Original Article

Priority of Spinal versus General Anesthesia for Caesarian-Section in the Eyes of Gynaecologists and Patients

Anesthesia for C-Section

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ABSTRACT

Objective: To study the Priority of Spinal versus general anesthesia for Caesarian-Section In the eyes of gynecologist and patient in Islam Teaching Hospital Sialkot, Shahina Jamil Hospital Abbottabad and CMH Mangla.

Study Design: Retrospective study.

Place and Duration of Study: This study was carried out at the Islam Teaching Hospital Sialkot, Shahina Jamil Teaching Hospital Abbottabad and CMH Mangla from 1st January 2010 to 28 Feb 2014.

Materials and Methods: 250 cases each for Caesarian Section were taken from government hospitals and private hospitals these were analyzed for type of anesthesia with its preference in the eyes of gynecologists and patients. Fully informed written consent had already been taken for type of anesthesia. Permission was also taken from authorities of above mentioned hospitals for the study.

Results: In government hospitals the gynecologist preferred (74%) spinal anesthesia for Cesarion section as compared to private hospitals where he/she preferred general anesthesia (85.6 %).

Conclusion: It was concluded that the Gynaecologist in the government sector prefers spinal Anesthesia for Caesarian Section but in private practice she / he prefers general anesthesia for Caesarian section. It was seen that the religious women prefer general anesthesia for caesarian section due to modesty reasons but women of modern society listen to the counseling for spinal anesthesia with open mind. The Anesthetist preferred spinal anesthesia for Caesarian section in most of the cases.

Key Words: Gynaecologist, Anesthetist, General Anesthesia, Spinal Anesthesia and Caesarian Section.

INTRODUCTION

A Caesarian section (or Cesarean section in American English), also known as C-section or Caesar, is a surgical procedure in which incisions are made through a mother's abdomen (laparotomy) and uterus (hysterotomy) to deliver one or more babies.[1]

It is usually performed when a vaginal delivery would put the baby's or mother's life or health at risk, although in recent times it has been also performed upon request for childbirths that could otherwise have been natural.[2]

The World Health Organization (WHO) recommends that the rate of Caesarean sections should not exceed 15% in any country.[3] However, in recent years the rate has risen to a record level of 46% in China and to levels of 25% and above in many Asian countries, Latin America and the USA.[4]

Caesarean section is recommended when vaginal delivery might pose a risk to the mother or baby.[5] Not all of the listed conditions represent a mandatory indication, and in many cases the obstetrician must use discretion to decide whether a caesarean is necessary.[6] Some indications for caesarean delivery are:[7]

Complications of labor and factors impeding vaginal delivery such as:

- prolonged labor or a failure to progress (dystocia)
- fetal distress
- cord prolapse
- uterine rupture
- placental problems (placenta praevia, placental abruption or placenta accreta)
- abnormal presentation (breech or transverse positions)
- failed labor induction
- failed instrumental delivery (by forceps or ventouse. Sometimes a 'trial of forceps/ventouse' is tried out - This means a forceps/ventouse delivery is attempted, and if the forceps/ventouse delivery is unsuccessful, it will be switched to a caesarean section.
- overly large baby (macrosomia)
- umbilical cord abnormalities (vasa previa, multi-lobate including bi-lobate and succenturiate-lobed placentas, velamentous insertion)
- contracted pelvis

MATERIALS AND METHODS

This study was carried out at the Islam Teaching Hospital Sialkot, Shahina Jamil Teaching Hospital Abbottabad and CMH Mangla from 1st January 2010 to 28 Feb 2014.

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anesthesia. Permission was also taken from authorities of above mentioned hospitals for the study.

RESULTS

In government hospitals the gynecologist preferred (74%) spinal anesthesia for Cesarion section as compared to private hospitals where he/she preferred general anesthesia (85.6 %). (Table 1 & 2).

