Your Guide To Anterior Cruciate Ligament Reconstruction
# Your Guide To Anterior Cruciate Ligament Reconstruction

## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Anterior Cruciate Ligament</td>
<td>4</td>
</tr>
<tr>
<td>Preparation before Surgery</td>
<td>6</td>
</tr>
<tr>
<td>Day of Surgery</td>
<td>8</td>
</tr>
<tr>
<td>After Surgery</td>
<td>10</td>
</tr>
<tr>
<td>Medical and Nursing Care in the Inpatient Care Units</td>
<td>11</td>
</tr>
<tr>
<td>Discharge Instructions</td>
<td>15</td>
</tr>
</tbody>
</table>

You are advised to follow any specific written or oral instructions given to you by your doctor or healthcare worker. Please seek clarification if you are in doubt.

This booklet is produced by the SGH Department of Orthopaedic Surgery, and contains general information and advice regarding your condition. It is designed to provide you with a guide on how to safeguard your health. However, it is not intended to contain exhaustive instructions. In specific cases, you may receive different or additional instructions from your doctor.
Dear patient,

Welcome to the Singapore General Hospital.

This booklet is specially prepared for you and your family to give you some information regarding your impending surgery.

We hope that the information will help you understand what happens before, during and after your surgery. We will guide you through the steps you will be taking on your path to recovery.

Please accept our best wishes, and we hope that you would have a pleasant stay with us.

A/Prof Tay Boon Keng
Chairman, Division of Surgery
Singapore General Hospital
Welcome to the Singapore General Hospital.

Our doctors, nurses and other members of the healthcare team will guide you towards a speedy recovery. If you have any questions, concerns or comments, please feel free to discuss with us.

Your Personal Particulars

Name: ____________________________________________

NRIC: ____________________________________________

Date of Birth / Age: ________________________________

Sex: _____________________________________________

Ward Admitted: __________________________________

Doctor-in-charge: _________________________________

Please call Tel: _________________________________ if you have any questions or need any clarifications.
The Knee
The knee is a complex joint that connects the thigh with the lower leg. The knee joint and its ligaments permit flexion, extension, and in certain positions, medial and lateral rotation. It is a common site for sprain and dislocation.

Anterior Cruciate Ligament Injuries
The Anterior Cruciate Ligament or ACL is often injured in sports such as football or skiing. A twist, a direct blow or a fall may easily tear the ligaments. These tearing of the ligaments result in pain and swelling, as well as instability of the knee. You will feel that your knee is giving way, especially when trying to change direction on the knee.

By treating the instability and performing a reconstruction of the ligaments, the risk of developing wear and tear in the knee can be reduced.
What is ACL Surgery?
Your surgeon can reconstruct a damaged ACL. This can be done by replacing the damaged tissue with a healthy strong tissue (a graft) taken from an area near your knee. This operation is called ACL Reconstruction.

Today, this surgery is most often done using the arthroscope. Two or more incisions will be made to your knee. An arthroscope will be inserted at one of the incision to look into the knee. Some other fine instruments will also be inserted to repair any damages found.
You will be admitted to hospital either a day before the surgery, or on the day of the surgery. If you have additional medical problems, admission may even be earlier.

**Physical Assessment**
A physiotherapist will perform a physical assessment to establish a baseline of your knee range of motion, and strength status before the surgery.

**No Smoking**
We strongly discourage smoking one week prior to surgery, and especially on the night before the surgery. Smoking makes it difficult for you to clear your secretions after surgery, and may impede your recovery.

**No Food Consumption**
You must not consume any food, not even water, after midnight. This is to prevent any vomiting and subsequent inhaling of the vomitus into the lung during surgery, which could be life-threatening.

**Get a Good Night’s Rest**
Have a good night’s sleep before your operation. Do let your doctor or nurse know if you require some medication to help you to sleep.
Personal Items & Valuables
We advise that you leave all your valuables and personal items at home, and to keep not more than ten dollars with you during your stay in the hospital.
Day of Surgery

Before you go for your operation
It is advisable for you to take a good shower, brush your teeth and rinse your mouth. You should refrain from drinking anything on the morning of your surgery. However, if you have to take medication for your medical problem, the nurse will advise you to take it with sips of water.

Shortly before the estimated time of your operation, the nurse will inform you to do the following:

• Empty your bladder
• Remove any dentures, spectacles and contact lenses, make-up, nail polish, hairpiece, jewellery and prosthesis
• Change into a gown

Please inform your nurse if you have any personal items requiring safekeeping.

