CHAPTER 6

CONCLUSION

This is the double-blind randomized controlled trial which demonstrated the equivalent effectiveness of 0.15% ropivacaine alone and 0.0625% bupivacaine plus fentanyl 3 μg/ml for postoperative patient-controlled epidural analgesia after total knee replacement procedure. In addition to that, ropivacaine alone showed a significant decrease in pruritus and sedative side effects when compared with bupivacaine plus fentanyl. Although pruritus and sedative side effects found in this study was not the serious adverse effects, it might be the most complaint opioid-related side effect that make many clinicians feel reluctant to use spinal opioids. Motor blockade was not the problem with ropivacaine in this study as assessed by Bromage's scale, even though epidural catheter was inserted at lumbar region. Patients were able to ambulate by themselves with little support that benefits the patients and the care team. Other side effects were not different but more patients rated pain treatment with bupivacaine and fentanyl better quality than ropivacaine. Our experience with this kind of postoperative pain, adding non-steroidal inflammatory drugs (NSAIDS) may make the quality of pain much better and reduce the consumption of epidural analgesic solution. The other interest is the economic evaluation compared these two regimens, since ropivacaine is much more expensive than bupivacaine, the benefit of the avoidance of opioid-related side effects should be weighted with the additional cost. In conclusion, PCEA with 0.15% ropivacaine alone

will be an alternative of postoperative pain treatment after total knee replacement surgery when opioid-related side effects are a great concern.