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Research Article

A CROSS-SECTIONAL RESEARCH TO INDICATE REPEATED COMPLAINTS CORRELATED WITH CS (CAESAREAN SECTION) DURING SPINAL ANAESTHESIA**Dr. Muhammad Mansoor Ijaz, Dr. Muhammad Awais, Dr. Muhammad Fahad Akbar**
Allied Hospital Faisalabad**Abstract:**

Objective: The main objective of this research is to point out the usual problems and control them that are related to the section of surgical delivery under spinal anaesthesia. In this way, the element of depression and tension can be reduced in patients.

Methods: This cross-sectional research completed at Allied Hospital Faisalabad from January to October 2017 at Anesthesia Department. The selection was done between the age limit of 20-30 years of 100 patients. These patients encountered surgical delivery optionally under spinal anaesthesia. Half an hour prior to surgery, patients were provided with Metoclopramide and Ranitidine 4. However, for the six hours before surgery, patients were not allowed to intake anything orally. Prior to spinal anaesthesia inauguration, patients received colloid 10ml/kg. At L3-L4 or L4-L5 interspaces, lumbar puncture was done under hygienic environmental while all the patients were in sitting position. To supervise the local anaesthesia eventually for 20 seconds, interspaces were filled with 25-gauge pencil point needle. Through Hudson mask, supervision of oxygen 4 litres/min was made. During surgical delivery under spinal anaesthesia, patients were asked for any issue. The usual problems were noticed that are more than five. In our study, less than five issue that is homologous to these issues were not mentioned.

Results: Total 100 patients were included in our study. Out of these, the patients that encountered any common were 33% while the patients did not face any problems were 67%. Moreover, 5% patients had a headache, 5% patients had a backache, epigastric pain is observed in 6% of patient nausea and vomiting is observed in 10% of patients, 11% patients had a shivering, whereas visceral pain or abdominal discomfort was noticed in 19% of patients.

Conclusion: In many patients, the most reliable procedure for surgical delivery in spinal anaesthesia. The elements of tension and depression may elevate in patients because of facing many problems during spinal anaesthesia.

Keywords: Caesarean section, spinal anaesthesia, common complaints, caesarean section.

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INTRODUCTION:

For birth of child, 20% of cases are such that needed surgical delivery. [1] Both optionally and in case of emergency, surgical deliveries are carried out. Surgical deliveries are carried out under common, spinal, epidural or combined spinal-epidural anesthesia. Currently, spinal anesthesia is considered significant for surgical deliveries. It is so because of its simplicity. It is also less expensive. Patient is aware of and conscious during surgery as it creates quick start of anesthesia. Patients has to encounter with less nausea and vomiting and less neonatal anxiety. The occurrence of aspiration pneumonitis is also marginal. Patients sufficient relaxation of muscle. Anesthesia is created for limited time by spinal anesthesia. Hypotension, shivering, abdominal pain or discomfort, nausea, vomiting and headache are some of complexities connected with spinal anaesthesia. These complexities can be created during or after the surgical operation. [2] Abdominal pain or unrelaxation were the problems mostly faced by the mothers during surgical delivery under spinal anesthesia, However, spinal anaesthesia is often changed into common anesthesia. If the pain of the patients is not under controlled, then common anesthesia is performed. It is also because abdominal discomfort, nausea, shivering, vomiting and other such issue become serious, the rate of interchanging the spinal anaesthesia in case of extreme surgical deliveries is 4.9% [5] and this percentage is greater than common conversion rate that is 0.7-2,8%. [3,4] Abdominal impact is explained as overweight pinching or irritating emotions that are related to vomiting and nausea. [6] whereas abdominal discomfort is tedious and badly restricted. It is often connected with externalization of uterus. [7] Patients faced pain due to vomiting and intraoperative nausea. Abdominal viscera may be projected out due to this. It will be contributing more complication in surgery and possibility of visceral damage. [8] will elevate. During surgical delivery, patient faces a lot of depression and tension. Patients experience many problems during surgical delivery so, anesthetist is also under high tension and depression. The main goal of this study is to point out the usual problems and control them that are related to section of surgical delivery under spinal anesthesia. In this way, elements of depression and tension can be reduced in patients.

