

# Treatment of Arthroscopic Surgery and its Causes and Diagnosis

Lewen Yon\*

Department of Orthopedic Surgery, Guangdong Medical University, Zhanjiang, China

## DESCRIPTION

Arthroscopic surgery, a remarkable advancement in the field of orthopedics, has revolutionized the way joint-related conditions are diagnosed and treated. This minimally invasive procedure has gained popularity for its ability to provide precise, real-time visualization of joint structures and allow for targeted interventions while minimizing tissue damage. It involves making small incisions near the affected joint and inserting a tiny camera called an arthroscope, to visualize the joint's interior in real time. This allows surgeons to identify issues such as torn ligaments, damaged cartilage, or inflammation. Surgical instruments can be introduced through additional incisions to repair or remove damaged tissue. Arthroscopy offers advantages like reduced scarring, quicker recovery, and less postoperative pain compared to traditional open surgery. This study discusses about the arthroscopy, exploring its history, the wide range of joint conditions it can address the surgical process, recovery, and the ongoing innovations shaping the future of joint care.

### Treatment

Arthroscopy is a versatile procedure used to diagnose and treat various joint-related conditions. Some of the most common conditions addressed through arthroscopic surgery include:

Knee arthroscopy: Arthroscopy can be used to trim or repair torn meniscus, a common knee injury. The Anterior Cruciate Ligament (ACL) and Posterior Cruciate Ligament (PCL) tears can be reconstructed arthroscopically. Articular cartilage injuries in the knee can be treated using techniques like microfracture or Autologous Chondrocyte Implantation (ACI).

**Shoulder arthroscopy:** Arthroscopy is employed to repair torn rotator cuffs, restoring shoulder function and Labrum tears in the shoulder can be repaired arthroscopically. Arthroscopy can alleviate impingement syndrome by removing bone spurs or inflamed tissue.

**Hip arthroscopy:** This condition, which leads to hip pain and decreased range of motion, can be treated arthroscopically by reshaping the hip joint and Tears of the hip labrum, a ring of cartilage around the hip socket, can be repaired through hip arthroscopy.

Ankle arthroscopy: Ankle impingement arthroscopy can be used to remove bone spurs or damaged tissue that causes ankle impingement and damaged ankle cartilage can be addressed using arthroscopic techniques.

**Elbow arthroscopy:** Elbow Arthroscopy can help treat these common overuse injuries by removing damaged tissue and loose bodies arthroscopy can remove loose bodies or bone fragments in the elbow joint.

#### Causes

Arthroscopic procedures themselves do not cause medical conditions; instead, they are a surgical technique used to diagnose and treat various joint-related issues. The decision to perform arthroscopy is based on the presence of specific joint conditions, such as meniscal tears, ligament injuries, or cartilage damage. The underlying causes of these joint conditions can vary widely, including factors like age, genetics, previous injuries, overuse, or inflammatory conditions. Arthroscopy is a valuable tool in addressing these issues, offering minimally invasive access to the joint for diagnostic evaluation and targeted treatment, helping patients regain joint function and alleviate symptoms.

#### Diagnosis

Arthroscopic diagnosis, also known as arthroscopic examination or arthroscopy, is a minimally invasive surgical procedure used by orthopedic surgeons to visually assess and diagnose various joint-related conditions. This procedure involves the use of a specialized instrument called an arthroscope, which is a thin, flexible tube equipped with a high-definition camera and lighting system. The arthroscopic diagnosis process typically includes the following steps:

**Preparation:** Before the procedure, the patient undergoes a thorough evaluation, including a review of medical history, physical examination, and possibly diagnostic imaging such as X-rays or MRI scans. This helps the surgeon determine the need for arthroscopy and plan the procedure accordingly.

Arthroscopy: The arthroscope is inserted through one of the incisions, providing real-time, high-definition images of the joint's internal structures on a monitor in the operating room. This visual inspection allows the surgeon to identify

Correspondence to: Lewen Yon, Department of Orthopedic Surgery, Guangdong Medical University, Zhanjiang, China, E-mail: Lewenyon@au.cn Received: 01-Sep-2023, Manuscript No. OMCR-23-26959; Editor assigned: 05-Sep-2023, PreQC No. OMCR-23-26959 (PQ); Reviewed: 19-Sep-2023, QC No. OMCR-23-26959; Revised: 26-Sep-2023, Manuscript No. OMCR-23-26959 (R); Published: 03-Oct-2023, DOI: 10.35248/2161-0533.23.12.369 Citation: Yon L (2023) Treatment of Arthroscopic Surgery and its Causes and Diagnosis. Orthop Muscular Syst. 12:369. Copyright: © 2023 Yon L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. abnormalities, such as torn ligaments, damaged cartilage, inflamed synovium, or loose bodies within the joint.

Arthroscopic diagnosis offers several advantages, including minimal scarring, reduced postoperative pain, and quicker

recovery compared to traditional open surgery. It provides a direct and detailed view of the joint, enabling surgeons to make precise diagnoses and plan tailored treatment strategies to alleviate symptoms and improve joint function.