

What To Do With Your Medications Prior To Surgery

Continued from page 1

All blood thinners, such as Coumadin (warfarin), Plavix (clopidogrel) or equivalent medications, will be stopped before surgery. **There are no exceptions to this rule if you are having a joint surgery.** Some patients may be converted to injected blood thinner prior to surgery depending on their underlying diagnosis. This will be stopped at least 12 hours prior to surgery. After the surgery, all blood thinners will be resumed when cleared by your surgeon.

If you take nonsteroidal anti-inflammatory medications for any reason, please stop them at least 5 days prior to surgery. Unless you can not live without it, we also recommend you stop Celebrex prior to surgery as well. If you take baby aspirin for preventive treatment, this will need to be stopped 7 days prior to surgery. If you take aspirin for known heart disease, peripheral arterial disease, or stroke, we would like to continue with baby aspirin until the day of your surgery.

If you have rheumatologic disease and take immunosuppressive medications (such as methotrexate, Arava (leflunomide), Humira (adalimumab), etc), please discuss specific details with your doctor. Some medications, such as Arava will be continued up until surgery while some are stopped at least a week before surgery and not started until your wound is healed.

If you take birth control pills (BCP), these will need to be stopped at least 4 weeks prior to surgery since they increase the risk of thromboembolic disease (blood clot formation). Hormone replacement therapy will also need to be discontinued at least 4 weeks prior to surgery although the risk of thromboembolic disorder is less than that of BCP.

Many of the herbal medications can interact with medications given during the surgery. For simplicity, we recommend all herbal supplements be stopped at least 1 week prior to surgery.

I hope this information will be helpful as you prepare for your upcoming surgery. If you have any questions regarding your medications, please talk to your doctor.

Closed Manipulation Of The Knee Following Total Knee Replacement

by William Long M.D.



William Long M.D.

What is closed manipulation of the knee?

Closed manipulation is a procedure that is performed after total knee replacement for a patient who has difficulty bending the knee. The procedure is called closed 'because there is no surgical incision. Manipulation refers to the hands-on technique performed by the orthopaedic surgeon. In an operating room an anesthesiologist administers an intravenous sedative to make the patient sleep. While the patient sleeps the surgeon slowly bends the knee until the stiff tissues stretch and the knee achieves the desired amount of flexion. The procedure takes several minutes to complete. Before waking the patient a local anesthetic is injected into the knee.

Some patients go home on the same morning as the procedure. Other patients receive an epidural catheter to assure painless postoperative motion, but this requires that the patient stay in the hospital overnight. The decision to stay overnight is usually made by the physician and the patient but some medical insurance companies will not approve or pay for an overnight stay. Very little pain or discomfort is expected after closed manipulation with or without the epidural.

One advantage to insertion of the epidural catheter is that it helps some patients gain confidence. The patient can see improved flexion and control of knee motion without associated pain. If a patient previously experienced severe pain dur-

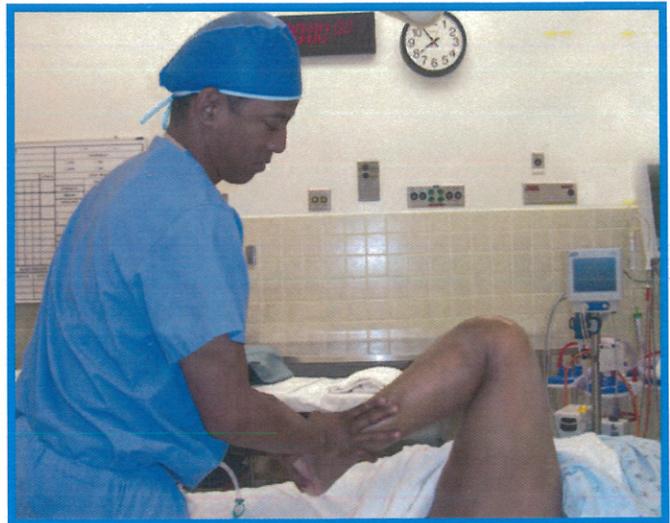
Continued on page 3

ing physical therapy they may become sensitized. The mere thought of maximally bending the knee might cause fear and anxiety as the patient anticipates painful motion. The epidural catheter facilitates immediate knee motion by eliminating pain and minimizing anxiety. Some patients have difficulty bending the knee but their stiffness is not associated with pain. These patients may not need an epidural catheter or an overnight stay. Little or no pain medication is needed after a closed manipulation. After the closed manipulation the patient should resume range of motion exercises with physical therapy within a few days.

When the surgeon recommends closed manipulation does that mean that something is wrong with the knee replacement operation?

Closed manipulation is recommended when the surgeon believes that there is no problem with operation. The implants should be the right size and they must be aligned properly and solidly attached to the bone. The procedure should not be done when lack of flexion is caused by a fracture, infection, loose implants, or parts that are the wrong size. The procedure is recommended when the surgeon believes that the soft tissues surrounding the knee became stiff because they did not bend enough during the first six weeks after the operation.

