

A new technique to improve pain management after hip replacement



MEDICAL TITLE: ERECTOR SPINAE BLOCK FOR TOTAL HIP REPLACEMENT

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AIM OF THIS STUDY

To assess a new technique to reduce pain after hip replacement surgery

SUMMARY

An injection of local anaesthetic or saline in your lower back just prior to your hip operation

BACKGROUND

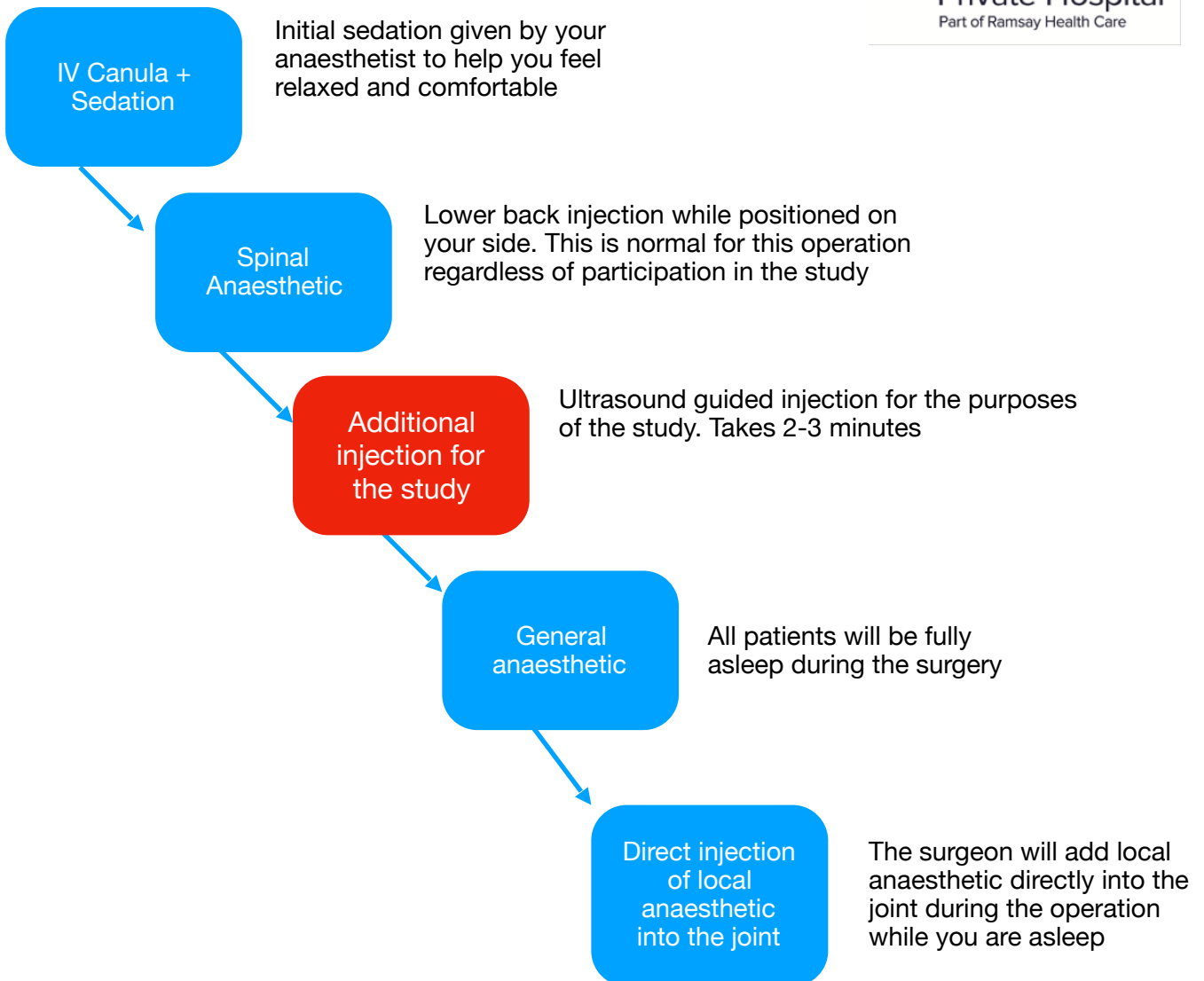
Currently a majority of patients recover well after hip replacement surgery with well controlled pain. However a small percentage of patients experience more significant pain particularly in the first 24 hours. Current methods to reduce pain after surgery include an initial preoperative injection of local anaesthetic in the lower back called a spinal anaesthetic. This renders both legs numb for 2-3 hours and allows patients to wake up pain free. The surgeon also injects local anaesthetic directly into the joint during the operation while you are asleep which helps to reduce pain once the spinal anaesthetic has worn off. These injections are combined with pain tablets. Simple pain medication such as paracetamol and anti-inflammatories are combined with stronger pain tablets such as pregabalin (eg LYRICA) and tapentadol (PALEXIA). These are given at regular intervals. In addition to this quick onset strong pain tablets can be requested and are available every 2 hours for any additional pain.

