

### **1. WELCOME**

Page 1 Welcome

Page 2 Dr. Morawski

# 2. GENERAL INFORMATION

- Pages 3-4 Maps & phone numbers
- Page 5 Knee anatomy
- Pages 6-10 Frequently asked questions about knee surgery

## **3. PREPARING FOR SURGERY**

- Page 11 Contact insurance & Preregister
- Page 11 Obtain medical clearance
- Pages 11-12 Preoperative class
- Page 12 Preparing your home
- Pages 12-16 Preparing your body / Exercises
- Page 17 Medications to stop prior to surgery
- Page17Day before surgery
- Page 17 Night before surgery
- Pages 17 Prior to admission check list

# 4. HOSPITAL CARE

- Page 19 Day of surgery
- Page 19 Day 1 after surgery
- Pages 19-20 If you are going directly home
- Page 20 Home health services
- Pages 20-21 Inpatient rehabilitation

# **5. DISCHARGE HOME CARE**

- Page 22 What to watch for after surgery
- Page 22 Control your discomfort
- Page 22Body changes
- Page 23 Caring for your incision
- Page 23 Stockings
- Page 23 Infection prevention
- Page 24 Deep Venous Thrombosis (DVT)
- Page 24 Pulmonary Embolus
- Page 24-26 Preventing Blood Clots
- Page 27-29 Post-Operation Knee Exercises

# 6. ACTIVITIES OF DAILY LIVING

- Page 30 Postoperative exercises, goals, & Guidelines.
- Page 30 Weeks 1 & 2
- Page 31 Weeks 2 4
- Page 32 Weeks 4-6
- Page 33 Weeks 6-12
- Page 34 Safety: Chairs, Walkers, Stairs
- Page 35 Safety: Home/avoiding falls
- Page 36 Do's and Don'ts for the rest of your life
- Page 37 Put your healthcare decisions in Writing / Importance of lifetime Healthcare

# 7. APPENDICES

Page 38 Aquacel Dressing

# WELCOME

# **YOUR GUIDBOOK**

Preparation, education, continuity of care and a pre-planned discharge are essential for optimum results in joint surgery. Communication is essential to this process. The Guidebook is an education tool for patients, physicians, physical and occupational therapists and nurses.

It is designed to educate you so that you know:

- ✓ What to expect every step of the way
- ✓ What you need to do
- ✓ How to care for your new joint

Remember, this is just a guide. Your physician, physician assistant, nurses or therapist may add to or change any of the recommendations. Always use their recommendations first and ask questions if you are unsure of any information. Keep your Guidebook as a handy reference for at least the first year after your surgery.

#### Carry your Guidebook with you to hospital, rehab, outpatient therapy and all physician visits.



# **DR. DAVID MORAWSKI** Total Joint Replacement Specialist

Dr. David Morawski is a fellowship-trained orthopedic surgeon specializing *in total joint replacement*.

Thank you for choosing Fox Valley Orthopedics to help restore you to a higher quality of living with your new prosthetic joint.

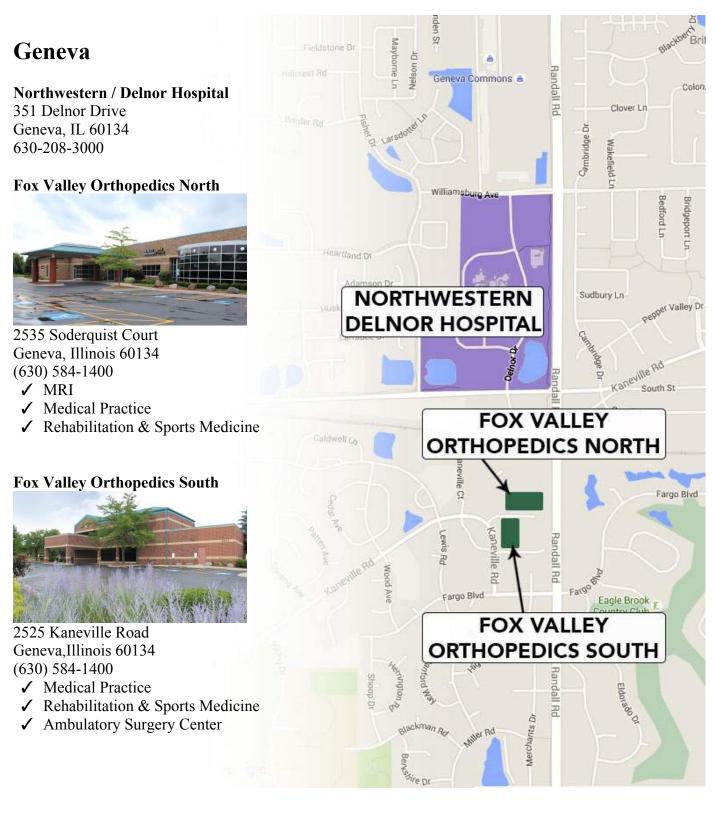
Annually, over 500,000 people undergo joint replacement surgery. Primary candidates are individuals with chronic joint pain from arthritis that interferes with daily activities, walking, exercise, sleep, leisure, recreation and work. The surgery aims to relieve pain, restore your independence and return you to work and other daily activities.

Total knee replacement patients typically recover quickly. Patients will be able to walk the day of surgery, and many are able to go home the same day. Generally, patients are able to return to driving 1-2 weeks, dancing 6-8 weeks and golf in 6-12 weeks.

Fox Valley Orthopedics has implemented a comprehensive planned course of treatment.

We believe that you play a key role in promoting a successful recovery. Our goal is to involve you in your treatment through each step of the program. This guide will give you the necessary information to promote a more successful surgical outcome.