PATIENTS AND METHODS:

This cross-sectional research completed at Allied Hospital Faisalabad from January to October 2017 at Anesthesia Department. Total 100 patients were selected for this study. Appropriate sampling was made. The age limit of these patients

were between 20 to 36 years. The patients were choosing voluntarily of surgical delivery under spinal anesthesia. These patients were associated with American Society of Anesthesia (ASA) grade 1 and 2. Before performing operation, patients choose the kind of anaesthesia. The patients who selected general anaesthesia were thirty-six. 40 patients agreed for spinal anaesthesia. 24 patients released on anaesthetist for selection. The benefits of spinal anaesthesia were described to those patients who choose general anaesthesia. These patients then agreed for spinal anaesthesia. Those patients then have hypertension due to pregnancy, know fetal complexities, allergy to bupivacaine, disease related to bleeding infection at place of injection and disagreement for spinal anaesthesia were some of the factor on the basic of which patients were excluded. Half an hour prior to surgery, patients were provided with Metoclopramide and Ranitidine 4. However, for the anaesthesia before surgical operation patients were not allowed anything orally. Prior to anaesthesia inauguration patients received colloid 10m/kg. The maintainers of intravenous lime were completed and measurement of heart rate, blood pressure and oxygen saturation was done at 1-3, 1-4 or 1-4, 1-5 intervertebral spaces. Lumbar puncture were done under hygienic environmental while all the patients were in sitting position. For about 20 seconds, the supervision of local anesthetic bupivacaine 0.75% was done. The selection of quantity of bupivacaine was done related to patient's height. Ladies with height 150 cm, the quality bupivacaine was adjusted as 1.6m. after surgical delivery was completed, patient were shifted horizontal pluses with sideways inclined. In this way, aorta caval compression is minimized. The estimated of motor block was done by using bromate scale whereas, the estimation of prevalence of analgesia was done by using pinprick after spinal anaesthesia for first 15 min, pulse rate, blood pressure and oxygen saturation were measured. This measurement was done after time interval of 2 minutes. Afterwards in the remaining surgery, the time interval was 5 minutes. Through Hudson mask, Oxygen 4 liters / minutes was supervised. With the boluses of 4 Ephedrine, hypotension was treatment. Hypotension is basically decline in blood pressure 20% from baseline or reduction in systolic pressure below 90mmHg. 4 Nalbuphine 5-10mg, Midazolam 2-5 and ketamine 25-50mg were used to combat intra-operative discomfort. After finishing hypotension during operation, Nausea or vomiting were treated with 4 Metoclopramide 10mg. Tramadol 25-50mg and 4 Ranitidine 50mg were used to treat intra-operative shivering and epigastric pain respectively. By Midazolam and by reassurance, pain of head was minimized. The numerical pain rating

scale was used for estimation of extent of pain. On scale, 7-10 shows serious pain, 4-6 shows normal pain while less pain is shown by 1-3. In this way, the extent of intraoperative shivering was measured. This measurement was done on the basis of muscle working. If the working of muscle is unable to observe, it was called as mild. If more than one muscles group and no common shivering was noticed, then intensity is said to be normal. But if the activity of muscles was severe including the whole body, it is said to be serious. During the surgical delivery under spinal anaesthesia, any problem faced by patients were considered. The problems that were commonly faced by patients were noticed. These problems were more than five. In present study less than five problems were not considered. By means of statically package for social sciences (SPSS), statically estimation was made. Qualitative variable was noticed in form of percentage and mean \pm SD was used for the indication of quantitative variables.

RESULTS:

For this study, total of 100 patients were chosen. 53.79 \pm 5.8 minutes was the time period for the birth of body, during surgical delivery under spinal anaesthesia no such problem was faced by any patient. 27.09 \pm 5.8 was the mean age of the patients selected for this study. The percentage of patients who had no problem was high i-e 67% as compared to those patients who faced some problem i-e 33% during spinal anaesthesia. 20% of patients agreed for spinal anaesthesia out of total 33% patients. The patients agreed for spinal anaesthesia faced many issues. 5% patients had a backache, epigastric pain is observed in 6% of patients, nausea and vomiting are observed in 10% of patients, 11% patients had shivering whereas visceral or abdominal discomfort was noticed in 19% of patients.

