CASE REPORT

Post PTCA patient posted for non cardiac surgery turbt under combined spinal epidural (CSE) anaesthesia in geriatric group

¹Dr. Vinita Rawat, ²Dr. Shreya Dhir, ³Dr. Sahil Yadav, ⁴Dr. Gurdayal Singh, ⁵Dr. Manoj Prajapati

¹Associate Professor, ^{2,3,4,5}Junior Resident, Department of Anaesthesiology and Critical Care, World College of Medical Sciences & Research Hospital, Girawar, Jhajjar, Haryana, India

Corresponding author

Dr. Vinita Rawat

Associate Professor, Department of Anaesthesiology and Critical Care, World College of Medical Sciences & Research Hospital Girawar, Jhajjar, Haryana, India

Received: 14 March, 2024

Accepted: 17 April, 2024

ABSTRACT

Use of low-dose local anesthetics in the spinal component of the CSE minimizes the risk of systemic toxicity and adverse effects on cardiac function, while still achieving satisfactory anesthesia levels. A 73 year old male diagnosed with carcinoma bladder (2cm growth on posterior border) was posted for TURBT under Low dose of combined spinal epidural (CSE). Surgery went uneventful with less blood loss and all the hemodynamic parameters were stable with no intaroperative complaint of pain. CSE is considered as a safer option for post PTCA patients as it maintained hemodynamic stability, provide pain relief with less incidence of perioperative morbidity.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution- Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

INTRODUCTION

Transurethral Resection of Bladder Tumor (TURBT) stands as the cornerstone in the management of nonmuscle-invasive bladder cancer (NMIBC), offering both diagnostic and therapeutic benefits. However, performing TURBT in geriatric patients with underlying cardiac conditions poses unique challenges and considerations.

CASE REPORT

A 73 year old male diagnosed with carcinoma bladder (2cm growth on posterior border) was posted for TURBT under Low dose of combined spinal epidural (CSE). Patient had undergone Percutaneous transluminal coronary angioplasty (PTCA) three years back and was on low dose aspirin and atorvastatin. 2D echo revealed ejection fraction (EF) \approx 40%, RWMA, Collapsing IVS, no valvular lesions. All other investigations were within normal limits (WNL). Under aseptic conditions, low dose CSE was given with 5mg of injection Bupivacaine (0.5%) heavy with injection Fentanyl 25 mcg intrathecally at L3-L4 space. Epidural catheter placed at L1-L2 level was topped up with 6 ml injection Bupivacaine (0.125%) in postoperative period. Surgery went uneventful with less blood loss and all the hemodynamic parameters (NIBP, ECG, SPO₂) were stable with no intraoperative complaint of pain.



Figure 1: Showing Intraoperative vitals of the patient

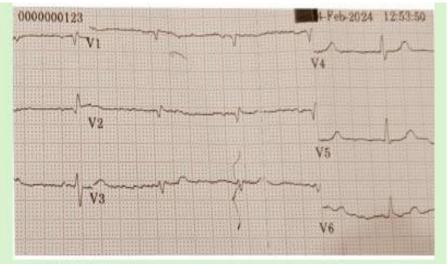


Figure 2: Showing ECG of the patients

DISCUSSION

Low dose CSE can help achieve this by providing adequate anesthesia with lower doses of local anesthetics, minimizing sympathetic blockade, and reducing the risk of hypotension compared to higher doses or general anesthesia. Additionally, the use of low-dose local anesthetics in the spinal component of the CSE minimizes the risk of systemic toxicity and adverse effects on cardiac function, while still achieving satisfactory anesthesia levels. The epidural component of the CSE allows for titration of analgesia during the intraoperative and postoperative periods, which can be particularly beneficial in cardiac patients who may require careful pain management to prevent hemodynamic instability and reduce the risk of myocardial ischemia.

CONCLUSION

CSE is considered as a safer option for post PTCA patients undergoing non cardiac surgery as it maintained hemodynamic stability, provided better pain relief with decreased incidence of perioperative morbidity.

REFERENCES

- Smith A, Howell S, Davison E, et al. Low-dose combined spinal-epidural anaesthesia for patients undergoing abdominal aortic surgery. Br J Anaesth. 2005;95(5):685-691.
- Chen L, Chen K, Lin P. Effects of reducing the dose of intrathecal bupivacaine in spinal-epidural anesthesia for cesarean section in women with cardiac disease. Acta Anaesthesiol Taiwan. 1-9