# **LOCATION MAPS**



# **LOCATION MAPS**

# Elgin

### Fox Valley Orthopedics Elgin



1975 Lin Lor Lane, Plaza Suite Elgin, Illinois 60123 (847) 468-1400

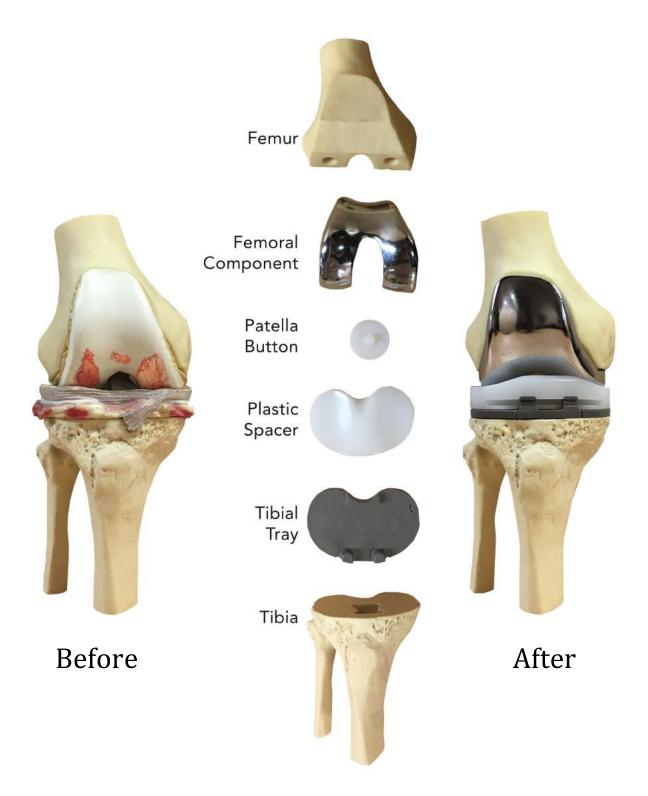
- ✓ Medical Practice
- ✓ Rehabilitation & Sports Medicine

Presence St Joseph's Hospital (847) 695-3200 77 North Airlite Street Elgin, Illinois 60123

St. Joseph Orthopedic Specialist (847) 931-5504



# **KNEE REPLACEMENT ANATOMY**



# FREQUENTLY ASKED QUESTIONS ABOUT TOTAL KNEE SURGERY

We are glad you have chosen Fox Valley Orthopedic Institute to care for your knee. Patients have asked many questions about total knee replacement. Below is a list of the most frequently asked questions along with their answers. If there are any other questions that you need answered, please ask us! We want you to be completely informed about this procedure.

# What is arthritis and why does my knee hurt?

In the knee joint there is a layer of smooth cartilage on the lower end of the femur (thigh bone), and the upper end of the tibia (shin bone) and the undersurface of the patella (kneecap). This cartilage serves as a cushion and allows for smooth motion of the knee. Arthritis is a wearing away of the smooth cartilage. Eventually, the cartilage wears down to bone. Rubbing of the bone against bone causes discomfort, pain, swelling and stiffness.

# What is total knee replacement?

A total knee replacement is really a cartilage replacement with an artificial surface. The knee itself is not replaced, as is commonly thought, but rather an artificial substitute for the cartilage is inserted on the end of the bones. This is done with a metal alloy on the femur and tibia with a plastic spacer in between them as well as on the kneecap (patella). This creates a new, smooth cushion and a functioning joint that does not hurt. Muscles, tendons, ligaments, and bursas are not replaced.



#### Page 7

## What are the results of total knee replacement?

Results will vary depending on the quality of the surrounding tissue, the severity of the arthritis at the time of surgery, the patient's activity level and the patient's adherence to the doctor's orders.

## When should I have this type of surgery?

Your orthopedic surgeon will decide if you are a candidate for the surgery. This will be based on your history, exam and X-rays. Your orthopedic surgeon will ask you to decide if your discomfort, stiffness and disability justify undergoing surgery. There is usually no harm in waiting if conservative, non-operative methods are controlling your discomfort.

## Am I too old for this surgery?

Age is not a factor if you are in reasonable health and have the desire to continue living a productive, active life. You will be asked to see your personal physician for his/her opinion about your general health and readiness for surgery.



## How long will my new knee last?

All implants have a limited life expectancy depending on an individual's age, weight, activity level and medical condition(s). A total joint implant's longevity will vary in every patient. It is important to remember that an implant is a medical device subject to wear that may lead to mechanical failure. While it is important to follow all of your surgeon's recommendations after surgery, there is no guarantee that your particular implant will last for any specific length of time. In general we are seeing 15 - 20 year life span of modern knee replacements.

## Why might I require a revision?

Just as your original joint wears out, a joint replacement may wear over time as well. The most common reason for revision is loosening of the artificial surface from the bone. Wearing of the plastic spacer may also result in the need for a new spacer. Your surgeon will explain the possible complications associated with total knee replacement.

## What are the major risks?

Most surgeries go well, without any complications. Infection and blood clots are two serious potential complications. To avoid these complications, we use antibiotics and blood thinners. We also take special precautions in the operating room to reduce the risk of infections. Your orthopedists will discuss ways to reduce that risk.

## Should I exercise before the surgery?

Yes, consult your surgeon and physical therapist about the exercises appropriate for you. There is a list of preoperative exercises in the GuideBook as well.

## How long will I be in bed after surgery?

You will be assisted up and out of bed on the day of surgery, perhaps walking with a walker. Most patients will be assisted to a chair or recliner.

# How long will I be in the hospital?

Many patients are able to go home on the day of surgery. Some knee patients will be hospitalized for 1-2 days after their surgery. Health factors, pre-op physical condition, and assistance at your home may determine how long you stay at the hospital.

# What if I live alone?

Three options are usually available to you. You may return home and receive help from a relative or friend. You may qualify to have a home health nurse and physical therapist assist you at home for two or three weeks. You may also qualify to stay at a rehabilitation facility following your hospital stay, depending on your insurance.

## How do I make arrangements for surgery?

After you and your surgeon decide to proceed with surgery, you will be contacted by our surgery scheduling team to schedule your surgery.

# How long does the surgery take?

We reserve approximately 2 hours for surgery. Some of this time is taken by the operating room staff to prepare for the surgery as well as for anesthesia. The surgery time only takes 45 - 60 minutes.

# Do I need to be put to sleep for this surgery?

You may have a spinal anesthetic (which numbs your legs only and does not require you to be asleep) or a general anesthetic. The choice is between you, your surgeon and the anesthesiologist, based on your medical history.

# Will the surgery be painful?

You will have discomfort following the surgery, but we will try to keep you comfortable with the appropriate medication.

# Who will be performing the surgery?

Your orthopedic surgeon will perform the surgery. An assistant often helps during the surgery. The assistant could be another surgeon or physician assistant. The physician assistant will be billed under your orthopedic surgeon's name.

## Where will my scar be located?

Your scar will be straight down the center of your knee, unless you have previous scars, in which case we may use the existing scar. The scar will be 4-6 inches long.

