

TOTAL KNEE REPLACEMENTS

Dr. Caldwell has recommended that you have a total knee replacement because your knee has developed significant arthritis. This is an elective procedure that should be done only when you feel that the pain or weakness in your knee is significant enough that it is inhibiting you from performing the activities that you wish to do on a daily basis.

Total knee replacements have been performed for many years with very successful results. Dr. Caldwell will perform your total knee replacement at Summit Medical Center located at 350 Hawthorne Avenue in Oakland. This is an inpatient surgery, which means that you will arrive at the hospital the day of your surgery and will generally stay in the hospital for 4 nights. You will be required to arrive roughly 2 hours prior to the scheduled start time of your procedure. When you arrive at the hospital, you will be directed to the 3rd floor where you will be admitted for surgery. Nurses and staff will ask you a lot of questions relating to your past medical history, the current reason for you being admitted to the hospital, and your medications including dosages and frequencies. Please bring all medications that you take with you on the day of your surgery.

Once all of the paper work is finished, you will speak directly to your anesthesiologist. You and the anesthesiologist will decide together whether to have your surgery done under general anesthesia or a spinal anesthetic. Either way is okay with Dr. Caldwell and the anesthesiologist is the best person to advise you on what type of anesthesia is best for you. Then you are ready to go back to the operating room. Once you are in the operating room, the first thing that will be done is a femoral nerve block. This is performed by the anesthesiologist using a nerve stimulator to identify the exact location of the femoral nerve in your groin area. Once the femoral nerve is located, a small catheter will be placed adjacent to the nerve. After surgery the catheter will be connected to a pump that will help to significantly decrease your post-operative pain. After the femoral nerve block is complete, either the general anesthetic or the spinal anesthetic will be started.

Now it is time to start your surgery. An incision will be made across the front of your knee. The incision is generally between 4-8 inches long. Three cuts are made in the tibia (i.e. shin bone), the femur (i.e. thigh bone) and the patella (i.e. knee cap) in order to insert the prosthesis. The knee prosthesis consists of 4 parts: the tibial component and the femoral component are cobalt chrome whereas the patella and spacer are polyethylene. Dr. Caldwell currently uses a mobile bearing prosthesis manufactured by DePuy. DePuy offers both a cemented and a non-cemented prosthesis. For more detailed information about the DePuy prosthesis, please refer to their web site at www.depuyorthopaedics.com. Several factors determine whether your knee replacement will be cemented or non-cemented. Factors that are more likely to require you to have a cemented prosthesis include, but are not limited to: patients over 55 years old; patients with other medical conditions such as diabetes, generalized osteoporosis, or Paget's disease; patients who use steroids such as prednisone; or patients with alignment deformities of the leg. The decision to cement or press fit your prosthesis will be made at the time of surgery by Dr. Caldwell.

Dr. Caldwell currently performs minimally invasive total knee replacements on all patients who are candidates. A minimally invasive knee replacement is generally

done through a smaller incision (4-5 inches) and spares more of the quadriceps muscle. You may not be a candidate for a minimally invasive knee replacement if you have a large deformity or are markedly overweight. Once the prosthesis is in place, the skin incision will be closed and a dressing applied to your knee. A knee immobilizer brace is placed over the dressing and you are transferred to the recovery room. Generally the surgery takes about 1-2 hours.

You will remain in the recovery room for 1-2 hours and then be transferred to the orthopedic floor located on 5 South. While you are in the hospital, you will have physical therapy 1-2 times each day and begin walking on your new knee the day after your surgery. You will begin using a CPM machine roughly 6-8 hours after your surgery. A CPM machine is a cradle that your leg rests in that slowly bends your knee to prevent scar tissue buildup. You will use the machine 2-3 times each day for a total of 6 hours daily.

After the 4th night of your hospitalization, you will either be allowed to go home or if you require additional care/assistance you will be transferred to a skilled nursing facility. The decision to go home or to go to a skilled nursing facility will be made while you are in the hospital based on how well you are progressing in physical therapy. If you go home, the discharge-planning nurse at the hospital will arrange for any medical equipment that you will need to be delivered to your home, for example, a front-wheeled walker, crutches, a bedside commode, and/or a shower chair. You will also be sent home with a CPM machine that you will continue to use 6 hours per day. You will have home physical therapy and possibly a home occupational therapist 2-3 times per week. If you go to a skilled nursing facility, you will generally stay anywhere from a few days to 2 weeks. The length of stay is determined by your progress in physical therapy. Instructions regarding showering, driving and medications will be given to you at the time of discharge from the hospital or the skilled nursing facility.

Dr. Caldwell would like to see you back in the office roughly 2 weeks following your surgery so he can evaluate your range of motion and check your incision site. Generally 2-3 weeks after surgery you will begin outpatient physical therapy at a facility of your choice. Dr. Caldwell will give you the prescription for therapy at your 2-week appointment. In addition, Dr. Caldwell would like to see you 6 weeks, 6 months and then yearly after surgery for a routine examination of your new knee. You may require additional appointments after surgery if Dr. Caldwell feels it is necessary.

As you can see, this is a major surgery and will require some work and time on your part for 3-6 months after surgery to recover successfully. Please consider this when planning the date of your surgery. Dr. Caldwell generally does not require you to donate blood prior to a total knee replacement because most patients do not lose enough blood during the surgery to warrant a blood transfusion after surgery. However, you must be aware that this is still major surgery and you could, under rare circumstances, need a blood transfusion after surgery. If this is the case, banked blood will need to be used. If you are strictly opposed to this for any reason, you must notify Dr. Caldwell prior to your surgery being scheduled.

Prior to your surgery Dr. Caldwell requires that you have the following:

1. An appointment with your primary care physician who must provide medical clearance for your surgery. Once your surgery date has been

scheduled, you should contact your primary care physician to arrange this appointment.

2. A pre-op appointment at the hospital. This appointment will be scheduled for you. If the time does not work for you, you will be able to reschedule it yourself.
3. An appointment with Dr. Caldwell roughly 1 week prior to surgery so he can answer any last minute questions you may have.
4. If you see any specialty physicians such as a cardiologist or a pulmonologist you may also need an appointment with them before surgery.

As stated earlier, total knee replacements have been performed for many years with very successful results. However, as with any surgery, there are risks associated with this procedure. Although the risks are rare they include, but are not limited to, the following: an area of decreased sensation or numbness near your incision site; persistent pain and or swelling in the knee; formation of a blood clot in your lower leg that can break off and travel to your heart, lungs or brain (i.e. deep vein thrombosis); a reaction to the anesthesia such as nausea/vomiting, stroke, heart attack or in very, very rare circumstances death.

We hope you enjoy your new knee. If we can be of any further assistance please feel free to contact our office at # 510-451-6266.