

Brachial Plexus Nerve Block for Pain Control under Imaging Guidance

Information for patients

Introduction

- Brachial plexus nerve block is used for localized pain relief in surgery of the upper limb. It can also be used for post-operative pain relief.
- A team consisting of radiologist with special training in Interventional Radiology and anesthetist will perform the procedure.
- The procedure is usually done in the Department of Radiology under ultrasound guidance for precise localization of the nerves.

Procedure

- Site of needle puncture is around the lower neck (above the clavicle—the collar bone).
- Under aseptic technique, the nerves supplying the upper limb (brachial plexus) are identified by ultrasound. A small catheter for brachial plexus anesthesia will be placed under ultrasound guidance after local anesthesia is given.
- The position of catheter will be confirmed by X-Ray or Computerized Tomography (CT) after injection of contrast medium.
- Anaesthetic drugs will be injected through the catheter, the success of neural blockade is judged clinically.
- It takes approximately 30 minutes for a single procedure.
- You must take care not to dislodge the catheter for continuous infusion of pain-relieving drugs.
- Anesthetist will regularly assess the pain control and drug infusion.
- The catheter will be removed when pain control is no longer required and the small skin puncture wound should heal uneventfully.

Potential Complications

- No major complications.
- General anesthesia may be required for supplementation if blockade was incomplete for surgical anesthesia (5 to 40%).
- The overall adverse reactions related to iodine-base non-ionic contrast medium is below 0.7%. The mortality due to reaction to non-ionic contrast medium is below 1 in 250000.

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Prepared in 2010. Version 2.0