## Will I need a walker or a cane?

Yes, you will start with a walker and then progress to a cane. You may need these assistive devices for approximately 2-6 weeks after surgery.

## Where will I go after discharge from the hospital?

Most patients are able to go home directly after discharge. Some patients may transfer to a rehabilitation facility, where they will stay from 3-7 days. The Hospital Discharge Planners will help you with this decision and make the necessary arrangements. You should check with your insurance company to see if you have acute rehab benefits.

## Will I need help at home?

Yes, for the first several days or weeks, depending on your progress, you will need someone to assist you with meal preparation, etc. If you go directly home from the hospital, family or friends need to be available to help. Preparing, before your surgery, can minimize the amount of help needed. Having the laundry done, house cleaned, yard work completed, clean linens on the bed and single portion frozen meals will help reduce the need for help.

# Will I need physical therapy when I go home?

Yes, you will have either outpatient or in-home physical therapy. Your first outpatient therapy appointment is arranged by you before you have surgery. Most patients begin outpatient therapy within 2 days of surgery and will go for 3-4 days in a row, then 3 days per week. If you need home physical therapy, that will be arranged for you. Following this, you may go to an outpatient facility three times a week. The length of time required for this type of therapy varies with each patient.

\*Please remember, it is your responsibility to arrange physical therapy appointments prior to having surgery

## How long until I can drive and get back to normal?

The ability to drive depends on the amount of prescribed narcotics used for pain control and your recovery. Typically, patients are able to drive after 1-2 weeks if off of narcotic pain medication and depending on if we did surgery on your left or right knee. Getting "back to normal" will depend on your progress.

## When will I be able to get back to work?

We recommend that most people take at least one month off from work, unless their jobs are quite sedentary and they can return to work with a cane. When to return to work should be discussed with your orthopedic surgeon.

## How often will I need to be seen by my doctor following the surgery?

You will be seen for your first postoperative office visit approximately 2 weeks after discharge. The frequency of follow-up visits will depend on your progress. Many patients are seen at six weeks, at a few months after surgery, and then yearly.

## Do you recommend any restrictions following this surgery?

Yes, high-impact activities, such as running, singles tennis and basketball are not recommended. Injury-prone sports such as downhill skiing are also dangerous for the new joint. Limit kneeling on the knee, and always use a pad to kneel on.

# What physical/recreational activities may I participate in after my recovery?

You are encouraged to participate in low-impact activities such as walking, dancing, golf, hiking, swimming, bowling and gardening.

## Will I notice anything different about my knee?

Yes, you may have a small area of numbress to the outside of the scar, which may last permanently. Some patients notice some clicking when they move their knee. This is a result of the artificial surfaces. This is normal, it should not cause pain and does not mean something is wrong.

## Why is my leg discolored?

You may develop some discoloration (like a bruise) in the leg. This is from bleeding that occurred shortly after surgery. This discoloration may extend to the hip or ankle, and will slowly disappear.

# **PREPARING FOR SURGERY**

# **PREPARING FOR SURGERY**

# CONTACT YOUR INSURANCE COMPANY

Before surgery, you will need to contact your insurance company to find out if a preauthorization, a precertification, a second opinion, or a referral form is required. It is very important to make this call because failure to clarify these questions may result in a reduction of benefits or delays in surgery. If you do not have insurance, please notify the registration staff when they call you for preregistration that you will need help in making payment arrangements.

## PREREGISTER

After your surgery has been scheduled, you will be called for preregistration information by phone. You will be asked to have the following information ready when you are contacted:

- ✓ Patient's full legal name, and address
- ✓ Home phone number
- ✓ Marital status
- ✓ Social security number
- ✓ Name of insurance company, address, policy, group #, and insurance card
- ✓ Patient's employer, address, phone number and occupation
- $\checkmark$  Name, address and phone number of someone to notify in case of emergency
- ✓ Bring your insurance card, driver's license or photo ID and any co-payment required by your insurance company with you to the hospital

# **OBTAIN MEDICAL CLEARANCE**

You need to see your primary care doctor, for preoperative medical clearance. (This is in addition to seeing your surgeon preoperatively.) You may also be asked to see a specialist, for example a cardiologist or vascular surgeon depending on any preexisting medical conditions.

#### Laboratory Tests

Your routine lab tests will be done at your pre-operative visit at the surgery center or hospital. If surgery is performed at Fox Valley Orthopedics Surgery Center your primary care doctor will perform the lab tests.

## **PRE-OPERATIVE CLASS**

A special class is held weekly for patients scheduled for joint surgery. We will schedule this class for you 1-2 weeks prior to your surgery. You will need to attend one class. It is strongly suggested that you bring a family member or a friend to act as your "coach". The outline of the class is as follows:

- Joint Disease
- What to expect before and after surgery
- Risks and benefits of joint replacement surgery
- Learn about assistive devices and joint protection
- Discharge planning/insurance/obtaining equipment
- Questions and answers

# **PRE-OPERATIVE CLASS (continued)**

When you come for your pre-op class, we will measure your height, weight, temperature, and blood pressure. We will also update your knee X-rays as necessary, and obtain a leg length measurement X-ray. After the lecture portion of your pre-op visit, you will meet one-on-one with your surgeon or his physician assistant for an examination, discussion of any questions that you have after the lecture, review of your lab results, etc. You will have some paperwork to complete while you are here for the pre-op visit; if you use reading glasses, please bring them with you to your appointment. You will be here for approximately 4 hours on the day of your class.

## **PREPARING YOUR HOME**

It is important to have your house ready for your arrival back home. Clean, do laundry and put it away. Put clean linens on the bed. Prepare meals and freeze them in single serving containers. Cut the grass, tend the garden and finish yard work. Pick up throw rugs and tack down loose carpeting. Remove electrical cords and other obstructions from walkways. Install nightlights in bathrooms, bedrooms and hallways. Arrange to have someone collect the mail and attend to pets.

# PREPARING YOUR BODY

It is important to be as fit as possible before undergoing a total knee replacement. This will make your recovery much faster. Eleven exercises are shown here that you should start doing now and continue until your surgery. You should be able to do them in 15-20 minutes and it is recommended that you do all of them twice a day. Consider this a minimum amount of exercise prior to your surgery.

Also, remember that you need to strengthen your entire body, not just your leg. It is very important that you strengthen your arms by doing chair push-ups (exercise #11) because you will be relying on your arms to help you get in and out of bed, in and out of a chair, walk and do your exercises post-operatively.

