

Open bladder operation in a child with neural tube defect with caudal anesthesia

Ozkan Onal¹, Aykut Demirci² and Omer Bayrak³

¹Anesthesiology and Reanimation Department, Yuksek Ihtisas Training and Educational Hospital, Turkey

²Department of Urology, Diskapi Training and Educational Hospital, Turkey

³Department of Urology, Ataturk Training and Educational Hospital, Turkey

Introduction: Neural tube defects is a malformation group consisting of congenital, heterogeneous and complex abnormalities of central nervous system. It is characterized by the protrusion of spinal meninx and/or cord from the open vertebral arch to the posterior. Caudal block can be employed on its own for anesthesia in lower abdominal operations in infants with high risk. In this case report, an open bladder calculus operation carried out on a 17 year old patient with neural tube defect and advanced scoliosis using caudal anesthesia. is presented.

Case: A 16 year old male patient at the weight of 40 kg who had undergone operation for neural tube and had advanced scoliosis, presented with complaints of severe abdominal pain, nausea and vomiting. In USG examination, a calculus at the size of 2cm was detected in the bladder. In preoperative evaluation, it was established that the patients was cooperative and oriented and had advanced scoliosis and had undergone operation when he was one year old for neural tube defect and hydrocephalia. Considering that the patient had advanced scoliosis and he may not be extubated in case general anesthesia is administered, spinal anesthesia was planned. Owing to the presence of advanced scoliosis and the history of neural tube defect operation, spinal anesthesia could not be carried out although it was attempted many times. Thinking that general anesthesia will be risky, but the operation was vital, and in view of the probability of caudal space not being closed, caudal block was tried. Caudal space was entered with a 20 g needle and 0.5% bupivacain 1 mg/kg was administered. Operation was initiated after local anesthetic was administered to caudal space and lasted for two hours. No perioperative complications developed and patient felt no pain for six hours postoperatively.

Discussion: Patients who will undergo spina bifida operations such as myelomeningocel, not for patients who underwent operation for spina bifida or who have spina bifida but were not recommended operation or those in whom operations is planned for another reason. As our patients had undergone operation in lumbar region and there was no problem preventing injection in sacral region, caudal anesthesia was decided upon.

Conclusion: In children undergoing operation under umbilicus, causal block is an easily applied, reliable effect with long term effect. In young patients who underwent operation for myelomeningocel and has scoliosis such as our patient, it is our belief that caudal anesthesia may be used reliably and efficiently since it has effective pain control in intraoperative and postoperative periods.

Biography

Ozkan Onal has completed his medical education from Ankara Gazi University Medical School and he has completed his anesthesia training from Ankara Hacettepe University Medical School and he is working in Ankara Yuksek Ihtisas training and educational hospital. He has published more than 15 papers about anesthesia.

drozkanonal@gmail.com