

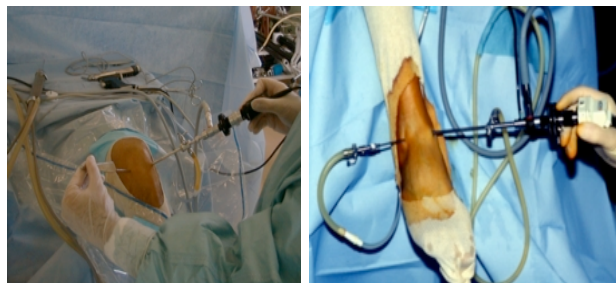
ARTHROSCOPY

Arthroscopy technique is born after the early works of a Japanese surgeon, WATANABE. Technology improved progressively surgical instruments (punch, shaver etc) and videoscopes with camera,

Arthroscopy allows the surgeon to look, palpate, and evaluate with precision anatomical lesions and to treat them through two or three punctiform skin incisions.

All the joint may be explored with various sized instruments.

All the pathology are concerned with this technique: arthrosis, inflammatory arthritis, sports trauma, synovial tumors, etc.



knee

ankle

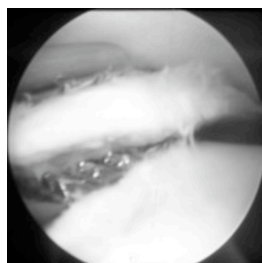
arthroscopic procedures actually allow better intraarticular visualization and ease of operative technique. The risk of complications as infection, hematoma is decreased, the same as pain, and hospital stay. Rehabilitation is facilitated.

ISAKOS is the international board that groups the surgeons involved in this technique.

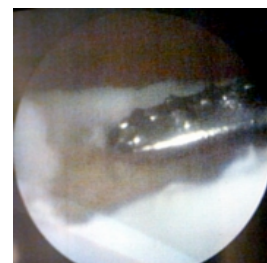
INSTRUMENTATION

The arthroscope is introduced through a skin incision of 5 mm. The videocamera fixed on the sheath allows the surgeon (and even the patient) to get the intra articular vision on a TV screen.

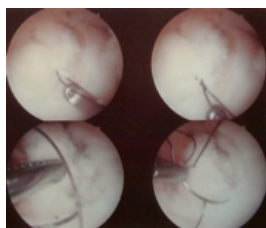
Handled and motorised instruments are used through another small incision.



grasp punch



rasp



suture



palpator



basket punch



shaver

INDICATIONS

Small instrumentation is available to perform arthroscopy even in pediatric surgery.

All the joints may be explored with an arthroscope even wrist, ankle, or foot joints. Knee and shoulder are the two main joints concerned with the technique, followed by ankle, elbow. Wrist and hip arthroscopy are more demanding technically.

Through arthroscopy we may remove any third mobile body, a meniscal lesion, a synovial tumor, reconstruct a ligament, treat a cartilage lesion, remove adhesences, clean and drain an infected joint, reduce and control a fracture and perform an osteosynthesis, etc.

CHECK-UP BEFORE SURGERY

In order to detect vital risk for anesthesiology, and to assess a potential risk of post-operative complication in a short or long term follow-up, a medical questionnaire checking list is needed before the operation, to be planned by the surgeon and his team.

Risk factors influencing complications are :

- **Obesity** is associated with a higher risk of infection and operative difficulties with the risk of breakage of instruments.
- **diabetis** is associated with a higher risk of infection
- **previous infection of the joint** is associated with a higher risk of infection

factors increasing risks for medical complications

- American Society of Anesthesiology (ASA) **scores > 3** is at risk.
- **Previous algo neuro dystrophy** may be a recurrent risk .
- **Previous deep veinous thrombosis** is a predisposing factor to recurrent episode

SURGERY

The length of arthroscopy varies with the type of surgical act. When doing ligament, tendon, or bone treatment, the surgeon may explain to you the technique he will use. Hospitalisation stay and rehabilitation will depend on the type of surgery performed.

COMPLICATIONS

Even with a careful act performed by perfectly trained team, any complications may happen the same as in all surgical acts.

These are exceptional ; The list below is not exhaustive

- **Infection** is one of the most dreaded complications, but is extremely rare as arthroscopy is performed under a continuous liquid flow through only small incisions (1/2500). In case of infection the joint is burning, red, swelling and very painful; you must come back immediately to be examined by the surgeon. Reoperation is necessary.

Synovial kyst: along the incision. sometimes it is necessary to remove it surgically

post-operative swelling: this is not a complication as it disappears spontaneously in one to three weeks. You may use cold packs, anti-inflammatory medications, and reduce active physiotherapy.

vascular lesion Hematoma may be seen in case of small veinous lesion at skin incision ; this has no consequence.

Some extremely rare popliteal vascular lesions have been published; Treatment must be performed by vascular surgeon.

nerve lesion : local superficial dysesthesy may be seen in case of lesion round skin incision ; this has no consequence and disappears but could be awkward
complete lesion of sciatic nerve may occur postoperatively as a result of nerve compression secondary to edema, hematoma, infection, or the application of long duration of tourniquet.

Phlébitis : preventive measure (early mobilisation, anti-thrombotic socks, low Weight Molecular Heparin anti-embolic prophylaxis for one to four weeks according to the surgery

complex regional pain syndrome : is a disorder characterized by the presence of symptoms as temperature alterations, abnormal skin color, abnormal sudomotor activity, and/or edema.

The estimated prevalences have ranged from 2.3% to 4% following arthroscopic knee surgery.