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بالرسالة صفحات
لم ترد بالأصل

Postoperative Pain Management Following Transurethral Resection of the Prostate: A Comparative Study between Epidural Bupivacaine, Tramadol and Their Combination

Thesis submitted for partial fulfillment of the M.D degree in Anesthesiology

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2010

Acknowledgement

*All praise be to **Allah**, Lord of the worlds, The Most Gracious, Most Merciful*

I would like to express my deepest gratitude to **Prof.Dr.Yahia Abdel-Rahim Hamimy**, Professor and former Head of Anesthesiology Department, Faculty of Medicine, Ain Shams University, who has honoured me deeply by his kind supervision, guidance and great support.

I also wish to express my sincere thanks to **Prof.Dr.Seif El-Islam Abd El-Aziz Shaheen,** Professor of Anesthesiology and Intensive Care, Faculty of Medicine, Ain Shams University, for his assistance and his great directions throughout the work.

I would also like to express my sincere gratitude to **Dr.Emad El-Din Mansour Abd El-Aziz,** Assisstant Professor of Anesthesiology and Intensive Care, Faculty of Medicine, Ain Shams University, for his expertise, much appreciated effort and valuable advice in every step I took.

I would also like to express my sincere regards to **Dr.Ashraf El-Sayed El-Agamy,** Lecturer of Anesthesiology and Intensive Care, Faculty of Medicine, Ain Shams University, for his guidance, assistance and useful advice throughout the work.

I am deeply and sincerely indebted to everyone else who has offered me help in any way to accomplish this work for their kind support and benevolence.

Finally, I would like to say a special thank you to my dear family for their support and assistance.

Doaa Mohammed

Contents

List of Figures

List of Tables

Introduction

Major surgery induces profound changes in the perioperative period. Postoperative pain may be a potent cause of adverse effects in many organ systems. The improved postoperative analgesia provided by epidural analgesia has shown many benefits including earlier mobilization, resumption of oral nutrition, earlier discharge from hospital and improved patient activity ***(Wheatley et. al., 2001).***

Postoperative pain relief has two practical aims. The first is provision of subjective comfort which is desirable for humanitarian reasons. The second is inhibition of trauma-induced nociceptive impulses to blunt autonomic and somatic reflex responses to pain and to enhance subsequent restoration of function by allowing the patient to breathe, cough and move easily. Because these effects reduce pulmonary, cardiovascular, thromboembolic and other complications, they may lead to improved patient outcome ***(Moizo et. al., 2004).***

Pain following prostatectomy is usually not severe and may be treated with systemic opioids combined with NSAIDS or COX-2 inhibitors and acetaminophen. However blood loss and thromboembolic complications are reduced when epidural analgesia is administered. This method is often preferred intraoperatively and continued postoperatively for pain relief after open prostatectomy and transurethral resection ***(Aribogan et. al., 2003).***

Epidural local anesthetic drugs administered alone have never become widely used for routine postoperative analgesia because of the significant failure rate resulting from regression of the sensory block, the unacceptable

incidence of motor blockade and hypotension. The use of epidural analgesia for pain relief was revolutionized in 1979 with the introduction of epidural opioids. Recent studies focus on the combination of local anesthetics with opioids to study the possibility of using lower doses of each agent to provide improved analgesia and a lower incidence of adverse effects than seen with each agent alone ***(De Leon and Lema, 1996).***

Review of Literature

Anatomy, Physiology and Innervation of the Prostate Gland

Introduction:

The prostate is composed of glandular and fibromuscular tissue surrounded by a dense fibrous sheath of pelvic fascia. It is traversed by the urethra and externally consists of a base, a downward pointing apex, and a posterior and two inferolateral surfaces. The prostatic parenchyma is divided into central and peripheral zones in which the glandular arrangement and ducts differ thus creating a median lobe, and right and left lateral lobes ***(Glasby et al., 1998).***

Prostatic hyperplasia occurs in nearly all males after the age of 40 and consists of glandular and fibromuscular nodules commencing peri-urethrally. In benign hyperplasia all lobes are usually enlarged, although commonly the median lobe is the most pronounced and may protrude into the bladder, resulting in obstruction by a ball-valve effect. It is a common cause of lower urinary tract obstruction in middle-aged and elderly men. Except for a very large gland, prostatectomy is usually carried out by transurethral resection ***(Healy and Knight, 2003).***

Blood Supply of the Prostate:

The main arterial supply to the prostate is the prostatic artery which arises from the inferior vesical