthroscope displays the image of the joint on a television screen, allowing the surgeon to look throughout the hip joint. The surgeon can then determine the amount or type of injury, and then repair or correct the problem as necessary.

The benefits of arthroscopy compared to the alternative, open hip surgery, include:
- Smaller incisions
- Minimal soft tissue trauma - Less pain
- Faster healing time
- Lower infection rate
- Less scarring
- Earlier mobilization
- Usually performed as outpatient day surgery
Surgical Procedure

Hip Arthroscopy is performed in a hospital operating room under general or regional anesthetic depending on you and your surgeon’s preference.

The surgeon makes two or three small incisions, about 1/4 of an inch each, around the hip joint area. Each incision is called a portal. These incisions result in very small scars which in many cases are unnoticeable.

A blunt tube, called a Trocar, is inserted into each portal prior to the insertion of the arthroscope and surgical instruments.

Surgical Procedure

In one portal, the arthroscope is inserted to view the hip joint. Along with the arthroscope, a sterile solution is pumped into the joint to expand the viewing area, giving the surgeon a clear view and room to work.

With the images from the arthroscope as a guide, the surgeon can look for any pathology or anomaly. The large image on the television screen allows the surgeon to see the joint directly and to determine the extent of the injuries and then to perform the particular surgical procedure as needed.

Surgical Procedure

The other portals are used for the insertion of surgical instruments. A surgical instrument is used to probe various parts within the joint to determine the extent of the problem. If the surgeon sees an opportunity to treat a problem, a variety of surgical instruments can be inserted through this portal.
After treating the problem, the portals (incisions) are closed by suturing or by tape.

Arthroscopy is much less traumatic to the muscles, ligaments, and tissues than the traditional method of surgically opening the hip with long incisions.

Post Operative Care:

After surgery your surgeon will give you guidelines to follow depending on the type of repair performed and the surgeon’s preference.

Common Post-operative guidelines include:

- Your surgeon will prescribe pain medications to keep you comfortable at home.
- Keep the incisions clean and dry. You may shower once the dressings are removed unless otherwise directed by your surgeon.
- You will be given specific instructions regarding activity and rehabilitation.
- Physical therapy will be ordered to restore normal hip function and strength.
- Eating a healthy diet and not smoking will promote healing

Risks and Complications:

As with any major surgery there are potential risks involved. The decision to proceed with the surgery is made because the advantages of surgery outweigh the potential disadvantages. It is important that you are informed of these risks before the surgery takes place.

Complications can be medical (general) or specific to Hip Arthroscopy surgery. Medical complications include those of the anesthetic and your general well being. Almost any medical condition can occur so this list is not complete. Complications include:

- Allergic reactions to medications
- Blood loss requiring transfusion with its low risk of disease transmission
- Heart attacks, strokes, kidney failure, pneumonia, bladder infections
- Complications from nerve blocks such as infection or nerve damage
- Serious medical problems can lead to ongoing health concerns, prolonged hospitalization, or rarely death.

The majority of patients suffer no complications following Hip Arthroscopy, however, complications can occur following

Hip surgery and include:
Infection:
Infections can occur superficially at the portal insertion sites or in the joint space of the hip, a more serious infection.

Nerve damage:
Trauma to nerves may be temporary or permanent and can cause numbness, tingling, pain, and weakness.

Hemarthrosis:
A condition caused by excess bleeding into the joint after the surgery is completed. This may require additional arthroscopic surgery to irrigate the joint and evacuate the blood.

Blood clots (Deep Venous Thrombosis):
These can form in the calf muscles and can travel to the lung (Pulmonary embolism). These can occasionally be serious and even life threatening. If you get calf pain or shortness of breath at any stage, you should notify your surgeon.

Failure to relieve pain:
This is rare but may occur especially if some pain is coming from other areas such as the spine.

Risk factors that can negatively affect adequate healing after hip arthroscopy include: (images)
Summary:

A good knowledge of this procedure will make the stress of undertaking the procedure easier for you to bear. The decision to proceed with the procedure is made because the advantages of the procedure outweigh the potential disadvantages. It is important that you are informed of these risks before the procedure.