Pre-medication
You may be given medication in the form of tablets or an injection to help you relax. This medication will make you sleepy, and may cause dryness in your mouth.

You should not attempt to get out of bed after taking the medication. Our nurse or health attendant will transfer you to the operating theatre on a trolley.
**Family Room**
Your family members could either return to the ward or wait in the waiting area just outside the operating theatre. Please advise them not to wait along the corridor.

**In the Operating Theatre**
Once you have arrived at the operating theatre, the nurse there will verify your identity and also the type of surgery you are scheduled for.

After verification, you will be transferred to another trolley and wheeled into the induction room to meet the anaesthetist and the surgeon.

The anaesthetist will give you an injection to put you in a deep sleep, so that you will not feel any pain. The operation is done under general anaesthesia.
Recovery Room
After your operation, you will be taken directly to the recovery room. Your blood pressure, breathing and heart rate will be checked frequently.

Please inform the nurse if you are feeling nauseous or experiencing any pain, so that medication could be given to relieve your discomfort.

When you are awake and your blood pressure and pulse have stabilised, you will be transferred to the ward.
At the ward, the nurses will check your blood pressure and pulse closely for the first few hours.

**Relief of Post-Surgery Discomfort**
Some level of discomfort is to be expected after the surgery. You will be given medications to help relieve any pain, as well as to help you recover from the operation.

**Diet**
Drinks will be served when you have recovered from the effects of the anaesthesia. You will be able to resume your normal diet subsequently if there is no complaint of nausea or vomiting.

**Wound Care**
- Your operated leg will be bandaged and elevated. You may find a drainage tube inserted in your knee to drain out the excess blood from the surgery. The tube will be removed upon instruction from your surgeon.

- An ice wrap (Duracold) will be placed on your knee for the next 24 to 72 hours, as instructed by your doctor. This is to reduce the pain and swelling on the operated site. During the first week, keep the leg elevated. You can also use ice wraps to help reduce the swelling and pain around the knee.

- Your knee will also be put on a brace, to protect your new ACL. The physiotherapist or surgeon may “lock” or “unlock” the knee brace. You are
advised not to remove or adjust the brace without instructions from the surgeon or physiotherapist.

- You may experience some itchiness with the brace on at all times. It is recommended that you wear stocking on the leg to absorb any perspiration.

**Elimination Needs**
As you need to rest in bed for at least a day, you will require a bedpan or urinal for elimination purposes.

**Rehabilitation after Surgery**
You will be taught some exercises and how to manage your brace after surgery.

Your surgeon and physiotherapist will discuss with you the rehabilitation plan, as you may or may not be allowed to bear weight on your operated knee.

- As instructed by your physiotherapist, you should start gentle hip and knee bending exercises, within limits of your pain.
• You will be taught how to lift your operated leg while maintaining a straight knee. Your may be required to keep the brace on while doing your exercise.

• Your physiotherapist will teach you how to walk and climb the stairs using a pair of crutches.

Length of Stay
The average length of stay for patients undergoing surgery for ACL reconstruction is two to three days. However, the length of stay may vary with each individual.
Discharge Instructions

The following discharge instructions will help you to take care of yourself during your recuperation at home.

Activity
• Continue your exercise regime as taught by the physiotherapist to optimise your strength and function.
• Use your crutches until further instructions from the doctor or physiotherapist.

Diet
• There are no restrictions on your diet unless prescribed.

Medication
• Take medication as prescribed.

Wound Care
• Keep your dressing clean and dry.
• Get ready a stool about the height of your hips to sit on when you are showering. Remove the brace and wrap a plastic bag around the knee to keep the dressing dry.
• Your appointment for removal of stitches will be given to you upon discharge.
Special Instructions

DO NOT
• straighten your knee against gravity from a position of about 30° of knee bending.

DO
• Keep your brace on as instructed by your surgeon.
• Strengthen your hamstring muscles and quadricep muscles as instructed by your physiotherapist.

When to consult your doctor
• Call your doctor or nurse if you experience any bleeding, pain or numbness on the operated leg.

Follow-up Appointment
• You will be given an outpatient appointment for a routine check up with your surgeon.
• You will be given an outpatient physiotherapy appointment for you to continue rehabilitation after discharge. Depending on your condition, you may be required to undergo therapy twice a week for up to six months.

Outpatient Physiotherapist _________________________

Time ___________________ Date ____________________