ARTHROSCOPY FOR TORN MENISCI

You have had problems with your knee and your orthopaedic surgeon suspects that you may have a torn meniscus, also known as a torn 'cartilage'.

Each knee has two menisci. These are crescent-shaped pieces of elastic cartilage that fit between the two large bones of the knee (femur and tibia). The menisci function as shock absorbers and help distribute the fluid within the joint. A sudden twist or other injury to the knee may tear one or both of the menisci. In most cases, menisci do not have the blood supply required to heal a tear. The torn edges, or sometimes the entire torn menisci, may need to be removed surgically. If not removed, the torn edges of the menisci may damage the surfaces of the bones within the knee, causing significant 'wear and tear' or degenerative arthritis.

When a torn menisci is suspected, your orthopaedic surgeon suggests the following course of action. To confirm the diagnosis, a special surgical procedure called a diagnostic arthroscopy is usually recommended. For this procedure, you are admitted to the hospital the morning of the surgery or the day before, depending on hospital policy. Before the operation your anaesthetist explains the type of anaesthetic that best fits your particular needs.

In the operating room, after the anaesthesia has taken effect, your orthopaedic surgeon makes a small (1/4") incision in your knee. He inserts an arthroscope (a miniature telescope-like instrument) and examines the inside of your knee. If he confirms that your meniscus is damaged, he locates the tear. He then removes the torn edges or the entire cartilage with a procedure called operative arthroscopy. This is accomplished by manipulating small instruments through a canal in the arthroscope or through additional tiny incisions in the knee. After the operation, a soft bandage is placed over your knee. You will remain in the "recovery" room adjacent to the operating room for an hour or two before returning to your room.

Some meniscal tears are better treated by surgical repair rather than excision. To repair the meniscus a variety of surgical techniques may be used, e.g. sutures, anchors etc. A repaired meniscus requires substantial modification of the standard post-operative regime . **(See Appendix)**

You may go home that afternoon if you are feeling strong and well. You are taught an exercise program to do at home, and this program is essential to the successful rehabilitation of your knee. You may need crutches for several days, but most patients return to normal activities of daily living within a few days after an arthroscopy. Sports and heavy labour may be resumed approximately four to six weeks after surgery, depending on your progress.

INSTRUCTIONS AFTER OPERATIVE ARTHROSCOPY

Occasionally, diagnostic arthroscopy reveals that the menisci is not removable by operative arthroscopy. Sometimes an arthrotomy is necessary. This means making an incision in the knee to perform conventional knee surgery for removal of the meniscus. Afterward, most patients are in hospital for 2-3 days. Crutches may

be required for a few days. An exercise program is prescribed to rehabilitate the strength of your knee.

After partial removal of the meniscus, the tissue does not regenerate. If the entire meniscus is removed, it is completely replaced by scar tissue. In both cases, the knee requires the extra support of strong muscles. A specific exercise program is essential to strengthen the structures that support and stabilise the knee.

If you have any questions concerning this information, or about your surgery, please contact our office on **(**0247 31 2122***)***.

1. **DIET -** Resume your normal diet.

2. **ACTIVITY:**

   a) You may gradually increase your activity as it is comfortable. At least until your first post-operative appointment, continue to elevate your leg whenever you are sitting or lying down.

   b) Knee swelling will gradually subside after surgery. Increased swelling is usually a sign of over activity and should be a signal for you to be less active.

   c) Your exercise program is the key to successful rehabilitation of your knee. Do the exercises given by your surgeon or therapist.

   d) Crutches may be helpful for a few days to assist your recovery.

   e) After you go home, you may bend your knee normally. Do this just to tolerance as you return to normal activity. Do not forcefully bend it or do bend knee exercises until given permission by your surgeon.

   f) You may drive a car as soon as pain and swelling has subsided enough to allow good mobility.

   g) Swimming and bicycling are permissible as soon as they are comfortable for you, beginning at least a few days after surgery. Jogging, running or stop-and-go- sports should be deferred for at least 4-6 weeks. Your surgeon will advise you how and when to resume sports.

3. **PAIN:**

   a) Usually pain is the result of over activity. Therefore, when you are in pain, sit or lie down, elevate your leg and rest. If the pain does not subside take the pain control medication suggested for you, but do not return to activity. Pain is a protective mechanism that signals potential injury to your knee, and should not be masked by medication when you are active. If pain persists despite rest and elevation of the leg, contact your surgeon.

   b) You will be given a prescription for pain medication when you leave the hospital. Please inform us of any known drug allergy. If you have any adverse affects from the medication, it should be discontinued and your doctor's office notified.

c) The sensation of "splashing" of fluid inside the knee is not cause for concern. It represents residual fluid from surgery and this will be absorbed.

d) Elevation of the leg and application of an ice pack to the knee minimises swelling and discomfort in the first 48 hours after surgery.