1.	Ankle pumps	20 reps	2x a day
2.	Quad sets	20 reps	2x a day
3.	Abduction and adduction	20 reps	2x a day
4.	Heel slides	20 reps	2x a day
5.	Short arc quads	20 reps	2x a day
6.	Long arc quads	20 reps	2x a day
7.	Straight leg raises	20 reps	2x a day
8.	Extension stretch	20 reps	2x a day
9.	Armchair push-ups	20 reps	2x a day

#### **RANGE OF MOTION AND STRENGTHENING EXERCISES**



#### 1. ANKLE PUMPS

Move ankle up and down. Repeat 20 times.

#### 2. QUAD SETS—(KNEE PUSH DOWNS)



Lie on back, press knee into mat, tightening muscles on front of thigh. Do NOT hold breath. Repeat 20 times.



3. ABDUCTION AND ADDUCTION-(SLIDE HEELS OUT AND IN)

Lie on back, slide legs out to side. Keep toes pointed up and knees straight. Bring legs back to starting point. Repeat 20 times.



Lie on couch or bed. Slide heel toward your bottom. Repeat 20 times.

#### 5. SHORT ARC QUADS



Lie on back, place towel roll under thigh. Lift foot, straightening knee. Do not raise thigh off roll. Repeat 20 times.

# 3. Preparing for Surgery



Sit with back against chair. Straighten knee. Repeat 20 times.

#### 7. STRAIGHT LEG RAISES



Lie on back. Lift foot up and down with a straight knee.



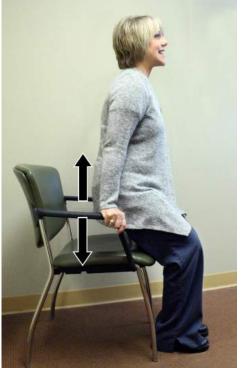
Sit in chair and lift leg onto another chair. Place ice pack on knee

9. ARMCHAIR PUSH-UPS

FOX VALLEY ORTHOPEDICS | GUIDE BOOK FOR KNEES | Dr David Morawski 630-584-1400 | fvortho.com

#### 8. EXTENSION STRETCH

# **3. Preparing for Surgery**



While seated sit straight up and try to lift yourself off the chair with your arms. Repeat 10-20 times

# 3. Preparing for Surgery

## **MEDICATIONS TO STOP PRIOR TO SURGERY**

#### **14 Days Prior to Surgery**

Ticlid must be stopped two weeks prior to surgery.

#### **10 Days Prior to Surgery**

Stop all anti-inflammatory medications such as Aspirin, Motrin, Aleve, Advil, Naproxen, Mobic, Vitamin E, and Omega 3 vitamins.

Stop all herbal medications other than iron and multivitamins.

Stop taking Plavix.

#### **3 Days Prior to Surgery**

Xarelto, Pradaxa, and Eliquis must be stopped 3 days before surgery. These medications will cause increased bleeding otherwise.

#### **Consult Your Primary Care Physician**

If you are on Coumadin you will need special instructions for stopping the medication from your cardiologist or primary care physician.

Your anesthesiologist, surgeon, or physician assistant will instruct you about what to do with your other medications.

# **DAY BEFORE SURGERY**

The hospital will call you on the day before the surgery to tell you what time your procedure is scheduled. You will be asked to come to the hospital **two hours before** the scheduled surgery to give the nursing staff sufficient time to start IV's, answer questions and prepare you for surgery. It is important that you arrive on time to the hospital because sometimes the surgical time is moved up at the last minute and your surgery could start earlier.

## **NIGHT BEFORE SURGERY**

**Do not eat or drink anything after midnight**, **EVEN WATER**, unless otherwise instructed to do so by your physician or anesthesiologist. No chewing gum or candy. However, you may be allowed to take certain medications the morning of surgery as advised by your physician.

# PRIOR TO ADMISSION CHECKLIST

See your family doctor or internist for an updated history and physical examination within 30 days of the surgery. If this is not done, your surgery will be cancelled. You may also be asked to see a specialist, for example, a cardiologist, pulmonologist or vascular surgeon.

Do not take aspirin or arthritis medications for <b>10 days</b> before surgery. This includes
Motrin, Feldene, Naprosyn, or other arthritis type medication. The use of these
medications interfere with blood clotting. Prednisone, however, should be continued. You
may take Tylenol® (acetaminophen).

Exercise as much as is comfortable.

Avoid crash diets and eat a well-balanced di
--

- ☐ If you smoke, you should stop smoking. Your family doctor or internist can help you with this. If you cannot stop smoking permanently, abstaining for 24 hours before surgery will be of benefit. It is essential not to smoke for at least 2 weeks after surgery. All hospitals are nonsmoking areas.
- □ Do not eat or drink anything (including water) after midnight on the evening before your surgery. Do not eat or drink anything (including water or coffee) the morning of your surgery. You may be able to take some medications with a sip of water if your doctor directs you to do so, i.e. heart or blood pressure medications, etc.

Please bathe or shower the morning of your surgery if possible.

Wear loose, casual clothing. Do not wear makeup or jewelry to surgery.

- $\Box$  Get a good night's rest.
- ☐ If you wear dentures, contact lenses or eyeglasses, you will be asked to remove them prior to your surgery.
- □ Notify your surgeon if there is a change in your medical condition (cold, infection, fever, etc.) prior to your surgery. It may be necessary to reschedule your surgery.
- Please bring your insurance ID card and this guide book.
- Bring a copy of your Advanced Directives, if applicable

# **HOSPITAL CARE**

# **HOSPITAL CARE**

# DAY OF SURGERY: WHAT TO EXPECT

Dr. Morawski will see you before surgery. In the preoperative unit you will be prepared for surgery. This includes starting an IV and shaving your operative site. Your operating room nurse as well as your anesthesiologist will interview you. You will then see Dr. Morawski, if you have not seen him in the preoperative unit. This will give you time to ask him any questions or relay any concern.

Following surgery, you will be taken to a recovery area where you will remain for 1-2 hours. Your family will not be able to visit during this time. During this time, pain control will be established; your vital signs will be monitored. At the hospital you will then be taken to the orthopedic unit where an orthopedic nurse will care for you. Only one or two very close family members or friends should visit you on this day.

It is very important that you begin ankle pumps on this first day. This will help prevent blood clots from forming in your legs. You should also begin using your incentive spirometer and doing the deep breathing exercises that help prevent pneumonia. You will be encouraged by the nurses to perform deep breathing exercises.

