



SPINAL ANAESTHESIA USING TAYLOR'S APPROACH SAVES THE DAY IN OBESE PARTURIENT.

Dr. Vishal Vashist

MD Anaesthesiology, Civil Hospital, Chowari, Chamba, Himachal Pradesh.

Dr. Roohani Mahajan*

MD Anaesthesiology, Civil Hospital, Nurpur, Kangra, Himachal Pradesh.

*Corresponding Author

Dr. Bhanu Gupta

MD Anaesthesiology, Senior Resident Department of Anesthesiology, Dr. RPGMC Kangra at Tanda.

ABSTRACT

Subarachnoid block is commonly employed for caesarean deliveries, by virtue of its simplicity in terms of performance, safety for the parturients as compared to general anaesthesia. The case history of a 27-year-old female parturient patient is presented. She was posted for emergency lower segment caesarean section in view of primigravida with breech presentation in labour. She was obese with bodyweight of 102 kg. She had a thick scaly plaque over the back in midline from L1 to L5 area, which is contraindication for administration of spinal anaesthesia via standard median and paramedian approach. Taylor's approach for administration of the same was tried and proved successful, thus saving the patient from receiving general anaesthesia.

KEYWORDS : parturient, spinal anesthesia, Taylor's approach

INTRODUCTION

Subarachnoid block is considered the optimal choice for providing anaesthesia in caesarean deliveries, unless contraindicated. The mere simplicity in performing the block, quick onset, good safety profile for the parturient and good postoperative analgesia are some of the factors for propensity towards the subarachnoid block. It offers several advantages over general anaesthesia (GA) like faster onset, intense motor block, ease of technique, avoid polypharmacy to name a few.

CASE REPORT

We report a case of 27-year old parturient 102 kg and period of gestation 39+5 weeks, scheduled for emergency lower segment caesarean section, the indication being primigravida with breech presentation in labour. On the operating table, basic noninvasive blood pressure (NIBP) monitor, pulse-oximeter and electrocardiogram (ECG) monitor were attached to the patient. The vitals were a heart rate of 82 beats/min an NIBP of 112/78 mm of Hg. ECG showed a normal tracing. The patient was given sitting position and the back was examined showing thick scaly plaque in the midline from L1 to L5. The spinal anaesthesia could not be given by standard median or paramedian approach as the area of concern is covered by thick scaly plaque and giving general anaesthesia in obese parturient patient is difficult and challenging. This was when the decision of trying the Taylor's approach¹ was made. After proper painting and draping Bilateral posterior superior iliac spines (PSIS) were palpated and marked. On the right side, a point 1 cm inferior and 1 cm medial to the PSIS was chosen as the point of insertion of the spinal needle. The needle was inserted in a cephalad and medial direction from the point of insertion, theoretically targeting the L5-S1 interspace. The needle was advanced and on feeling of "loss of resistance," the stylette withdrawn. (Fig1) A free flow of clear CSF was obtained, and 1.8 ml of 0.5% heavy injection bupivacaine was injected intrathecally after positive aspiration of CSF into the syringe. Patient was positioned supine after injection. Level of blockade was checked and found adequate. The surgery lasted for 50 minutes. Intra-operative and post-operative periods were otherwise uneventful.



Fig 1

DISCUSSION

Subarachnoid block is commonly employed for caesarean deliveries, by virtue of its simplicity in terms of performance, safety for the parturients as compared to general anaesthesia. Obstetric anaesthesia guidelines recommend spinal and epidural over general anaesthesia for most caesarean sections^{2,3}. The primary reason for recommending regional blocks is the risk of failed endotracheal intubation and aspiration of gastric contents in pregnant women who undergo GA⁴. SAB is preferred by many anaesthesiologists in view of cost effectiveness, low risk of cognitive dysfunction, thrombo-embolic events, post-operative respiratory morbidity, renal failure and prolonged post-operative hospital stay.

The Taylor approach of spinal anesthesia is an alternative safe approach in elderly patients with severe scoliosis and kyphoscoliosis with a success rate of 100%⁵. Following contraindication for conventional midline spinal anaesthesia approach we decided to attempt Taylor's approach, which is a modification of the paramedian approach for spinal anaesthesia. It is carried out at L5-S1 interspace, the largest interlaminar space of the vertebral column. Spinal needle is inserted in a cephalomedial direction through a skin wheal raised 1 cm medial and 1 cm caudal to the lowermost prominence of the PSIS¹. Patil AD et al has given spinal anaesthesia using Taylor approach in a short stature asthmatic patient⁶.

CONCLUSION

Subarachnoid block using a Taylor approach has been advocated as an alternative when general anaesthesia is to be avoided and conventional spinal anaesthesia is contraindicated.

REFERENCES

1. Thota RS, Sathish R, Patel P, Dewoolkar L. Taylor's approach for combined spinal epidural anaesthesia in post spine surgery: A case report. *Int J Anesthesiol* 2006;10:2.
2. American Society of Anesthesiologists Task Force on Obstetric Anesthesia: Practice guidelines for obstetric anaesthesia: an updated report by the American Society of Anesthesiologists Task Force on Obstetric Anaesthesia. *Anesthesiology*. 2007; 106: 843-863. 10.1097/01.anes.0000264744.63275.10.
3. Cyna AM, Dodd J. Clinical update: obstetric anaesthesia. *Lancet*. 2007; 370: 640-642. 10.1016/S0140-6736(07)61320-8.
4. Bloom SL, Spong CY, Weiner SJ, Landon MB, Rouse DJ, Varner MW, Moawad AH, Caritis SN, Harper M, Wapner RJ, Sorokin Y, Miodovnik M, O'Sullivan MJ, Sibai B, Langer O, Gabbe SG: Complications of anaesthesia for cesarean delivery. *Obstet Gynecol*. 2005; 106: 281-287.
5. Ahsan-ul-Haq M, Amin S, Javaid S. Paramedian technique of spinal anaesthesia in elderly patients for hip fracture surgery. *J Coll Physicians Surg Pak* 2005;15:160-1.
6. Patil AD, Bapat M, Patil SA, Gogna RL. Spinal anaesthesia using Taylor's approach helps avoid general anaesthesia in short stature asthmatic patient. *Saudi J Anaesth* 2015;9:474-6.