There is no absolute number of degrees of flexion that dictates when manipulation should be done. Traditionally surgeons followed a general guideline that recommends manipulation when the knee bends less than 90 degrees six weeks after the operation. Ultimately 110 degrees of flexion was considered the desirable amount of knee flexion. Today because of smaller incisions, better implant designs and improved postoperative pain control some surgeons are reconsidering these general rules. If a patient has 130 degrees of flexion with one knee replacement and only 100 degrees of flexion with the other should the stiff knee be manipulated? Should a knee be manipulated two months when the same range of motion can be achieved by two or three months of continued physical therapy? The correct answer depends on the individual patient, their desires and circumstances. One patient may decide that they want to avoid returning to the hospital and the operating room at all cost. Another patient with the same range of motion may not want to go through the time commitment and discomfort of a long course of therapy. Some individuals just



In an operating room while the patient sleeps Dr Long slowly bends the knee until the stiff tissues stretch and the knee achieves the desired amount of flexion.

want the doctor to decide for them.
Who fault is it that I got stiff ?

When a knee does not bend enough after total knee replacement then far too often a blame game begins. Sometimes the surgeon blames the physical therapists because it is their job to help the patient move the knee after surgery. The surgeon may believe that if the therapist pushes the knee hard enough it will bend. The physical therapist sometimes blames the patient. The therapist may believe that the patient is not trying hard enough or that they are simply a wimp with poor pain tolerance. If the patient would simply follow instructions the flexion will be achieved. Ultimately, the patient holds the surgeon responsible. It is the surgeon who must diagnose the problem that caused stiffness and solve the problem. The surgeon must decide if it is best to simply stay the course, adjust the pain medication and modify the therapy regiment, or recommend closed manipulation. The surgeon must also recognize when there is a serious problem that will not be solved without an operation.

What are the Risks Associated with Closed Manipulation?

The most common cause of failure is the return of stiffness. Most patients can expect to gain improved flexion immediately and by simply using the new range of motion and doing a few exercises they can maintain

Continued on page 4

Closed Manipulation

Continued on page 3

the range of flexion.

If the patient never bends the knee during the course of the day then the knee will lose the range of motion.

Fracture of the femur is a much more serious complication. Tearing of the tendons, ligaments or skin has been reported when too much force is applied. The longer the knee has been stiff and the weaker the bone then the higher the risk of a fracture. After more than 15 years of performing closed manipulation the author has not caused one of these complications, but it is certainly possible that this could happen one day. To avoid this complication the surgeon must be willing to stop pushing on the leg if too much force is required. The range of motion is not achieved and the only solution may involve an open operation, but the traumatic injury is avoided. The experience of the surgeon determines when to push harder and when to accept the range of motion that is achieved with reasonable force.

Summary

Closed knee manipulation is a procedure that can be very useful and effective in helping the patient achieve knee flexion rapidly and without severe pain. It is safe in most instances especially when performed by an experienced surgeon. The indications for closed manipulation are determined by the desired range of motion and the philosophy of the treating physician. The goals and expectations of the patient, the quality of bone and the length of time that the knee has been stiff must all be taken into consideration. Although there is no surgical incision, the decision to perform a closed knee manipulation should not be taken lightly. Understanding the complexities of this relatively simple technique is important because it gives the surgeon the best chance of making the correct recommendation.

X-Rays Are Important Tools For Making An Accurate Diagnosis

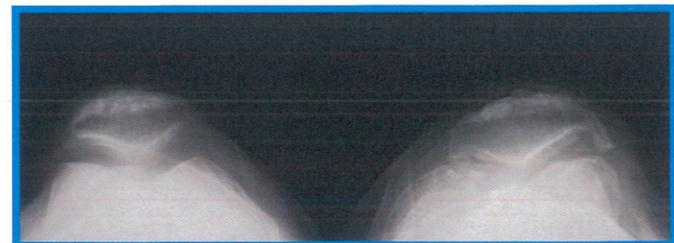
by Paul K. Gilbert M.D.

We at the Dorr Arthritis Institute are blessed by having patients who trust us enough to come from other facilities for our expertise. They often are seen first by other physicians and turn to us for a second opinion or further care.



Standing radiographs reveal the loss of bone cartilage and the subsequent reduction of the joint space (bone on bone).

They bring their X-rays with them to optimize our analysis of their particular needs. X-rays are extremely important to a comprehensive examination and consultation, especially in regard to knee issues. While many practitioners simply shoot two views--one from the front and one from the side--more extensive pictures are requisite to truly appreciate the extent of any existing disease. Standing X-rays shot from the front are essential; these give a basic understanding of the amount of cartilage left between the bones. It is also frequently beneficial to take a standing film with the knee bent 45 degrees, which provides further insight as to cartilage status at this position on the femur. Judicious X-ray evaluation is critical and indispensable for the proper diagnosis and planning of appropriate treatment intervention.



“Sunrise” view of Patella Femoral joint space