On the day of surgery you will be helped out of bed. You will be assisted to a chair in your room. The physical therapist will assess your progress and assist you walking with either crutches or a walker. Many patients are able to go home on the day of surgery.

# DAY 1 AFTER SURGERY

If you stayed overnight, then on day 1 after surgery you will be helped out of bed early and will dress in the loose clothing. Shorts and tops are usually best; long pants are restrictive. Your day will start with a morning walk with your physical therapist. In the afternoon you will have a second therapy session. You may begin walking stairs on this day.

## **IF YOU ARE GOING DIRECTLY HOME**

Someone responsible needs to drive you. If your trip will take longer than an hour, you should plan to sit in the back seat with your leg elevated across the seat to keep your leg from swelling.

You will receive written discharge instructions concerning medications, physical therapy, activity, etc. The discharge planner will arrange for equipment. Take this guide book with you. If you require home health services, the discharge planner will arrange this for you.

# 4. Hospital Care

After discharge from the hospital or rehabilitation unit, you may receive home health services. Depending on your health care needs, your doctor may prescribe one or several of the services we offer, including:

#### **Professional nurse care:**

Providing information to help you manage your health is the focus of nursing care. This means nurses not only assist you with surgical dressing changes, diet planning and medication but teach you to perform these and other tasks safely. Your nurse may also perform home lab draws to regulate Coumadin dosages.

#### **Rehabilitation services:**

Physical and/or occupational therapy may be important parts of your care plan. Registered physical therapists focus on helping you recover strength and flexibility. The goal of home health is to provide you with the information and equipment you need to make you as independent as possible at home. Home health services must be ordered by your physician and usually occur two or three times a week. Each visit may last up to an hour, depending on your needs. While you are being followed by home health services, one of your responsibilities is to follow through with the therapy recommendations and instruction you receive from your therapists and nurses even on days when they do not make a visit.

#### **Inpatient Rehab:**

Transfer to an inpatient rehab unit after your acute care hospital stay will be done only for those patients needing additional closely monitored therapy. Whether or not you will be transferred to a rehab depends on two factors:

- 1. Questions asked before admission about your general health, help at home, and activity level before surgery
- 2. How well you progress in the hospital after your surgery. Transfer to rehab is done only for those patients who exhibit a need for it and for whom it would be a very positive step.

The rehab unit focuses on patient independence. To be admitted to a rehab unit, you must be able to participate in three or more hours of therapy per day, five days per week. You will receive limited therapy on both Saturday and Sunday. The hours are split between physical therapy and occupational therapy.

Therapies are done on an individual and group basis. The average length of stay is one to two weeks. This stay may be covered by Medicare and most major insurance groups. Prior to transfer, insurance coverage will be verified by the health benefits advisor from the rehab unit.

You will be getting dressed daily, so please bring several changes of clothes that you normally wear at home. Some exercises are done in a therapy gym, so shorts or sweats are helpful. Meals are served in a central dining room. You will be encouraged to bathe, dress, and perform daily hygiene independently with instruction from your therapist and nurse.

While on the rehab unit, you will be followed by a team of health care professionals: a physical medicine physician is the leader of the team, your surgeon, rehab nurses, rehab therapists, a social worker, and a discharge planner. The goal of this team is to safely return you to your presurgery living situation. This implies a comfort level with activities of daily living.

# 4. Hospital Care

Your mobility skills are practiced and increased daily so that, when you go home, you will be able to care for yourself. Your discharge date is decided upon in conferences between nurses, therapists and social workers. Any home therapies, nursing needs, or equipment that might be required are arranged for before discharge. A home evaluation before discharge with your therapists may also be done to evaluate your function at home.

# **DISCHARGE HOME CARE**

# WHAT TO WATCH FOR AFTER SURGERY

You may have questions after surgery. Sometimes patients are reluctant to ask questions after leaving the hospital because they do not want to bother anyone. This is your body and your life, always feel free to ask questions. A good rule of thumb is, when in doubt, call.

#### You should call your physician if:

- 1. Your incision becomes red, angry looking and/or drainage develops from the surgical site. If the area around the incision becomes more swollen and does not become less swollen with rest, ice and elevation. **CALL.**
- 2. Your leg, ankle, or foot swelling does not respond to rest and elevation. There is tenderness or redness along the calf or inner thigh. Blood clots can form in your calf or thigh following surgery, so if you see any of these signs. **CALL**.
- 3. You have increasing pain in your surgical joint after it has healed. This could be a sign of infection. CALL.
- 4. You are running an elevated temperature of 101.5° F with no other symptoms following your surgery. **CALL.**

**Something you should remember:** If you have dental work or a minor surgical procedure, be sure to tell your dentist or surgeon that you have had a major joint replacement. The protective use of antibiotics for these procedures may keep you from developing an infection in your prosthesis.

#### **CONTROL YOUR DISCOMFORT**

- Take your pain medication at least 30 minutes before physical therapy.
- Gradually wean yourself from prescription medication to Tylenol<sup>®</sup>. You may take two regular strength Tylenol in place of your prescription medication up to four times a day.
- Change your position every 45 minutes throughout the day.
- Use ice for pain control. Applying ice to your affected joint will decrease discomfort, but do not use for more than 20 minutes at a time each hour. You can use it before and after your exercise program. A bag of frozen peas wrapped in a kitchen towel makes an ideal ice pack. Cold water therapy machines may also be used. These may be left on for longer time periods.

#### **BODY CHANGES**

- Your appetite may be poor. Drink plenty of fluids to keep from getting dehydrated. Your desire for solid food will return.
- You may have difficulty sleeping. This is normal. Do not sleep or nap too much during the day.
- Your energy level will be decreased for the first few months.
- Pain medication that contains narcotics promotes constipation. Use stool softeners or laxatives such as MiraLAX or milk of magnesia if necessary, or contact your primary care physician.

#### **CARING FOR YOUR INCISION**

- You may shower with the Aquacel dressing on, as long as it remains sealed against your skin. If the dressing has peeled away from your skin, you will need to cover your knee with a barrier(like plastic food wrap) in order to shower.
- Your physical therapist will remove the Aquacel dressing one week after your surgery. If the therapist does not remove your dressing, please call the office, we will have you come in to remove the dressing.
- After the dressing is removed, you may shower with the incision uncovered as long as you are not having any drainage from the incision.
- You may keep your incision covered with a light dressing, if desired.
- Notify your surgeon if the incision has increased drainage, redness, pain, odor, or heat around the incision site.
- Take your temperature if you feel warm or sick. Call your surgeon if your temperature exceeds 101.5°F

#### STOCKINGS

You will be asked to wear special compression stockings. These stockings are used to help compress the veins in your legs. This helps to keep swelling down and reduces the chance for blood clots.