Table – I: Level of spinal space at which Bupivacaine was given and the dermatome level achieved in patients with spinal anaesthesia (100)

Characteristic		Number
ASA Classification	One	88
	Eleven	12
Spinal Space	L 3-4	78
	L 4-5	22
Dose Bupivacaine (ml)	(1.6)	21
	(1.8)	79
Height achieved (dermatome level)	T4	81
	T6	19

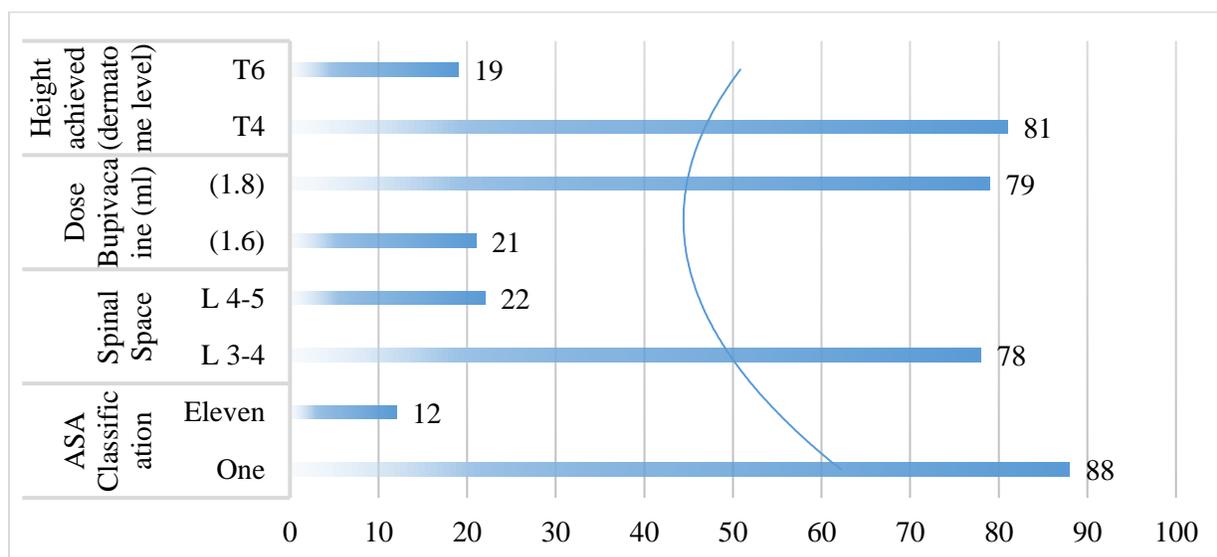
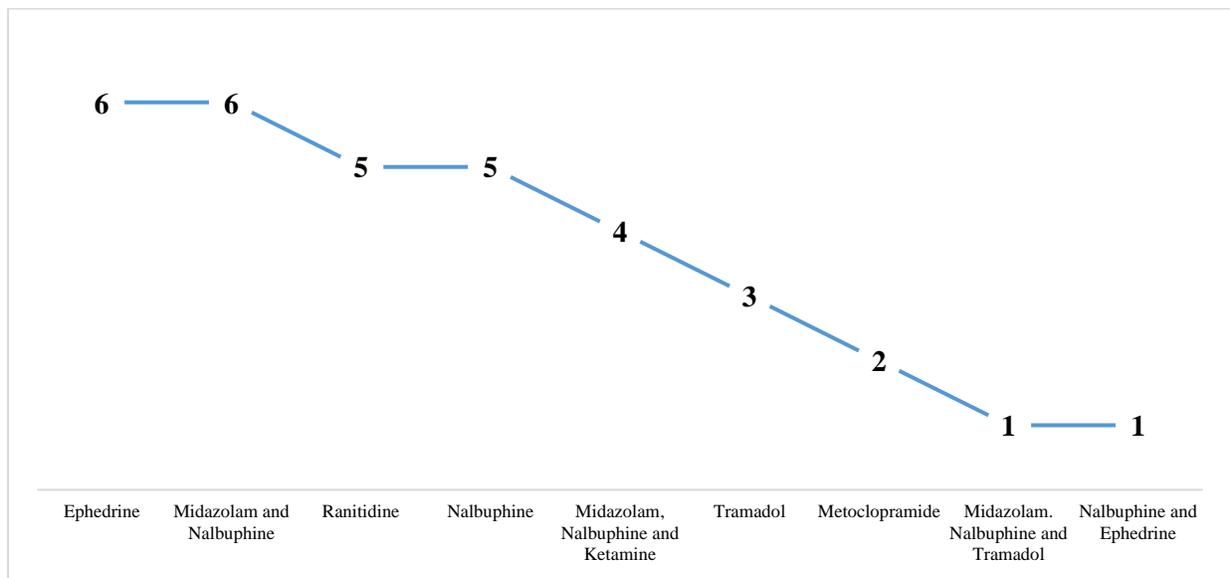
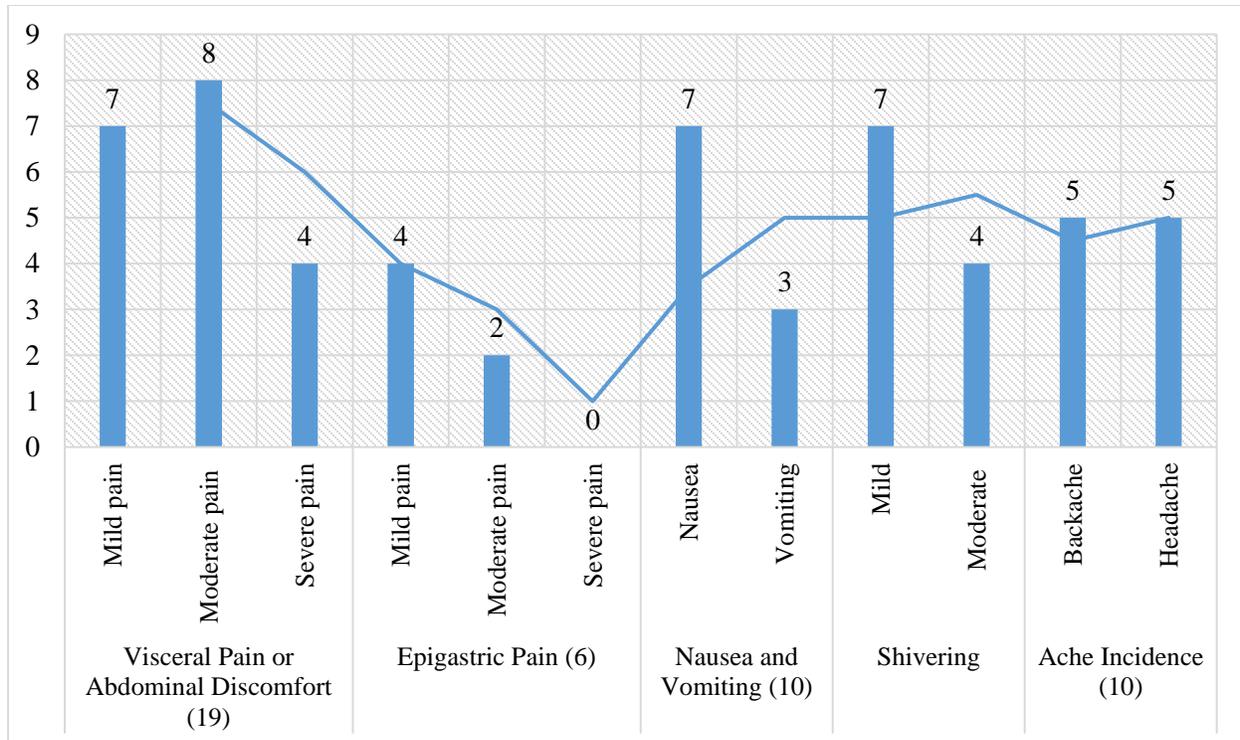