4. DRESSING

a) A soft compression dressing has been applied to your knee. This dressing should be comfortable and absorb any leakage of fluid or blood from your operative site. Although the dressing may become moist or blood stained, this is not usually a cause for concern.

b) You may remove the dressing 3 days after your surgery.Apply Band-Aids to the tiny incisions for several days after the surgery. Cover with a light crepe bandage or sports knee guard.

5. INCISIONS

a) The small points of entry may be sore and develop bruising over the next several days. The bruising eventually disappears and does not require any special care.

b) Do not apply creams or lotions to your incisions. They will heal well on their own.

6. BATHING

a) It is safe to shower 48 hours after surgery. Bathing or soaking in water should be avoided for four (4) days.

7. PRECAUTIONS

a) If you develop fever **(101 f or 38 C or above)**, increasing pain not relieved by medication or rest, redness or swelling in your calves or feet, please contact our office on **(0247 31 2122).**

8. RETURN VISIT

a) You will need to visit your surgeon approximately 10-14 days after discharge from hospital. **Please call our office on (02 4731 2122) for your post-operative appointment as soon as your return home from the hospital.** Please phone if you have any problems or questions before your post-operative appointment.

KNEE EXERCISES

Because you will not be using your leg normally for some time, you will lose muscle size and strength. This loss must be regained by physical therapy after you are out of the cast or bandage. Much of the possible loss can be prevented by starting

exercises NOW. You can speed your recovery and ensure a more successful recovery by doing your best NOW.

HOME KNEE EXERCISES

1. Lie on your back. Keep you knee absolutely straight as you lift it to 45 degrees. Lower it slowly. Do not relax the leg, but repeat 15 times. As you get stronger, add weights by means of putting weight in a gym bag or "flight bag" and dropping the handles over the ankles **(see Fig. 664A**).

2. Standing **front** leg raise is done exactly as the preceding exercise, only you stand to do the lift. Perform 15 repetitions. Add weight when you are able **(see Fig. 664B).**

   Standing **side** raise is done exactly as the preceding exercise, only the weight is lifting to the side. Do 15 repetitions **(see Fig. 664C).**

3. This "quad-setting" exercise is performed seated on the floor. Place a couple of rolled-up towels under the knee. Whilst pushing the back of the knee down into the towel as hard as possible, attempt to keep the entire surface of your leg in contact with the floor. Hold for 5 seconds. Repeat 10 times **(see Fig 664D).**

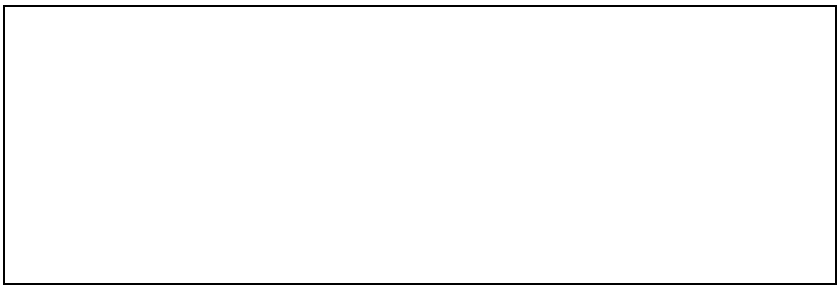
4. Sit on a high table, with the back of the knee just at the edge of the table. You may wish to use towels to pad the back of the knee. From the fully bent position, straighten the knee as much as possible and hold for 3 seconds. Repeat 15 times. As you get stronger, add weight (by the method described in No. 1) Continue using this exercise only as long as there is no increased pain or swelling as a result of the exercises **(see Fig 664E).**

5. Stand erect and balance by holding onto a stable piece of furniture. Bend the exercising knee backwards. Use the weighted bag, as in the preceding exercises. Do 15 repetitions **(see Fig. 664F).**

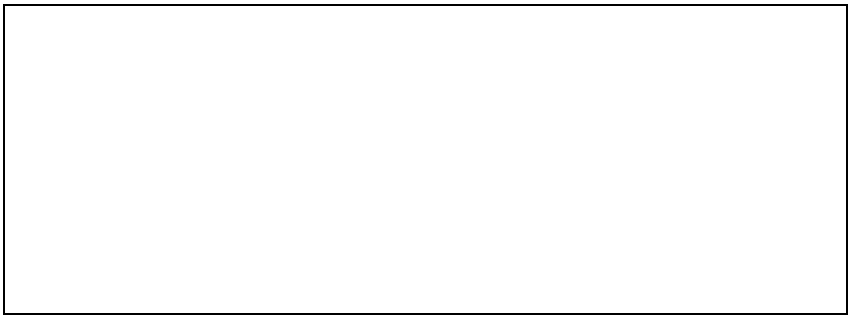
POST ARTHROSCOPY EXERCISES

These Exercises are to be done three times per day until you see your Doctor.