- If swelling in the operative knee increases, elevate the leg for short periods throughout the day. It is best to lie down and raise the leg above the level of your heart.
- Wear the stockings continuously throughout the day. They may be removed at night for sleeping.
- Your compression stockings may be removed about 3 weeks after surgery.
- If your stockings become soiled, please wash them as directed on the package.

#### **INFECTION PREVENTION**

A possible complication of a joint replacement is infection in the joint replaced. Your surgeon takes the utmost care in keeping a sterile environment during surgery as well as providing intravenous antibiotics before, during, and after surgery. There are preventative measures that you can take to insure prevention of infection after your joint replacement.

- Take proper care of your incision by keeping the area clean and dry.
- DO NOT use ointments, creams, or lotions until your surgeon approves their use.
- You will need to take antibiotics prior to any dental work or invasive procedures for your lifetime. This is done to prevent an infection from occurring in your joint replacement.
- Typically your surgeon prefers any dental work that you need to be done on a nonemergent basis to be performed either 1 month prior to or 3 months after your joint replacement.

#### **DEEP VENOUS THROMBOSIS (DVT)**

Due to the nature of your surgery and your decreased mobility after surgery, you are at risk for developing a DVT or Deep Venous Thrombosis. A DVT is a blood clot that can develop in your legs and can potentially cause a PE or Pulmonary Embolus. Your surgical team tries to prevent these from forming with the use of medications, compression stockings, calf pumps, and early mobilization. Signs of DVT to look for are:

- Swelling in the leg, foot, or ankle that does not respond to rest and elevation.
- Tenderness or redness along the calf or inner thigh.

You should contact your surgeon if you experience any of these symptoms.

#### **PULMONARY EMBOLUS**

If you were to develop a DVT in your legs, a portion of that DVT may break off and travel to the lungs to form a PE or Pulmonary Embolus. This is considered a medical emergency. Symptoms of a PE to look for are:

- Sudden chest pain
- Difficulty breathing and/or rapid breathing
- Excessive sweating
- Confusion
- Rapid pulse
- If you experience any of these symptoms, you should contact your surgeon or seek medical treatment as soon as possible, **call 911**.

#### ANTICOAGULATION

You will be given medication to help prevent blood clots. Your surgeon will decide which blood thinner is right for you. Below are some of the options we may use.

#### ASPIRIN

Aspirin has been used for many years as a pain reliever. The beneficial effects of aspirin have also been seen in patients with a history of cardiac disease because of its ability to prevent blood clots. This reduces the risk of blood vessel blockage. This beneficial effect has also been noted in several studies of patients undergoing total joint surgery. With the rapid recovery program, people are ambulating more quickly; reducing the risk of blood clot. We use an enteric-coated 81mg aspirin taken with food twice daily for 6 weeks after surgery.

#### **COUMADIN AND HOW IT WORKS**

The purpose of Coumadin(warfarin) is to prevent harmful clots from forming or growing. The medication works by decreasing the amount of active clotting factors in the bloodstream.

#### COUMADIN AND HOW IT SHOULD BE TAKEN

Take Coumadin at the same time every day. Take Coumadin exactly as the physician prescribes. NEVER take more or less of the Coumadin unless specifically told to by your physician or nurse. If you forget to take your dose, DO NOT double your dose the next day but take your regularly prescribed dose. Missing only one dose will not cause a clot to form. Missing more than one dose may cause problems while taking more than the prescribed dose may cause bleeding.

#### **DETERMINING THE DOSE OF COUMADIN**

While you are taking Coumadin, a blood test will be done each day that you are in the hospital to monitor the effectiveness of the medication. This blood test is called the prothrombin time (PT), or INR. When you are discharged from the hospital, the blood test monitoring is decreased to two times a week. Coumadin therapy will normally continue for six weeks after surgery. If you develop a blood clot, then your coumadin will continue for a longer period of time.

If you are discharged to home with home health services, the home health nurse will come out twice a week to draw the prothrombin time. These results are called to our staff who will call you that day to adjust your dose.

If you do not utilize home health nursing, then you will have the blood test drawn in our office twice a week, every Monday and Thursday. Our staff will contact you to adjust your dose.

If you are transferred to rehab, the monitoring is usually done two times a week. The physician caring for you at the rehab center will adjust the Coumadin dose as necessary. When you are discharged from rehab or home health your Coumadin level will be monitored by our staff for a period of six weeks after surgery

#### SIGNS OF ADVERSE EFFECTS

Because one of the signs of too much Coumadin is bleeding, you should be aware of the signs and symptoms of bleeding. Call your doctor right away if any of these signs and symptoms are present. Also, call your doctor if you sustain any falls or injuries while taking Coumadin.

- 1. Excessive bleeding from your gums while brushing your teeth
- 2. Frequent and severe bruising
- 3. Nose bleed for no reason
- 4. Dark or bloody urine
- 5. Black or tarry stools or obvious blood in your stools
- 6. Unusual bleeding
- 7. Excessive menstrual bleeding

#### DRUGS TO AVOID WHILE TAKING COUMADIN

Aspirin, aspirin containing and nonsteroidal anti-inflammatory medications (NSAIDS) all INCREASE the effect of Coumadin and, therefore, should be avoided unless prescribed by a physician. Do not take Aspirin, Nsaids, Ketoprofen, Naproxen or Vitamin E while on this therapy. Inform all of your doctors that you are on Coumadin and consult your pharmacist before taking any over-the-counter medications

#### HOW DIET AFFECTS COUMADIN

Changes in diet may also affect the way Coumadin works. It is important to maintain a steady well-balanced diet. Too many dark green leafy vegetables on consecutive days may alter the prothrombin time. Therefore, maintain the same weekly balance of vegetables. Fish, liver, and vitamin K can decrease the effects of Coumadin.

#### Alcohol

Alcohol and tobacco consumption should be avoided while on Coumadin because it can also alter the prothrombin time.

