Informed Consent for Regional Anaesthesia:
Lower Limb (leg) Nerve Blocks

What is a leg nerve block and why do I need it?

Lower limb (hip, knee, ankle or foot) surgery can be very painful. Lower limb nerve blocks provide good pain relief and results in a more pleasant recovery. Less pain ensures more comfort post-operatively and allows for early and effective physiotherapy, mobilization and discharge.

Specific targeted nerves are temporarily numbed by injecting local anaesthetic drugs close to the nerve or group of nerves supplying sensation (feeling) to a specific part of your leg or foot. Leg nerve blocks are done using special techniques, equipment (ultrasound or nerve stimulator) and needles (blunt nerve block needles) to ensure the best results and to minimize complications. All nerve blocks are done using an aseptic technique in theatre and usually while you're under general anaesthesia. Your anaesthesiologist will consider all relevant factors and the surgery planned before suggesting a specific nerve block or blocks.

Pericapsular nerve group (PENG) block:

This block is used to reduce pain after hip surgery. It involves the injection of local anaesthetic in the plane between the psoas muscle and superior pubic ramus (injection site is just above your groin crease). The block lasts between 6-24 hours with minimal muscle weakness helping with early mobilization.

Traditional femoral nerve block:

This block is for painful surgery below the hip and provides pain relief for femur nails, knee replacements, knee ligament reconstructions or any foot surgery. The femoral nerve is blocked in the groin area. Blocking the femoral nerve high in the groin results in numbing of the thigh, knee and foot. There is associated thigh muscle weakness with the numbing for the duration of the block, usually lasts 6-24 hours.

Pain relief from a femoral nerve block is very effective but often does not result in complete/absolute pain relief. Additional pain medication will always be prescribed. The temporary muscle weakness that accompanies this nerve block causes some difficulty with early mobilization and physiotherapy.

Adductor canal femoral nerve block:

This block is done specifically for knee replacements and knee ligament reconstructions. After leaving the groin the femoral nerve runs with the major blood vessels of your leg in a canal (the adductor canal) down to the knee. The nerve can be visualized with a sonar in the canal in the mid thigh region. A bolus of local anaesthetic drugs is injected into the canal, blocking up to 80% of knee pain for 6-24 hours. This block is done lower down in the thigh and as a result it does not cause weakness of the larger thigh muscles, allowing early and almost pain free mobilization and physiotherapy.

In special cases, instead of a once off bolus block, a small indwelling catheter can be placed inside the adductor canal to allow prolonged infusion of local anaesthetic drugs for continuous pain control for up to 3 days post-operatively.

Bolus only blocks are done with a smaller needle with less risk for infection, and damage to nerves or blood vessels. The continuous catheter block is done with a bigger needle and presents more potential risk for damage to nerves and blood vessels. The risk for infection is also potentially more, despite an aseptic placement technique and sterile dressing of the catheter. This is because the catheter stays in the canal whilst being connected to a constant infusion of local anaesthetic drugs.

Popliteal and ankle nerve blocks:

These nerve blocks are specifically for surgery below the knee. The popliteal block is done by injecting local anaesthetic drugs just above the knee. The majority of your lower leg, foot and toes will be numbed for 6-24 hours. The popliteal block is not a complete pain block and often requires the addition of an ankle or adductor canal block to ensure complete pain relief for painful foot surgery.
Ankle blocks are done by injecting local anaesthetic drugs at multiple sites around the ankle. Ankle nerve blocks alone often provides sufficient pain relieve for forefoot, toe and bunion surgery.

Who should not get a nerve block?

1. Patients who do not want to have a block.
2. Patients with pre-existing nerve damage to the leg or foot.
3. Patients who are allergic to local anaesthetic drugs.
4. Patients on anticoagulant medication. (Warfarin, Pradaxa, Xarelto, Plavix).

Potential complications:

Less Serious (common 1:10 to 1:100 people)
1. Pain during injection. (if awake during the block)
2. Bleeding, bruising, swelling or infection at the injection site.
3. Partial or incomplete blocks. (Additional analgesia will always be provided)

More serious (uncommon 1:1 000 people)
1. Prolonged block (days to months), with temporary numbness/weakness/paralysis or pins and needles.

Very Serious (extremely rare 1:10 000 to 1:100 000 people)
1. Absorption/injection of the local anaesthetics drugs into a blood vessel with a systemic toxic/allergic reaction.
2. Permanent damage to the nerve with numbness/weakness/paralysis.

Nerve blocks are available and commonly utilized to help with pain management. You are free to accept or decline it. Additional fees are charged for blocks and medical aid contributions differ and may not cover all costs. The lists of complications are not complete. You should ask questions and make an informed decision. Serious complications are rare. For many orthopaedic operations nerve blocks are part of the surgeon's protocols/recommendations and are routinely offered to patients.

I _____ confirm that I have read and understood the information provided above. I confirm that I understand the risks of possible complications inherent to nerve blocks. I have been given the opportunity to discuss my concerns with the anaesthesiologist. I declare that I am of sound mind and not under duress at the time of signing this consent. I hereby give permission to a nerve block on myself/my dependent, knowing that incident free nerve blocks cannot be guaranteed.

Signed _____   Date _____
        (Patient/parent or guardian)