

Title: Local Anesthesia for Minor Procedures

Author: Mike Felten MS3

Date: January 9, 2008

Key words: Anesthesia, epinephrine, digit

Abstract: Local anesthesia is commonly used for minor procedures involving the fingers and toes. Adding epinephrine to local anesthesia gives quicker anesthesia onset, fewer injections needed to reach anesthesia, better pain control, prolonged anesthesia duration and less bleeding.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

## What is a local anesthetic?

A local anesthetic is a medicine used to numb a small portion of your body to help relieve pain. It works by blocking the signals from nerves that travel to your brain. There are several types of local anesthetics which include injectable, topical, dental and ophthalmologic anesthetics.

### For more information

#### Websites

<http://www.emedicine.com/ent/topic20.htm>

<http://www.mayoclinic.com/health/anesthesia/SC00026>

## Local Anesthesia for Minor Procedures

## Which anesthesia will my doctor use?

The most commonly used anesthetic for a minor procedure is an injectable anesthetic. Your doctor will use a thin needle to inject a small amount of medicine near the area that needs to be numbed. Many patients will feel an initial sting from the medicine, but this goes away within seconds as the anesthesia starts to work. After waiting several minutes, your doctor will check to see if the area is without sensation. Sometimes you need more than one injection to get complete numbness. Most patients will then be pain free for their procedure.

#### Literature

Andrades, Patricio R. M.D. et al. Digital blocks with or without epinephrine. *Plastic and Reconstructive Surgery*. 2003 Apr 15;111(5):1769-70.

Waterbrook AL, et al. Is epinephrine harmful when used with anesthetics for digital nerve blocks? *Ann of Emergency Med*. 2007 Oct;50(4):472-5.

Do you have a deep cut that needs to be sutured?  
An abscess to be drained?  
Do you need a skin biopsy?

All of these procedures can be made more comfortable with the help from a local anesthetic.

### Or contact your physician

Mike Felten MS3  
University of Minnesota  
Medical School

## When will I get numbed up?

For any procedure where the skin is not damaged or painful, it should be cleaned first. This can be done with an alcohol pad, or a special soap that helps kill bacteria. After it is clean, the doctor will inject the area to make it numb. Once the area is sufficiently anesthetized, the rest of the procedure can be performed.

## My cut hurts. Will they still clean it first?

A deep cut, or laceration, should be numbed *before* it is cleaned. This helps relieve the pain that would be caused by cleaning and washing the laceration. It will then be closed with a suture if necessary.

## Is there any way to make the anesthesia work faster and last longer?

Commonly, a drug called epinephrine is added to the local anesthetic to help it work better. Epinephrine works by constricting blood vessels, which helps keep the anesthetic from being washed away. This reduces the amount of anesthetic and injections needed to make you numb. It also helps the medicine to work faster, keep the area anesthetized for longer and reduce the amount of bleeding.

## Is epinephrine safe?

Yes! Epinephrine is used commonly for local anesthesia injections. By keeping the anesthesia from washing away, it reduces the amount of side effects from the injected anesthetic.

Many physicians are trained with the wrong belief that it is bad to use epinephrine on small parts of the body (fingers, toes, ears, and nose). Inaccurate historical reports blamed epinephrine for damaging tissues because of low blood flow. However, there have been several recent studies that have found epinephrine to be safe to use in these locations despite these long held views. Epinephrine gives the same benefits as when it is used on any other part of the body.

## So should I ask for epinephrine?

Yes! Mixing epinephrine with a local anesthetic will help control your pain faster, better and longer. It also helps control bleeding, regardless of where it is used. So the next time you need to have local anesthetic, ask your doctor if they can use epinephrine to help keep you more comfortable.

### The benefits of mixing epinephrine with a local anesthetic are:

- **Faster pain control**
- **Better pain control**
- **Longer pain control**
- **Less bleeding**