Despite these techniques some patients may still experience severe pain. While this can be managed reasonably well with additional strong pain tablets, patients are then more likely to experience side effects and there may be a period of time before pain can be adequately suppressed. Ideally prevention of the onset of severe pain is preferable.

Additional 'nerve block' techniques have been used to prevent severe pain. A 'nerve block' is the placement of local anaesthetic by injection close to relevant nerves so that pain signals can be reduced. Examples of these include femoral nerve blocks' and 'lumbar plexus blocks'. While these nerve blocks may reduce pain they may cause transient weakness of the thigh muscles (12-24h) which can delay mobilisation and can increase the risk of falls. Lumbar plexus blocks can also be more technically challenging. Hence these nerve blocks are not routine.

A newer technique involves injecting local anaesthetic in the lower back to the side of the operative hip adjacent to the lumbar vertebra (close to the spinal column) below a muscle. This is technically easier and may be less likely to cause muscle weakness and yet can be effective in reducing pain signals from the hip for up to 12 hours. The technical term is called an ERECTOR SPINAE BLOCK named after the muscle below which the local anaesthetic is injected.

You will receive either local anaesthetic which may reduce pain or saline (salty water) which will have no effect on your pain. In either scenario all efforts will be made to keep you comfortable with the usual pain tablet medication as described above.

ANAESTHETIC SUMMARY**SIDE EFFECTS AND RISKS**

Side effects from the injection may include some local discomfort at the site of the injection which should be transient and mild in nature. The risks of the injection may include bleeding at the site of the injection or in deeper tissues. Infection risks are rare but possible. The side effects from local anaesthetic may include transient weakness of the hip or thigh muscles. This is not uncommon and will be formally assessed in every patient as a routine prior to attempts to stand or walk after your operation. If muscle weakness was present it would be expected to resolve over a 12-24 hour period. Altered sensation to the operative leg is anticipated over the thigh and may extend to your lower leg. This will be experienced as painless tingling or numbness and will typically last no longer than 24 hours. If you experience more persistent tingling or altered sensation the surgeon will review you as nerve stretch is possible due to surgical factors and this may take longer to resolve. You will be assessed on a daily basis for these potential side effects.

YOUR PARTICIPATION

You will be asked to complete a simple questionnaire. This will include reporting your pain scores at 6 and 24 hours after your operation and a short 5 minute questionnaire on your overall quality of recovery at 24h. Your participation is entirely voluntary. By participating you will be helping us to provide better information to Anaesthetists with which to advise patients like you, potentially improving the care we can provide. Should you change your mind and choose to withdraw from the study you can do so at any time and for any reason without compromise to your care.

**CONFIDENTIALITY**

Your identifying information will not be recorded or reported in the study data. Any published data will not include reference to you individually. If you choose to withdraw from the study at any time, any data collected up to the point of withdrawal will be retained for analysis unless you request that it is not analysed in which case it will be deleted.

MEDICAL CARE

Your care will not be affected by participation in this study. Should you experience an adverse event at any time you will receive appropriate medical care irrespective of involvement in the study. Should you decide not to be involved in the study your care will not be altered. Your rights at Australian law do not change upon signing the consent form for this study.

MEDICAL CARE

If you require further information or if you have any problems concerning this project please contact the principal researcher:

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The Hollywood Private Hospital Research Ethics Committee has given approval for this study. If you have any concerns about this study please do not hesitate to contact Dr Terry Bayliss, Chairperson, Research Ethics Committee, Hollywood Private Hospital, Monash Avenue, NEDLANDS, WA 6009. Tel 08 9346 6345



**HOLLYWOOD PRIVATE
PATIENT CONSENT FORM**

HOSPITAL

TITLE: ERECTOR SPINAE BLOCK FOR TOTAL HIP ARTHROPLASTY

A new technique to improve pain management after hip replacement

INVESTIGATORS: Mark J Lennon, Riaz Khan, Dan Fick, Sinead O’Leary, Catherine Ashford

To be completed by the Participant of the study:

- 1. Have you received enough information about this study? Yes No
- 2. Have you had an opportunity to ask questions and discuss this study? Yes No
- 3. Have you received satisfactory answers to all your questions? Yes No
- 4. Which Doctor (or other researcher) has spoken to you about this study? _____
- 5. Do you understand that you are free to withdraw from this study at any time without giving a reason and without affecting your current or future medical care? Yes No
- 6. Do you agree to take part in this study? Yes No

Participant’s Name

Participant’s Signature

Date

Person Obtaining Consent

Signature

Date