What is an axillary nerve block?

An axillary nerve block is a type of local anaesthetic procedure used predominantly for hand, wrist and forearm surgery. It is sometimes referred to as a brachial plexus block. The brachial plexus describes a bundle of nerves that supply the shoulder, arm and hand with feeling, strength and power.

These nerves travel from the neck, through the armpit, down the arm, and end in the hand. An axillary nerve block involves numbing these nerves with local anaesthetic as they travel through the armpit or the top of your chest. This causes the arm to lose feeling and power for a period of time. Your anaesthetist will meet with you beforehand to discuss your anaesthetic including the risks, benefits, your preferences and if an axillary block is suitable for you.

What can I expect to happen during the procedure?

You will be brought into a room where the axillary nerve block will be performed. This is separate area from where your operation will be performed. You will be asked to lie down on a bed. The team looking after you will ensure that you are comfortable and in the correct position.

You will have been asked to stop eating and drinking as if you were having a general anaesthetic and this will be checked with you.

Your anaesthetist will attach to you some equipment that monitors your heart rate, blood pressure and oxygen levels. Firstly, a small cannula (thin plastic tube) will need to be placed in the hand or arm that is not being operated on. The axillary nerve block can be performed either awake or with some sedation. Your arm will be positioned on a table so that your anaesthetist can access your armpit. The skin will be cleaned and a small injection of local anaesthetic is given to the skin. A needle is used to inject local anaesthetic around the nerves. Your anaesthetist will then put a clear jelly like substance on your armpit and use an ultrasound machine to place the needle correctly.

Occasionally, your anaesthetist may use a small electric current which runs through the needle to help find the nerves. This might cause your arm to twitch, but should not cause any pain. If you are in discomfort at any stage, please let your anaesthetist know.

Why does the whole arm need to be numb?

It may seem strange that the whole arm needs to be numbed for an operation on your wrist or hand. However, at the beginning of your operation a very tight band, called a tourniquet, is put around the top of your arm. This would be uncomfortable for you if the top of the arm was not numb.

How long does it take for the local anaesthetic to work?

Once the local anaesthetic has been injected around the nerves in your armpit, your arm will start to feel warm and fizzy. Over the next 15 to 30 minutes the arm will become numb, heavy and difficult to control. You will stay in the anaesthetic block room during this period, and then be taken round to the theatre where you are having your operation. You will still be able to feel movement and touch, but should not experience any pain. A member of the theatre team will be with you at all times should you require any assistance.

How long does the local anaesthetic take to wear off?

The numb heavy feeling in the arm will last for between four and 24 hours. Usually it is 10-12 hours. Your arm or hand will need to be protected until the strength and feeling has returned to normal.

You may have your arm put in a sling. You will be advised what painkillers to take and when to do so as the local anaesthetic effects wear off.

Are there risks associated with the axillary nerve block?

This is a very commonly performed routine procedure, with the highest regard for your safety. All medical interventions carry some risk.

There is a small risk of bleeding, infection, direct nerve damage or reaction to the local anaesthetic itself. Your anaesthetist will be able to go through these with you in more detail.

Occasionally, the local anaesthetic does not spread to all the nerves as effectively, and some supplemental pain relief may need to be given. Please be reassured that if your block does not work well enough, your anaesthetist will provide another form of anaesthetic or pain relief.

You can find more information from the Royal College of Anaesthetists website www.rcoa.ac.uk in the information for patients section, leaflets:

- Nerve damage associated with peripheral nerve blockade http://www.rcoa.ac.uk/document-store/nerve-damage-associated-peripheral-nerve-block

- You and your anaesthetic http://www.rcoa.ac.uk/document-store/you-and-your-anaesthetic

If you have any further questions or would like something explained in more detail please speak to your anaesthetist on the day of your procedure.

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