

Technical And Ethical Considerations During Regional Anaesthesia For Cesarean Section: Achieving A Balance

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Abstract

“Remember this-that there is a proper dignity and proportion to be observed in the performance of every act of life.” Marcus Aurelius Antoninus (121AD-180AD)

Regardless of race, culture and religion, every patient during his/her medical examination or treatment expect that his/her body would be treated decently. For the good quality care, provision of due respect is an essential component. Actions to circumvent unnecessary exposure of patient's body is a display of kindness of care provider which is associated with greater patient satisfaction.[1]. The use of regional anaesthesia for caesarean section has dramatically increased during recent decades [2]. It is performed in the lumbar area with the patient either in sitting or lying in lateral position. This procedure requires exposure of the patient's back and exposure of the rest of the body is not required and therefore should be considered as unnecessary exposure. However if proper attention is not given to avoid unnecessary exposure, then sitting position is likely to expose the upper half and lying position the lower half of the body. Sitting position is preferred by many anaesthetists as midline of the back and its side wise tilt is ascertained easily and in case of spinal anaesthesia, higher CSF hydrostatic pressure results in quick appearance and increase flow of CSF.

The use of regional anesthesia requires considerable technical skills and demands good appreciation of regional anatomic relationships. Its technique includes; positioning of the patient, exposing her back, cleaning with antiseptic and except the lumbar area, covering the back with sterile drapes. However, covering the back may conceal the spinal tilt and thus may makes the spinal anaesthesia technically difficult. Before inserting the spinal/epidural needle, the anaesthetist decides about the site of insertion. After insertion, the needle is then advanced, targeting the lumbar inter-laminar space. This space is deep to the skin,

subcutaneous tissue and spinal ligaments. The anaesthetist viewing the patient back like a roentgenogram, create an imaginary picture of her spine. This image is constructed with the help of the information gathered from the inspection and the palpation of patient's back. The information regarding patient's size and frame, spinal curve or tilt, dimension of her trunk is obtained from the inspection. Palpation is performed to feel for the bony landmarks (lumbar spinous process, interspinous gap and iliac crest). In most patients bony landmarks are palpable, so required placement of the regional block needle is often not difficult. However, in obese pregnant woman, bony landmarks may not be palpable which makes the block difficult to perform [3,4] Clinically, inspection is then the only method which provide information on which spinal anatomy could be speculated. Additional difficulties are encountered in conditions like hydramnious, multiple pregnancies which exaggerate the lordosis, which further limit the spinal flexion. In such situations a mental picture of patient's spine is of immense importance. To generate this image, it is essential to assume that all spinous processes fall on to the straight imaginary line which descends from the occiput vertically downward, follows over the middle of the back of the neck, back and terminate at the natal cleft. The insertion of spinal/epidural needle is guided by superimposing the imaginary spinal anatomy on to the real one. The closeness between the virtual and real spinal anatomy increases when patient's spine is flexed with out rotation or side wise tilt. Hence the visualization of patient's back is crucial for spinal anatomy imagination.

However, this assumption may not be true, when unnoticed deviation of the spine from the mid line occurs. This could happen when patient is leaned on one side or when spine poses a scoliotic view, often seen when patient sits predominantly on one buttock. Therefore in technically

challenging cases, it is imperative to have the patient in sitting position, with maximum possible flexion of spine with out any side wise tilt or rotation. During the procedure anaesthetist may need to review the spine, readjust the position and reconstruct the mental picture of the spine. For that reason in technically difficult cases wide exposure of the patient's back is desirable not only at the beginning but through the regional procedure.

On the other hand to preserve patient's dignity, minimum exposure is desirable. Patient's head, shoulder, breast, buttocks may be unintentionally exposed while anaesthetist is concentration on the technique of regional block. This can embraces the patient, make her tense and may contribute to the over all dissatisfaction about her care. Patient's perspective about body exposure depends on her belief, culture, and moral values in the society. In social encounter with males, a Muslim woman covers her head, arms and legs where as for a non muslim, especially westerner, opposite is considered as social norms. As a matter of fact, in some countries it is illegal for women to wear head scarves at their educational or job sites [5,6]. In defiance some of them have given up their education, carrier and job but refused to uncover their heads. Unambiguously for them, body exposure even during medical encounter is of great significance. Care provider may not be aware of the values that are important to the patient. During preoperative encounter with the patient anesthetist rarely discuss the issue of avoiding unnecessary exposure of her body. Surely if patients are informed and given the choice, that such uncovering can be avoided during regional anaesthesia, many indeed would avail such offer. Nevertheless patient's obedience and ignorance may consider unnecessary exposure essential for the procedure. On the other hand, dominance nature of care providers may not pay attention to avoid unnecessary exposure. Such unimpeded attitude and practice over a period of time then becomes the norms of operating theatre culture. Undoubtedly it is the ethical responsibility not only of the anaesthetist but all care providers to respect the patient's body and beliefs. The anesthetist should lead the measures so as to establish theatre as patient's friendly place. The theatre environment should such that patient could sense that her self-esteem is

respected. Minimum number of people with no outside disturbance should occur when the regional anaesthesia procedure is performed.

In summary, anaesthetists while performing regional anaesthesia, especially in technical challenging cases, should strive to achieve a balance between exposing the patients and preserving their dignity. For the success of apparently difficult regional anaesthesia, good positioning and wide exposure are important prerequisite. They could expose the patient's back as much as they thinks is essential, but at the same time should ensure to avoid the unnecessary exposure. [Figure 1].

Figure 1

Figure 1: The position for the spinal / epidural block: avoiding the unnecessary exposure of the body and imagining the spinal anatomy.

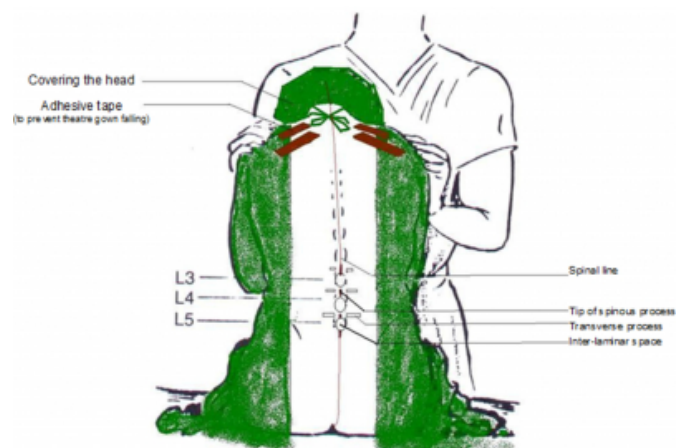


Figure 1 The position for the Spinal / epidural block: Avoiding the unnecessary exposure of the body and imagining the spinal anatomy

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