A controlled comparison of three anaesthetic techniques for the total knee replacement surgery

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Status	RECRUITING
Sponsor	International Musculoskeletal Research Institute
Enrollment	45 participants

Plain Language Summary

This study compares three types of pain control used during and after total knee replacement surgery. Having a knee replaced is a major surgery, and managing pain well afterwards helps patients recover faster. The three methods being compared are: (1) locally administered anaesthesia injected around the knee joint, (2) spinal anaesthesia (an injection in the back to numb the lower body), and (3) a femoral nerve block (numbing the main nerve in the thigh). Researchers will compare how much pain medication each group needs after surgery.

You may be eligible if:
- You are between 40 and 75 years old
- You are having a planned (elective) primary total knee replacement for the first time
- You have a BMI (body mass index) below 40
- You are able to walk independently before the surgery
- You are male or female

You may NOT be eligible if:
- You have neuropathic pain or already take strong opioid pain medications (more than 30mg morphine/day or equivalent)
- You have a mental illness, intellectual disability, or active drug or alcohol problem
- You have a nerve or movement disorder in the leg being operated on, or a history of stroke
- You have a condition that makes spinal anaesthesia or a nerve block unsafe or unsuitable
- You are on immunosuppressive medications or taking high-dose steroids
- You are allergic to anti-inflammatory medications (NSAIDs)

Talk to your doctor about whether this trial might be right for you.

Key Eligibility Criteria

Inclusion (6)

- Elective primary unilateral total knee arthroplasty
- Age 40-75 years
- BMI <40
- Ability to self-mobilize
- Patient understands the conditions of the study and are willing and able to give written informed consent to participate in the study including prescribed follow-ups

... and 1 more (see full listing online)

Exclusion (8)

- Previous involvement in this study
- Neuropathic pain or opioid tolerance (defined as use of >30mg oral morphine/day or equivalent – fentanyl patch 12mcg/hr., buprenorphine patch 20mcg/hr., oral oxycodone >20mg/day)

• Patient has an emotional or neurological condition that would pre-empt their willingness to participate in the study including mental illness, intellectual disability, and drug or alcohol abuse.

• Sensory and/or motor disorders in the operated limb, history of stroke of major neurological deficit.

• Contraindication to spinal anaesthesia (coagulopathy, sepsis, local infection, patient refusal, spinal defects, previous laminectomy)

... and 3 more (see full listing online)

Locations (1 total)

SA, Australia