A femoral nerve block is given before some knee surgeries by a member of the anesthesia team - an anesthesiologist or CRNA (Certified Registered Nurse Anesthetist). The block is a way in which post-operative pain is managed after knee surgery. The femoral nerve provides feeling and motor function to the front of the thigh and knee. When the nerve is numbed by the block, you should have less pain and need less pain medicine after surgery.

How is the femoral nerve block done?
You may be given some medication to help you relax and become sleepy. Your anesthesiologist/CRNA will clean your groin with a bacteria-killing cleanser and will inject some local anesthetic (numbing medicine) into the skin. This will help make the procedure more comfortable.

A device called a nerve stimulator may be used and you may feel the muscles in your leg twitch - this is normal. An ultrasound machine may be used instead of a nerve stimulator. A cool gel is put on a probe and placed on your groin. This helps to show a picture of your femoral nerve on a computer screen. Your anesthesiologist/CRNA will then carefully insert a needle and inject local anesthesia to numb the femoral nerve.

Depending on the surgery you are having, a small flexible tube called a catheter may be inserted. This will allow for continuous injections of numbing medicine. The needle is removed and only the catheter remains.

Always tell your anesthesiologist/CRNA if you feel any sharp or shooting pain at any time during the procedure.

How long will the pain relief last?
The “single shot” femoral nerve block provides about 12 hours of pain relief after surgery. If a catheter is placed, pain medicine is given until the catheter is removed 1 to 2 days after your surgery.

Are there any side effects from the medications?
The two types of medications that are often used are narcotics and local anesthetics. Sometimes narcotics may cause some itching, nausea, or drowsiness.

Local anesthetics used in the block may cause some feelings of numbness or heaviness in your leg. Because of this, falling is a risk. You may have some trouble bearing weight on the blocked leg.

While the catheter is in place, you may be wearing a splint on your leg called a knee immobilizer. To avoid falling, you will need help with walking. The pain control does last longer than the temporary weakness.
What are the risks?
Like any other medical procedures, there are risks with nerve blocks. The site where the nerve block was given may be sore or tender for a few days.

Anytime a needle or catheter is inserted under the skin and near a blood vessel, bleeding, bruising, or infection may occur.

Tell your anesthesiologist/CRNA right away about any bruise that is getting larger in the puncture area.

How common is nerve injury?
Nerve injury is rare when nerve blocks are given. It can occur anywhere from 1 in 4000 blocks to 1 in 200,000 blocks depending on the type of block and other risk factors. It can result from direct needle injury of the nerve or from complications such as bleeding or infection. In order to prevent nerve injury:

- Tell your anesthesiologist/CRNA if you feel any sharp or shooting pain during needle placement or injection.
- Call your doctor if you have any new symptoms such as tingling, numbness, or weakness after a nerve block has already worn off. These symptoms can be a sign of nerve damage from bruising or infection.
- Because recovery of nerve function depends on timely treatment, do not take the symptoms lightly and be sure to call your doctor.

Can a femoral nerve block catheter become infected?
Every time a needle or catheter is inserted into your body, there is the risk of infection. Bacteria can enter the body through the puncture or along the catheter site.

The risk of infection increases over time but the chance of a serious infection leading to an abscess needing surgical treatment or damage to the nerve from the infection is very rare. Tell your doctor if you have:

- Redness, swelling or pus at the puncture site
- Fevers or chills

Talk to your doctor about any questions or concerns.