Abstract # 135

Combined Spinal Epidural Anaesthesia for Caesarean Section in a Patient with Cerebral Palsy

Abstract Type: Case Report/Case Series
Wint Yu Mon, M.B., B.S.; Usha P. Nair, FRCA
Lincoln county Hospital

Introduction: Cerebral palsy (CP) is an umbrella term describing non-progressive motor conditions resulting from injury to the developing central nervous system. In this case report, we present the use of combined spinal epidural anaesthesia (CSE) in a patient with CP undergoing caesarean section (CS)

Case Report: A 30-year-old woman G1P0 with known CP and spastic diplegia at 38 weeks of gestation was scheduled for an elective CS as vaginal delivery was deemed impossible due to severely limited abduction of both hips. She was able to walk short distances with crutches, but otherwise wheel chair bound. She also had some associated involuntary limb movements. Examination revealed that she had mild lumbar scoliosis, degree of fixed flexion in her hips and knees and slight internal rotation of shoulders.

Technique and potential risks of CSE were explained to the patient.

Patient sat up for the procedure with extra help. Epidural space was identified with 16G Touhy needle using loss of resistance to saline after 3 attempts. 27G 110mm Whitacre spinal needle was used to identify and inject 12mg heavy bupivicaine with 250 microgram of diamorphine intrathecaly. Epidural catheter was threaded with some difficulty. During surgery, the patient’s ECG, blood pressure and oxygen saturation were monitored. After 12 minutes, desired block to T5 was achieved and hence did not need any epidural top up. She was positioned carefully on table taking into account her fixed flexion deformity. She was stable throughout with no athetotic crisis. She did not complain of any discomfort during the procedure.

Discussion: There are case reports describing the use of general anaesthesia and spinal anaesthesia in CS for patients with CP(1,2). Although these case reports described good outcomes, we need to be aware of the potential problems. General anaesthesia may be associated with respiratory depression and increased sensitivity to agents and spinal anaesthesia may precipitate athetotic crisis.

For our patient, a decision was made to employ CSE technique for a number of reasons. Firstly, risks of General anaesthesia could be avoided. Secondly, to establish gradual block to minimize the risk of cardiovascular instability and potential risk of athetotic crisis. However, the technique may be more challenging in patients with more severe kyphoscoliosis and those demonstrating frequent involuntary movements.

Conclusion: We used CSE successfully for our patient with cerebral palsy undergoing CS. This technique provided safe, controlled anaesthesia for our patient and with good outcome for mother and baby.

References