1. Lie on a bed and bend and straighten your knee gently 10 times.

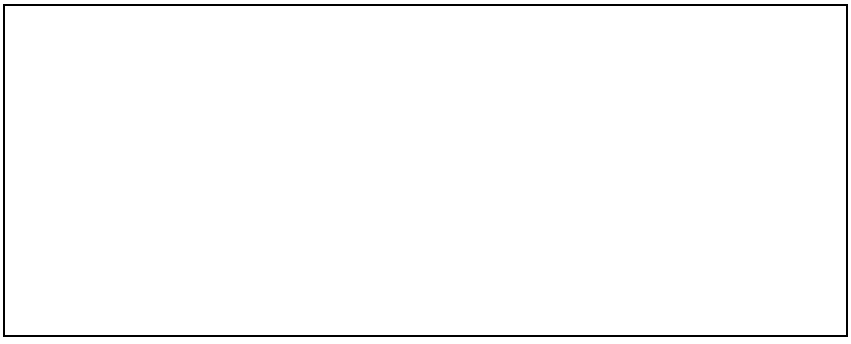


2a. Lie on bed with your leg straight out and tighten your thigh muscle, (i.e. try to straighten your knee and hold it tight for 5 seconds.



2b. Relax for 2 seconds.

2c. Lift your leg up straight to 45 degrees and hold it there for 5 seconds.



2d. Relax for 2 seconds.

Repeat exercises **2a)** to **2d)** as your pain permits, until you can do 10 repetitions, 3 times per day.

Notify one of your treating team if you get **severe swelling**, **pain or redness** in your knee, or if you can't sleep because of your **knee pain**.

COMPLICATIONS

Arthroscopic Knee Surgery, like all operations, can have certain complications. Although these are rare, they do happen. Please read the following possible complications list carefully and feel free to ask your surgeon if you have any queries.

- Anaesthetic related complications.
- Allergic reactions to medications and material used before, during and after the operation.
- Blood Loss/Haemorrhage.
- Infection.
- Sympathetic Dystrophy.
- Painful, thickened or unsightly scar.
- Joint stiffness.
- Residual or incomplete pain relief.
- Clots (Thromboembolic Disease).
- Strokes
- Myocardial Infarction.
- Bed Sores.
- Chest Complications, e.g. Pneumonia.
- Urinary complications – Retention, Infection.
- Renal Failure.
- Thrombophlebitis
- Compartment Syndrome

This is not a comprehensive list of all possible complications. If you do not understand the information, you should discuss your queries with your surgeon.

APPENDIX

MENISCAL REPAIR (MENISCOPLASTY)

The meniscal tissue heals very slowly. Therefore it is necessary that you:-

1. Maintain the Brace for at least 6 weeks.

2. Avoid sports for at least 6 months.

The success of meniscal repair depends on the care you take with use of your knee during the period it takes for the cartilage to heal. Success rate of meniscal repair is about 80 – 85% depending on a number of factors including location and type of tear, age of the patient and after care. Meniscal tears that fail to heal require later day resective surgery.

CONSENT FOR OPERATION

I …… (Name), of
……..……..…..

……..…
…..(Address)

hereby give consent to Dr Lee Woo Guan to perform the following operation/procedures.
……..……

……..……

I declare that the nature of the operation/procedure (operations/procedures) and the possible complications have been explained to me.

I am aware that the following risks/complications may result from the operation:-

Anaesthetic related complications Allergic reactions to medications and material used before, during and after the operation Blood Loss/Haemorrhage Infection Compartment Syndrome Sympathetic Dystrophy Renal Failure Thrombophlebitis	Painful, thickened or unsightly scar Joint Stiffness Residual or incomplete pain relief Clots (Thromboembolic disease) Strokes Myocardial Infarction Bed sores Chest complications, e.g. Pneumonia Urinary complications – Retention, Infection

COMMENTS:
…….

……..……

I have read and understand all aspects of the proposed treatment, and I have been given a chance to ask questions and discuss all the issues related to my operation.

I accept the risks associated with the operation to be undertaken and give consent to the operation.

Signed:…… Date:
……

Name: ……Place: …….
……

Witness:…… Date: …….. Name: ……..