Table No. 1: Priority Distribution of type of Anesthesia for Cesarion section in Govt hospitals

S.No	Priority	Cases	Percentage
01	Spinal Anesthesia	185	74 %
02	General Anesthesia	65	26 %
	Total	**250**	**100 %**

Table No. 2: Priority distribution of type of Anesthesia for Cesarion section in private hospitals

S. No	Priority	Cases	Percentage
01	Spinal Anesthesia	36	14.4 %
02	General Anesthesia	214	85.6 %
	Total	**250**	**100 %**

DISCUSSION

Pulmonary aspiration of gastric contents (incidence 1:400 for obstetric cases versus 1:2000 for all patients) and failed endotreacheal intubation (incidence 1:300 versus 1:2000 for all patients) during general anesthesia are the major causes of mortality and morbidity in mothers for C Section. Large population studies in UK and United States have shown that regional anesthesia for c-section is associated with less maternal morbidity and mortality than general anesthesia. Minimal systemic drug administration, no interference with airways, better fetal apgar[12] at delivery, less bleeding during surgery, less Post OP pain complaints and less chances of DVT are the additional benefits of regional technique. [8]

There is surge in the popularity of neuroaxial anesthesia in the west amongst gynecologists, anesthetist and patients. The major concerns with this technique are hypotension and post dural puncture headache (PDPH) which can be minimized with better technique and timely intervention by anesthetist. [9]

The low cost of spinal anesthesia, less time taken for administration and rapid turnover after surgery minimizes the operation room occupancy (duration of operation room stay is 50% reduced) along with minimal logistic support of gases and assistants make it more conducive to socioeconomic environment of Pakistan. False incrimination of backache associated to past spinal anesthetic is the major hurdle in consent of spinal anesthesia. The low socioeconomic segment of our society have many taboos and misbelieves due to hearsay. Back ache is more common in ladies because of gynecological problems, reduced muscle strength, bad postures, obesity, relaxed ligaments and its reduced strength due to multiparity. One group of medicos also propagate that they do not practice spinal anesthesia during surgery for vested interest and help in confirming the false believes. [11]

It should be noted that 25 to 30 % of patients receiving only general anesthesia also complain of backache post operatively and significant percentage of general population has chronic backache. [10]

In general, gynecologist know that spinal is better for C-Section academically but there are other factors which modify their options. Most of the gynecologist want that patient should not listen when they are talking and panicking during the procedure. Confident and expert gynecologist more often opt for regional technique. Hospital administrators having compromised standards of operation room do not want the patient to know the same, and desires to put the patient to sleep. There is another serious unethical growing demand of gynecologist owned hospitals to comply for administration of spinal anesthesia after Ketamine disassociation to the patients who have not consented for spinal anesthesia which should be resisted and plainly denied. Patient discomfort during surgery depends on level of block and gentle handling of viscera during surgery. Rough handling and inadequate vagal block is the major cause of discomfort for the patient during procedure.

The interesting aspect of obstetric practice shows that in public sector hospitals where free treatment is given gynecologist do no object to spinal anesthesia and even council the patient for the technique. Patients who are getting free treatment, they simply do not find courage to argue or choose the type of anesthesia that they may be declined the treatment on this pretext. So they simply comply and have no free choice, they leave the option to treating doctors but the section of gynecologists involved in private practice prefer general anesthesia for the known reasons.

Modesty concerns of the patients are more in religious back ground patients and they want general anesthesia. Presence of male staff in operation room during surgery is another steering factor for general anesthesia. Patients of highly educated, liberal and better socioeconomic group listen to counseling with open mind for spinal anesthesia.

CONCLUSION

It was concluded that the Gynaecologist in the government sector prefers spinal Anesthesia for Caesarian Section but in private practice she / he prefers general anesthesia for Caesarian section. It was seen that the religious women prefer general anesthesia for caesarian section due to modesty reasons but women of modern society listen to the counseling for spinal anesthesia with open mind. The Anesthetist

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