#### Shaving

For shaving use only an electric razor while taking Coumadin

# **POST-OPERATION KNEE EXERCISES**

Listed on the following pages are home exercises that are essential for a complete recovery from your surgery. Your therapist will mark which exercises you should be doing. Some exercises you will do in the first two weeks, others during weeks 2-4 and still others during weeks 4-6 and beyond. Exercising should take approximately 20 minutes and should be done twice daily. If you are recovering quickly, it is recommended that you supplement these exercises with others that your therapist recommends. Stop doing any exercise that is too painful.

1.	Ankle pumps	20 reps.	2 times/day
2.	Quad sets (knee push-downs)	20 reps.	2 times/day
3.	Abduction and adduction (slide heel side to side)	20 reps.	2 times/day
4.	Heel-slides (slide heel up and down)	20 reps.	2 times/day
5.	Short arc quads	20 reps.	2 times/day
6.	Straight leg raises	20 reps.	2 times/day
7.	Seated knee flexion	20 reps.	2 times/day
8.	Extension stretch	5-10 min	2 times/day

#### 1. ANKLE PUMPS



Move ankle up and down. Repeat 20 times

2. QUAD SETS—(KNEE PUSH DOWNS)



Lie on back, press knee into mat, tightening muscles on front of thigh. Do NOT hold breath. Repeat 20 times.

3. ABDUCTION AND ADDUCTION—(SLIDE HEELS OUT AND IN)



Lie on back, slide legs out to side. Keep toes pointed up and knees straight. Bring legs back to starting point. Repeat 20 times.

4. HEEL SLIDES—(SLIDE HEELS UP AND DOWN)



Lie on couch or bed. Slide heel toward your bottom. Repeat 20 times.

5. SHORT ARC QUADS



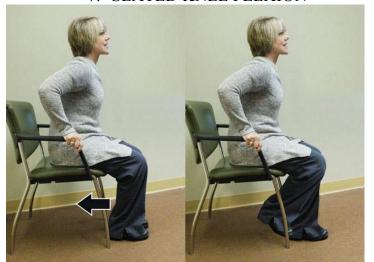
Lie on back, place towel roll under thigh. Lift foot, straightening knee. Do not raise thigh.

6. STRAIGHT LEG RAISES



Lie on back. Lift foot up and down with a straight knee.

# 5. Discharge Home Care



# 7. SEATED KNEE FLEXION

Sit in chair and gently pull knee bac. Repeat 20 times.



# 8. EXTENSION STRETCH

Sit in chair and lift leg onto another chair. Place ice pack on knee

# **DAILY LIFE & ACTIVITIES**

# **DAILY LIFE AND ACTIVITIES** TOTAL KNEE REPLACEMENT POSTOPERATIVE EXERCISES & GOALS ACTIVITY GUIDELINES

Exercising is important to obtain the best results from total knee surgery. You may receive exercises from a physical therapist at an outpatient facility or at home. In either case, you need to participate in an ongoing home exercise program as well. After each therapy session, ask your therapist to mark the appropriate exercises in your GuideBook. These goals and guidelines are listed on the next few pages.

## WEEKS ONE AND TWO

Most joint patients go directly home, but you may go to a rehabilitation center for 7-14 days. During weeks one and two of your recovery your two-week goals are to:

- Continue with walker or two crutches unless otherwise instructed.
- Walk at least 300 feet with support.
- Climb and descend a flight of stairs (12-14) with a rail once a day.
- Actively bend your knee to 90 degrees.
- Independently sponge bathe or shower and dress.
- Gradually resume homemaking tasks.
- Do 20 minute of home exercises twice a day, with or without the therapist, from the program given to you.
- Increase CPM usage from 70° to 110°.

#### WEEKS TWO TO FOUR

Weeks 2-4 will see you recovering to more independence. You will need to be very faithful to your home exercise program to be able to achieve the best outcome. Your goals for the period are to:

- Achieve 1-2 week goals.
- Walk at least  $\frac{1}{4}$  mile.
- Climb and descend a flight of stairs (12-14 steps) more than once daily.
- Bend your knee more than 105°.
- Straighten your knee completely.
- Independently shower and dress.
- Resume homemaking tasks.
- Do 20 minutes of home exercises twice a day with or without the therapist.
- Begin driving. You will need permission from therapist, as well as be off narcotic pain medication in order to drive.

#### **Strengthening Exercises**

1. Name of exercise	reps	times/day
2. Name of exercise	reps	times/day
3. Name of exercise	reps	times/day
4. Name of exercise	reps	times/day
5. Name of exercise	reps	times/day
6. Name of exercise	reps	times/day

#### **Additional Comments:**

РТ\_\_\_\_\_

# WEEKS FOUR TO SIX

Weeks 4-6 will see much more recovery to full independence. Your home exercise program will be even more important as you receive less supervised therapy. Your goals for this time period are to:

- Achieve 1-4 week goals.
- Walk with a cane or single crutch.
- Walk <sup>1</sup>/<sub>4</sub>- <sup>1</sup>/<sub>2</sub> mile.
- Begin progressing on stair from one foot at a time to regular stair climbing (foot over foot).
- Actively bend knee 110°.
- Straighten your knee completely.
- Continue with home exercise program twice a day.

#### **Strengthening Exercises**

1.	Name of exercise		reps	times/day	
2.	Name of exercise		reps	times/day	
3.	Name of exercise		reps	times/day	
4.	Name of exercise		reps	times/day	
5.	Name of exercise		reps	times/day	
6.	Name of exercise		reps	times/day	
Stretching Exercises					
1.	(stretch/	)	times/day		
2.	(stretch/	)	times/day		
3.	(stretch/	)	times/day		
Additional Comments:					

PT\_\_\_\_\_

# WEEKS SIX TO TWELVE

During weeks 6-12 you should be able to begin resuming all of your activities. You will also finish up outpatient physical therapy. Your goals for this time period are to:

- Achieve 1-6 week goals.
- Walk with no cane or crutch and without a limp.
- Climb and descend stairs in normal fashion (foot over foot).
- Walk  $\frac{1}{2}$ -1 mile.
- Bend knee to 120°.
- Straighten knee completely.
- Improve strength to 80%.
- Resume all activities including dancing, bowling and golf.

