

# Anaesthesia Information

## Local Anaesthesia

### Introduction

The purpose of local anaesthesia is for pain reduction during the operation without affecting the consciousness. There are several types of local anaesthesia:

1. Topical Anaesthesia
2. Infiltration Anaesthesia
3. Nerve Blocks
4. Intravenous Regional Anaesthesia

#### **1. Topical**

It means a superficial loss of sensation in the mucous membranes or the skin which is produced by direct application of a local anesthetic on the surgical site. Local anaesthetics exist in many forms such as gels, sprays, creams, eye drop, ointments or patches.

#### **2. Infiltration Anaesthesia**

It is done by injection of the anaesthetic solution onto the surgical site through a small needle to infiltrate into the area. It is usually used in painful procedures such as skin surgery, wound repair, lumbar puncture etc.

#### **3. Nerve Blocks**

It is a kind of conduction anaesthesia in which a local anaesthetic is injected onto the peripheral nerves to inhibit nerve transmission. It can be applied on minor or major nerves for which the transmission of pain sensation can be blocked, e.g. ring blocks (to provide anaesthesia of the whole finger) or femoral nerve block.

#### **4. Intravenous Regional Anaesthesia**

It is to provide anaesthesia for the distal arm or leg. A cannula is inserted in a distal vein of the limb and a pressure cuff is applied to the top of the limb, e.g. the arm or thigh. The patient's blood pressure should be measured with cuff pressure set at 50 mmHg at least above this level. The anaesthetic is then injected into the cannula which may lead to mottled skin.

### Outcomes

Local anaesthetics provide a reversible regional loss of sensation. Local anaesthetics reduce pain, thereby facilitating surgical procedures.

### Possible Risks and Complications

1. Pain
2. Hematoma
3. Infection
4. Damage to the nerve
5. Allergic reaction to drugs (Major reactions occur in less than 0.01%)

6. Local Anaesthetic Toxicity:

- Systemic effects of heart and respiration depression
- Death

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations and other type of anaesthesia may be required.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

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Our Hospital reserves the RIGHT to amend any information in this leaflet without prior notification