Table – II: Treatment given to patients with common complaint during spinal anaesthesia

Drugs	Number
Ephedrine	6
Midazolam and Nalbuphine	6
Ranitidine	5
Nalbuphine	5
Midazolam, Nalbuphine and Ketamine	4
Tramadol	3
Metoclopramide	2
Midazolam. Nalbuphine and Tramadol	1
Nalbuphine and Ephedrine	1

**Table – III:** Common complaint of patients (n=100) during caesarean section with spinal anaesthesia

Common complaint	Number	
Visceral Pain or Abdominal Discomfort (19)	Mild pain	7
	Moderate pain	8
	Severe pain	4
Epigastric Pain (6)	Mild pain	4
	Moderate pain	2
	Severe pain	0
Nausea and Vomiting (10)	Nausea	7
	Vomiting	3
Shivering	Mild	7
	Moderate	4
Ache Incidence (10)	A backache	5
	A headache	5



DISCUSSION:

The acceptance of regional anaesthesia is elevated due to present inclination of obstetric anaesthesia due to general anaesthesia. But regional anaesthesia contribute less to death rate. For spinal anesthetic factor which is common is bupivacaine. Bupivacaine is associated with narcotics. This association is made to create sufficient awareness of anaesthesia. During surgical delivery under spinal anaesthesia, the issue usually observed is abdominal discomfort tedious and badly restricted. This irritating feelings are associated with nausea and vomiting, externalization of uterus after birth of body manipulating of abdominal viscera. when stitches were done, some patient felt pressure on wounds and pain was noticed in 3 patients out of 19 patient complained for abdominal pain in our study and this percentage in high with the cue of bupivacaine in greater amount, visceral discomfort was removed. This was found by Bogra at al. however, when less quantity of bupivacaine was used, visceral pain was not reduced completed greater extent of visceral discomfort was noticed by Choi et al. [0]. He observed 20% patients with high usage of Bupivacaine whereas 35% with less usage. Another report was made Pedersen at el. He observed visceral discomfort in 31.6% [11]. As compared with our study, this value is greater. While doing surgical delivery under spinal anaesthesia, the problems usually experienced by patients are nausea and vomiting. Hypotension and peritoneal operation are

probably the origin of Sid effect. The patients were restless due to sudden contraction of diaphragmatic in emesis. Due to this abdominal viscus may be projected out. The surgical operation become hard to carry out. Patients faced problems of nausea and vomiting possibly because of hypotension. The percentage of occurrence of vomiting and nausea was 8% and 10% respectively in our study. If blood pressure of patients becomes normal, the problem of nausea and vomiting is reduced. But when the level of blood pressure is high or abnormal, then in the absence of hypotension, patients encounter nausea and vomiting. Shahryar et al. [12] noticed the extent of nausea and vomiting under spinal anaesthesia. He observed that treatment of nausea and vomiting with Midazolam shows 15% while with Metoclopramide was 52%. If comparison is made, these values are greater than our study. Another physician named Carpenter et al [13] showed extent of nausea in 18% of patients while vomiting in 7% of patients. When preventively Metoclopramide and Ondansetron was used for the treatment of nausea and vomiting, the extent is less as 8.4% and these values are comparable with our study.

During spinal anaesthesia, the usual problem was shaking. Patients are restless due to shaking. Due to this issue, the production of CO₂ is elevated and patients used more oxygen. 11% was a percentage of the extent of shivering in our study. 40% to 50%

percentage of shivering extent was noticed by Talakaub *et al* [14]. Along with Clonidine, the occurrence of shivering was reduced. This stigmatisation was done by Shukla *et al* [15]. This assessment is not valuable with use of Tramadol under spinal anaesthesia. Hong *et al* [16] showed the result of using Bupivacaine. 23.3% was the extent of shivering after spinal anaesthesia by using bupivacaine. But if bupivacaine is used with narcotics, the extent of shivering was reduced to 13.3%. The treatment of patients with Tramadol is done by Mohta *et al* [11] in three sections. By all the three sections, shivering before anaesthesia was controlled. Abdelrahman *et al* [18] noticed the occurrence of shivering between 15-55%. He used Midazolam and Ketamine. He used them during regional anaesthesia. As compared to our study, the occurrence of shivering is very high in this study. During regional anaesthesia, Honarmand *et al* [19] showed a preventive measure for shivering. He found that preventive use of ketamine and Midazolam was more influencing as compared to ketamine or Midazolam. During operation, 5% had a complaint of a headache and epigastric discomfort was observed in 6% of patients. All patients behaved well in response to ten ranitidine. After spinal anaesthesia, 4 patients showed hyposensitivity. These patients were treated with 4 ephedrine and due to this treatment, their blood pressure becomes elevated than normal. This could be the reason of a headache. No other clear cause of a headache was noticed. As the surgery was time-consuming and it takes more than 65 minutes. So, this prolonged timing possibly because backache observed in 5% of patients.

CONCLUSION:

The most reliable procedure for surgical delivery is spinal anaesthesia. The elements of tension and depression may elevate in patients because of facing many problems during spinal anaesthesia. Those patients faced less problem who agreed for spinal anaesthesia. The patients should be examined for general anaesthesia who are not agreed for spinal anaesthesia.

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