

# Patient's Preference Regarding General or Regional Anaesthesia for Elective Cesarean Section

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## ABSTRACT

**Background:** In Cesarean section we try to save the life of both mother and baby. It is done when there are chances of any type of harm during normal vaginal delivery. It is also done when there is any documented problem with mother and baby.

**Aim:** To find the patients choice regarding general or regional anaesthesia for elective cesarean section and reasons for this.

**Study Design:** Observational descriptive study.

**Methods:** 120 patients undergoing for elective cesarean section were included. Informed consent was taken and a questionnaire was filled.

**Results:** 71.7% of subjects preferred regional anaesthesia and 28.3% opted general anaesthesia.

**Conclusion:** Most of the patient preferred regional anaesthesia and most common reason for preference was safety of baby and their better post-operative condition where as those who opted general anaesthesia, their most common reason was fear of surgery and operation theater environment.

**Keywords:** Cesarean section, Regional anaesthesia, General anaesthesia.

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## INTRODUCTION

With the help of cesarean section we try to save the life of both mother and baby and most of the time it is planned to do when there is foetal distress or other complications. This procedure can be performed both in regional and general anaesthesia. The postoperative morbidity and mortality can be reduced when regional anaesthesia is used alone or in combination with routine general anaesthesia<sup>1</sup>. Spinal anaesthesia decreases the chances of cardiac problems, pulmonary embolism and venous thrombosis<sup>2</sup>. Patients with heart disease there is minimal stress response and less peri-operative ischemia and less morbidity and mortality with regional anaesthesia<sup>3</sup>. During general anaesthesia high dose of inhalational agents can result in uterine atony and increase blood loss<sup>4</sup>. In some centers regional anaesthesia is preferred as it allows the mother to be awake and interact immediately with her baby<sup>5</sup>. Advantage of regional anaesthesia includes the decrease risk of pulmonary aspiration of gastric contents and esophageal intubation<sup>6</sup>. In some centers spinal and combined spinal and epidural anaesthesia is used for scheduled C-sections<sup>7</sup>. General Anaesthesia has the more incidence of nausea of vomiting<sup>8</sup>. Now-a-day in epidural anaesthesia both opioids and non-opioids drugs are used for post-operative pain management<sup>9-13</sup> and it is becoming famous.

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## MATERIAL & METHODS

After the approval of study from the hospital ethics committee 120 patients undergoing elective cesarean section were included and informed consents were taken. Pre-operative assessment was done a day before surgery and during this pre-operative assessment questionnaire was filled and the anaesthesia plan was decided according to patient's will. In Operation theater standard II monitoring was used for all procedures. It was an observational Descriptive study and was done in 6 months and sampling technique was non-probability convenient and was done in Services hospital.

## RESULTS

After analysis we found that 71.7% of subjects preferred regional anaesthesia where as 28.3% subjects preferred general anaesthesia.

The subjects who chose regional anaesthesia 18.60% due to information received from their relative, 24.41% because of their previous experience, 8.13% because of low finances 43.02% because of safety of newborn baby and 5% wants to see their baby as early as possible and wants to remain conscious during procedure.

The subjects who chose general anaesthesia, 11.76% due to information received from their relative, 8.82% becomes of their previous experience, 20.58% refuse regional due to fear of needle prick, 23.52% refuse regional due to fear of backache and 35.29 wants unconsciousness during

procedure due to fear of operation theater environment.

Table 1: Reason for opting regional anaesthesia technique (n = 86)

Causes	Frequency	%age
Informed by Relatives	16	18.60
Previous Experience	21	24.41
Finances involved	7	8.13
Safety of newborn	37	43.02
Consciousness during procedure	5	5.81

Table 2: Reason for opting G/A technique (n=34)

Causes	Frequency	%age
Informed from relatives	4	11.76
Previous experience	3	8.82
Fear of needle prick	7	20.58
Fear of backache	8	23.52
Preference of unconsciousness during procedure	12	35.29

## DISCUSSION

Delivery of baby by cesarean section is the most common surgical procedure<sup>14</sup>. It is done when vaginal deliveries are failed and mother and fetus health is on risk<sup>15</sup>. In Pakistan incident is 22.30% and out of which emergency cesarean section accounted was done in 65.7%<sup>16</sup>. Maternal morbidity is higher in emergency cesarean section than elective cases<sup>17</sup>.

