

Comparison of Hemodynamic Responses of

Intrathecally Placed Hyperbaric 0.75%

Bupivacaine Hydrochloride in Different

Height Groups of Patients

Undergoing Caeserean Section

{Original Article (Anaesthesiology)}

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ABSTRACT

Objective: To compare the Hemodynamic response of intrathecally placed 1.5 ml of 0.75% hyperbaric bupivacaine hydrochloric in different height groups of patients undergoing caesarean section in spinal anesthesia

Study Design: Quasi experimental study.

Place and Duration of Study: This study was carried out in the Department of Anesthesia, Sindh Govt, Lyari General Hospital, Dow Medical College, Dow University of Health Sciences from July 2009 to December 2009.

Materials and Methods: In this study patients enrolled for elective caesarean section, were divided into two groups. In Group-A the height of the patients was equal or less than 60 inches (5 feet) and the height of the patients of Group-B was between 60 -66 inches (5 – 5.5 feet).

Results: Hypotension was observed in 67 patients. 46 patients belonged to Group-A and 21 patients from Group-B.

Conclusion: The study showed that height of the patients influenced the hemodynamic response of local Anesthetics given during spinal anesthesia

Key Words: Hemodynamic Responses, Bupivacaine Hydrochloride, Caeserean Section

REFERENCES

1. American Society of Anesthesiologists Task Force on Obstetric Anesthesia. Practice guidelines for obstetric anesthesia: an updated report by the American Society of Anesthesiologists Task Force on Obstetric Anesthesia. *Anesthesiologists* 2007; 106 (4): 843-63.

2. Cyna AM, Dodd J. Clinical update: Obstetric anesthesia, *Lancet*. 2007; 25; 370(9588) : 640-2

3. Bloom SL, Spong CY, Weiner SJ, Landon MB, Rouse DJ, Varner MW, et al. Complications of anesthesia for cesarean delivery. *Obstet Gynecol.* 2005;106 (2): 281-7

4. Gordon A, Mckenzie E, Jeffery H. Pediatric presence at cesarean section: Justified or not? *Am J Obst and Gynecol* 193(3):599-605

5. Casey WF. Spinal anesthesia in practical guide. *Spinal anesthesia in obstetrics.* 2000;12 (8):7

6. Sultan ST. Anesthesia and safe obstetrics. *Spectrum* 2000; 21:14-15

7. Kamran S, Akercan F, Akarsu T, Firat V, Ozcan O, Kardadas N. Comparison of the maternal and neonatal effects of epidural block and of combined spinal-epidural block for caesarean section. *Eur J Obstet Gynecol Repod Biol* 2005; 121: 18-23.

8. Sukhera SA, Ahmed S, Neonatal outcome: a comparison between epidural and general anesthesia for caesarean sections. *Professional Med J* 2006;13:72-8.

9. Gutshe BB. Prophylactic ephedrine preceding spinal analgesia for cesarean section. *Anesthesiol* 1976; 45:462-5.

10. Nagat E, Yoshimine K, Minoda Y, Kawaguchi Y, Sakamoto M, Takehara A. Comparison of 8 mg and 10 mg hyperbaric bupivacaine during spinal anesthesia for cesarean section in Japanese parturients: *Masui* 2004; 53: 131-9.

11. Richardson MG, Collins HV, Wissler RN. Intrahecal Hypobaric vs. hyperbaric bupivacaine with morphine for cesarean section. *Anesthesia and Analgesia* 1998; 87: 336-340.

12. Harten JM, Boyne I, Hannah P, Varveries D, Brown A, Effect of height and weight adjusted dose of local anesthesia for elective caesarean section Anesthesia 2005; 60: 648-53.

13. Kiran S, Singal NK. A comparative study of three different dose of 0.5% hyperbaric bupivacaine for spinal anesthesia in elective caesarean section: In J Obstetric Anesthesia 2002; 11: 185-89.

14. Chung CJ, Bae SH, Chae YJ. Spinal anesthesia with 0.25 hyperbaric bupivacaine for cesarean section; effect of volume. Br J Anesthesia 1996; 77: 145-9.

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