**Service Priorities and Programmes**

**Electronic Presentations**

**Convention ID:** 90
**Submitting author:** Mr TL YAU
**Post title:** Registered Nurse, Yan Chai Hospital, KWC

# Effectiveness of warming Lignocaine on reducing of infiltration pain for digital nerve block: a randomized control trial

*Yau TL(1), Wong HY(1), Chan LM(2), Chuk LK(2), Fan YH(2)*
*(1)Accdient and Emergency Department, Yan Chai Hospital, (2) Accident and Emergency Department, Prince of Wales Hospital*

**Keywords:**
local anesthetic
Ligocaine
infiltration pain
digital nerve block

## Introduction

In the emergency department, digital block is a common anesthetic method that use before surgical procedures on patients'finger. However, digital block injection itself causes pain, which may become the most unpleasant experience for a patient throughout the procedure. Some though that the infiltration pain might be significant but the benefits of buffering and warming did not justify the effort. The reported used in other interdisciplinary surveys is slow, tied to perceptions of time and financial cost. However, if an economic and easy method did exist in reducing the pain, our patients should not be sacrificed.

## Objectives

In order to reduce patient's discomfort during administration of local anesthetics, various techniques have been employed. Warming anesthetic solution is one of the popularly studied method but conflicting conclusions have been drawn, Moreover, there has been no published study to examine the efficacy of this technique in the Chinese population. we have, therefore, designed our own double blinded randomized control trial to assess the potential benefit of warming local anesthetics in reduction of infiltration pain during digitak block injection in the Chinese population.

## Methodology

This study was performed in two acute hospital emergency departments, Prince of Wales Hospital (PWH) and Yan Chai Hospital (YCH), and was approved by the hospital ethics committee. Convenience sampling method was used to recruit study participants. The recruitment period started from January 2012 and ended in May, 2012. Eligible participants were all Chinese adults aged 18 or more who required digital nerve block on fingers for simple procedures in the emergency department.

## Result

The mean pain score (mm) was 41 in warm ligocaine group and 39 in room temperature group. Comparing group means by using one simple t-test, it showed

there was no significant difference of pain score between two intervention groups.