Wound infiltration is as effective as ultrasound-guided ilioinguinal nerve block in adult inguinal hernia repair – a randomised controlled trial
Yeung C (1), Kwok M (2), Yuen CH (3), Cheng HK (1)
(1) Department of Anaesthesia & Operating Theatre Services, Tseung Kwan O Hospital, (2) Ambulatory Surgery Centre, Tseung Kwan O Hospital, (3) Department of Surgery, Tseung Kwan O Hospital

Keywords:
inguinal hernia
post-operative analgesia
wound infiltration
ultrasound-guided ilioinguinal nerve block

Introduction
Ambulatory care is a more cost-effective healthcare model than traditional overnight admission for non-complex operations. Effective time management of the operating theatre (OT) helps in the efficient running of the OT and shortening public hospital surgery waiting list. Inguinal hernia repair is a common operation. One of the main obstacles to same day discharge is inadequate pain relief.

Objectives
To determine whether ultrasound-guided nerve block provides superior post-op pain relief compared to wound infiltration with local anaesthetic (LA).

Methodology
In this randomised controlled trial, forty patients were randomised into two groups. One group received an ultrasound-guided ilioinguinal nerve block with LA plus a placebo wound infiltration with normal saline (Group B). The other group received a wound infiltration with LA plus a placebo ultrasound-guided nerve block with normal saline (Group I). Patient-controlled analgesia (PCA) with morphine was prescribed for all patients overnight. Morphine consumption and post-op pain scores were compared. Extra time required for performance of ultrasound-guided nerve block was recorded. Student t-test was used for analysis of continuous data.

Result
The visual analogue scale (VAS) pain score in recovery at rest were 34 and 37 for Group B and Group I respectively (p=0.646). The VAS in recovery with coughing were 48 and 49 for Group B and Group I respectively (p=0.877). Morphine consumption were 19.6 mg and 20.4 mg for Group B and Group I respectively (p=0.888). The incidence of post-op nausea and vomiting was identical between the two groups (30%). The mean time taken to perform the block was 7.85 mins (range 4.0 to 18.3 mins).