The Analgesic Effect of Ultrasound-Guided Bilateral Quadratus Lumborum Block (lateral Approach) Versus Bilateral Transversus Abdominis Plane Block with General Anesthesia in Laparoscopic abdominal surgery (Randomized Controlled Clinical Trial)

BY

Mohammed Abd El-aleem Abbas Sayed

А

THESIS

Submitted in Partial fulfillment

Of

The requirements for the degree of

Master of Science

In

Anesthesia

Department Of Anesthesiology

Faculty of medicine

Fayoum University

2020

The Analgesic Effect of ultrasound-guided Bilateral Quadratus Lumborum Block (lateral Approach) versus Bilateral Transversus Abdominis Plane Block with general anesthesia in Laparoscopic abdominal surgery (Randomized Controlled Clinical Trial)

By

Mohammed Abd El-aleem Abbas Sayed

(M.B.B.Ch)

Supervised By

Dr. Maged Labeb Boules

Ass. Prof of Anesthesiology Faculty of medicine, Fayoum University

Dr. Mohammed Ahmed Shawky Mohammed

Lecturer of Anesthesia Faculty of medicine, Fayoum University

Dr. Omar Sayed Farghaly

Lecturer of Anesthesia Faculty of medicine, Fayoum University

Faculty of Medicine Fayoum University 2020



Background: The transversus abdominis plane (TAP) block is an already established technique and is considered now as an efficient part of the multimodal pain management approach for abdominal surgical procedures. The quadratus lumborum block (QLB) is a recently described regional block that was first described by Blanco et al , which has been reported to provide an effective analgesia for upper and lower abdominal surgeries. The aim of this study is to compare the analgesic efficacy of TAP block and QLB 1 after laparoscopic abdominal surgery regarding opioid consumption, duration of analgesia and visual analog score.

Methods: This prospective randomized controlled observer-blinded study compared between the analgesic efficacy between TAP block (n=25) versus QL block (n=25) in patients aged (18-60) years of American society of anesthesiologists physical status class I & II scheduled for elective laparoscopic abdominal surgical procedures. The primary outcome was the cumulative morphine consumption at first 24 hours postoperatively. Secondary outcomes included VAS scores, first analgesic requirements and any postoperative complications.

Results: There was statistically significant difference with p-value <0.05 among the study groups as regards cumulative morphine consumption in the first 24 h postoperatively, time of first analgesic requirements and VAS score after 2, 4, 6,12 and 24 hours postoperatively with the highest mean in group (TAPB), and the lowest mean in group (QLB).

Conclusion: In this study we found that QLB 1 needs less morphine consumption in the first 24 hours postoperatively and more prolonged and effective analgesia.