#### **Strengthening Exercises**

1. Name of exercise	repstimes/day				
2. Name of exercise	repstimes/day				
3. Name of exercise	repstimes/day				
4. Name of exercise	repstimes/day				
5. Name of exercise	repstimes/day				
6. Name of exercise	repstimes/day				
Stretching Exercises					
1(stretch/ )	times/day				
2(stretch/ )	times/day				
3(stretch/ )	times/day				
Additional Comments:					

PT\_\_\_\_\_

# STANDING UP FROM CHAIR DO NOT pull up on the walker to stand!

Sit in a chair with arm rests when possible.

- 1. Scoot to the front edge of the chair.
- 2. Push up with both hands on the arm rests. If sitting in a chair without arm rests, place one hand on the walker while pushing off the side of the chair with the other.
- 3. Balance yourself before grabbing for the walker.

#### WALKER AMBULATION

- 1. Move the walker forward.
- 2. With all four walker legs firmly on the ground, step forward with the operated leg. Place the foot in the middle of the walker area. Do NOT move it past the front feet of the walker.
- 3. Step forward with the operated leg. NOTE: Take small steps. Do not take a step until all four walker legs are flat on the floor.

#### STAIR CLIMBING

Ascend with non-operated leg first "Up with the Good". Descend with operated leg first "Down with the Bad".



FOX VALLEY ORTHOPEDICS | GUIDE BOOK FOR KNEES | Dr David Morawski 630-584-1400 | fvortho.com

#### Page 35

#### AROUND THE HOUSE: Saving energy and protecting your joints

#### Kitchen

- Do NOT get down on your knees to scrub floors. Use a mop and long handled brushes.
- Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- To provide a better working height, use a high stool, or put cushions on your chair when preparing meals.

#### Bathroom

- Do NOT get down on your knees to scrub the bathtub.
- Use a mop or other long handled brushes.

#### SAFETY AND AVOIDING FALLS

- Pick up throw rugs and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have nonskid backs.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- Be aware of all floor hazards such as pets, small objects, or uneven surfaces.
- Provide good lighting throughout. Install night lights in the bathrooms, bedrooms, and hallways.
- Keep extension cords and telephone cords out of pathways. Do NOT run wires under rugs, this is a fire hazard.
- Do NOT wear open toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls.
- Sit in chairs with arms. It makes it easier to get up.
- Rise slowly from either a sitting or lying position so as not to get lightheaded.
- Do not lift heavy objects for the first three months and then only with your surgeon's permission.
- Stop and think. Use common sense.

#### Page 36

#### DO'S AND DON'TS FOR THE REST OF YOUR LIFE

All joint patients need to have a regular exercise program to maintain their fitness and the health of the muscles around their joints. With both your orthopedic and primary care physicians' permission you should be on a regular exercise program three to four times per week lasting 20-30 minutes. Impact activities such as running, singles tennis, and high impact sports, may put too much load on the joint and are not recommended. Infections are always a potential problem and you may need antibiotics for prevention.

#### WHAT TO DO IN GENERAL

- Do not have any dental work or invasive procedures scheduled for at least three months after surgery unless it is urgent to do so.
- Take antibiotics as directed by your surgeon before you are having dental work or other invasive procedures.
- Although the risks are very low for postop infections, it is important to realize that the risk remains. A prosthetic joint could possibly attract the bacteria from an infection located in another part of your body. If you sustain an injury such as a deep cut or puncture wound you should clean it as best you can, put a sterile dressing on it and notify your doctor. The closer the injury is to your prosthesis, the greater the concern. Occasionally, antibiotics may be needed. Superficial scratches may be treated with topical antibiotic ointment. Notify your doctor if the area is painful or reddened.
- When traveling, stop and change positions hourly to prevent your joint from tightening.
- See your surgeon yearly unless otherwise recommended

# PUT YOUR HEALTH CARE DECISIONS IN WRITING

It is our policy to place patients' wishes and individual considerations at the forefront of their care and to respect and uphold those wishes.

#### What are Advance Medical Directives?

Advance Directives are a means of communicating to all caregivers the patients' wishes regarding health care. If a patient has a Living Will or has appointed a health care agent and **is no longer able to express his or her wishes to the physician, family or hospital staff**, the medical center is committed to honoring the wishes of the patient as they are documented at the time the patient was able to make that determination.

## These are the different types of Advance Directives:

LIVING WILLS are written instructions that explain your wishes for health care if you have a terminal condition or irreversible coma and are unable to communicate.

APPOINTMENT OF A HEALTH CARE AGENT (sometimes called a Medical Power of Attorney) is a document that lets you name a person (your agent) to make medical decisions for you, **if you become unable to do so**.

HEALTH CARE INSTRUCTIONS are your specific choices regarding use of life sustaining equipment, hydration and nutrition and use of pain medications.

On admission to the hospital you will be asked if you have an Advance Directive. If you do, please bring copies of the documents to the hospital with you so they can become a part of your medical record. Advance Directives are not a requirement for hospital admission.

## THE IMPORTANCE OF LIFETIME FOLLOWUP VISITS

Over the past several years, orthopedic surgeons have discovered that many people are not following up with their surgeons on a regular basis. The reason for this may be that they do not realize they are supposed to or they do not understand why it is important.

#### So, when should you follow-up with your surgeon? These are some general rules:

- Initially at six weeks and three months.
- Then at one year, 3 years, 5 years, and every 5 years after that.
- Anytime you have mild pain for more than a week.
- Anytime you have moderate or severe pain.

Thank you, The Surgeons and Staff of Fox Valley Orthopedics

# **APPENDICES**

# 7. Appendices

# **AQUACEL DRESSING**

Your dressing is a unique type of dressing. It is impregnated with silver which functions as an antimicrobial element to help prevent infection. It was placed in surgery and has a special adhesive. The dressing may be left on for 7 days after surgery. It is water resistant and you therefore may shower with that dressing on (as long as your drain is removed). There may be a small amount of blood on your dressing. This is normal. If the bleeding reaches the edges of the pad the dressing is no longer considered water resistant and should be removed.

## **Removing Your Dressing**

As mentioned your dressing has a special adhesive. It should not be simply pulled off as you might tear a band-aid off. The adhesive portion should be stretched until the bond is broken from your skin. Using hand sanitizer over the dressing prior to stretching may assist removal.

## After Aquacel

When your surgical dressing is removed you may use an island dressing or some gauze with tape. This should be changed on a daily basis. You may shower as long as there is no drainage on your dressing when you remove it.



FOX VALLEY ORTHOPEDICS | GUIDE BOOK FOR KNEES | Dr David Morawski 630-584-1400 | fvortho.com