The frequency of morbidity varies by country, health care facility and delivering physician<sup>18</sup>. In one local study they observed that rate of cesarean section is more in rich and modern gentry because of labor pains and such patient want escape from the labor pain. Such patients also want not to remember the painful normal vaginal delivery.

In advance and rich countries, the ratio of cesarean section is very high as compared to poor countries. Due to lack of basic health facilities in third world countries, the ratio of cesarean section is more and results are poor. In such situation, regional anaesthesia is very important in third world country because this is economical and easy to perform and it has minimal complications as compare to general anaesthesia.

General Anaesthesia is used in many countries, but before decision of type of anaesthesia, the Anaesthetist weighs the merits and demerits of the type of anaesthesia. In high risk patients, they use general anaesthesia and it is still gold standard.

## CONLUCION

Most of the patients preferred regional anaesthesia and most common reason was safety and their better

post-operative condition and those who opted general anaesthesia, the most common reason was fear of surgery and operation theater environment.

## REFERENCES

1. Klenman W, Mikhail M. Regional anesthesia and pain management: in Spinal, Epidural and Caudal block. Morgan GE, Mikhail M, Murray MJ (editors) Clinical anesthesiology 4<sup>th</sup> New York; 2006: 289-323.
2. Aitkenhead AR, Smith G, Rowbotham DJ. Anesthesia for gynaecological and genitourinary surgery. Text book of Anesthesia 5th edition: New York 2007: Churchill Living Stone.
3. Jeffrey YF, Chan PS, Wang DY. Nerve block of lower extremity. In Yao and Artusios's anesthesiology 6th edition, Yao FS, Malhotra V, Fontes M (editor) New York, Lipponcott Williams and Wilking; 2008: 655-68.
4. Duke J. Spinal Anesthesia: in Anesthesia secrets James D. editor Elsevier; New York. 2006; 433-439.
5. Hawkins JL, Koonin M, Gibbs CP. Anesthesia related deaths during obstetric delivery in the United States Anesthesiology, 86; 277-84.
6. Afolabi B, Merah N. Regional versus G. A. for C-section. Cochrane database System Rev 2006. 4: 319-88.
7. Bucklin BA, Kawkin L. Obstetric Anesthesia work France survey twenty years update. Anesthesiology 2005; 10.3: 645-53.
8. Akhtar N, Abbas SA, Regional Anaesthesia in thyiord surgery. JCPSP 2014; 23 (12): 885-887.
9. Jeon HR, Chae WS, Lee SJ Lee JH, Cho SH, Kim SH, et al. A comparison of sufentanil and fentanil for patient-controlled epidural analgesia in arthroplasty. Korean J Anesthesiol 2011 Jan; 60 (1) : 41-6.
10. Seveticic G, Gentilini A, Eichenberger U, Zanderigo E Sarori V, Luginbuhl M et al. Combinations of bupivacaine, Fentanyl and clonidine for lumbar epidural post-operative analgesia: a novel optimization procedure. Anesthesiology 2004; 101 (6): 1381-93.
11. Lawson EF, Wallace MS, Current developments in intra spinal agents for cancer and non cancer pain. Curr pain headache Rep 2010; 14 (1): 8-16.
12. Ding Z, Raffa RB. Identification of an additional supra spinal component to the analgesic mechanism of action of buprenorphine. Br J pharmacol 2009; 157 (5) 831-43.
13. Kornfeld H, Manfredi L Effectiveness of full aganist opioids in patients stablized an buprenorphine undergoing major surgery: A case series. Am J ther 2010; 17 (5) : 523-8.
14. Khan H. High cesarean section rate: can we reduce it ? Gomal Journal of Medical Sciences 2008; 6:1.
15. Finger A. Cesarean section rates skyrocket in Brazil. Many women are opting for cesareams in the belief that it is a practical solution. Lancet 2003; (3) : 362-68.
16. Hafeez M, yasin A, Badar N, Pasha MI, Akram N. Gulzar B. Prevelance and indications of caesarean section in a teaching Hospital. JIMSA 2014; 27 : 15-16.
17. Pallamaa N, Ekblad, Gissier M, Severe maternal morbidity and the mode of delivery. Acta obstetric Gynaecol Scand 2008; 87: 662-8.
18. Bragg F, Cromwell DA, Edozien LC, Gurol-Urganic I, Mahmood TA, Templeton A., Variation in rates of caesarean section among English NHS trust after accounting for maternal and clinical risk: cross sectional study. BMJ 2010; 341: 50-65.