

CASE REPORT

ANAESTHETIC MANAGEMENT OF LSCS IN A PATIENT WITH LUMBAR PERITONEAL SHUNT (OPERATED FOR PSEUDOTUMOUR CEREBRI) - A CASE REPORT

D.A. Hiremath¹

HOW TO CITE THIS ARTICLE:

DA Hiremath. "Anaesthetic management of LSCS in a patient with lumbar peritoneal shunt (operated for pseudotumour cerebri) - a case report". Journal of Evolution of Medical and Dental Sciences 2013; Vol2, Issue 38, September 23; Page: 7341-7342.

ABSTRACT: Idiopathic intracranial hypertension, also known as pseudotumour cerebri, is a disorder of elevated intracranial pressure of unknown etiology. Patients present with daily headache, pulse-synchronous tinnitus transient visual obscurations, papilledema with its associated visual loss, and diplopia from sixth nerve paresis. Many disease associations have been alleged, but few besides obesity, hypervitaminosis A and related compounds, steroids withdrawal and female gender have been proven [1]. Here we are going to present a case report of anaesthetic management of cesarean section who was operated for pseudotumour cerebri by lumbar peritoneal shunt by giving general anaesthesia.

KEYWORDS: caeserean section, pseudotumor cerebri, spinal anaesthesia, general anaesthesia.

INTRODUCTION: Lumbar peritoneal shunt is treatment of choice in a case of pseudotumour cerebri. If subarachnoid block was given for LSCS, with a lumbar peritoneal shunt in situ the needle may accidentally puncture the catheter. So the epidural anaesthesia is also considered as an alternative to the general anaesthesia.

CASE REPORT: A 25 years old female G1P2, weighing 55 kg was admitted for delivery. She was operated previously for pseudotumor cerebri with lumbar peritoneal shunt in situ. All her routine investigations were normal. Patient was premedicated with glycopyrrolate 2mg and was pre-oxygenated with 100% oxygen for 3 minutes. Anesthesia was induced with propofol 2.5 mg /kg, and intubated with 7mm cuffed endotracheal after giving vecuronium 0.01 mg/kg prior to the induction agent. The vocal cords were sprayed with 10% xylocaine to suppress the pressor response which will increase the intracranial pressure. She was maintained with 50% oxygen 50% nitrous oxide, fentanyl [1 ug/kg] and intermittent halothane. Reversal with neostigmine [2.5mg] and glycopyrrolate [2mg] was done and extubated. Patient was monitored by oximetry, capnography and vital signs were maintained. The post-operative period was uneventful.

DISCUSSION: Lumbar peritoneal shunt is performed for reducing intracranial pressure to reduce the morbidities like visual loss. Many have managed LSCS with lumbar epidural anaesthesia [2], but here there is a risk of dural puncture. Spinal block may puncture the shunt catheter, and it does not serve the purpose. A single shot spinal anaesthetic is not practical in a patient with a lumbar peritoneal shunt. Neuro-axial block and a blood patch (if necessary) may be performed in a patient on enoxaparin therapy if current guidelines for managing patients on anticoagulant therapy are followed [3].

CASE REPORT

Considering above factors, we managed this case with general anaesthesia. We instilled 10% lignocaine over base of tongue, vallecula, glottis to suppress pressure response to the laryngoscopy and intubation. The risk of puncturing the dura and shunt catheter is avoided.

The lumbar peritoneal shunts are effective in controlling all the clinical manifestations of pseudotumour cerebri in the immediate post operative period. So it is wise not to touch the lumbar peritoneal shunt catheter during anaesthetic management of LSCS. (4) Shunt failure with relapse of pseudotumour cerebri occurs as late as 7 years after insertion. (5).

REFERENCES:

1. Wall M. Idiopathic intracranial hypertension (pseudotumor cerebri). *Curr Neurol Neurosci Rep.* 2008; 8(2):87-93.
2. Liu GT, Volpe NJ, Schatz NJ, Galetta SL, Farrar JT, Raps EC. Severe sudden visual loss caused by pseudomotor cerebri and lumboperitoneal shunt. *Am J Ophthalmol.* 1996 Jul; 122(1):129-31.
3. Kaul B, Vallejo MC, Ramanathan S, Mandell GL, Krohner RG. Accidental spinal analgesia in the presence of a lumboperitoneal shunt in an obese parturient receiving enoxaparin therapy. *Anest Analg.* 2002 Aug; 95(2):441-3.
4. Abubaker K, Ali Z, Raza K, BOLGER c, Rawluk D, O'Brien D. Idiopathic intracranial hypertension: Lumboperitoneal shunts versus ventriculoperitoneal shunts –case series and literature review. *Br J Neurosurg.* 2011 Feb ;(1):94-9.
5. Rosenberg ML, Corbett JJ, Smith C, Goodwin J, Sergott R, Savino P, Schatz N. Cerebrospinal fluid diversion procedures in pseudomotor cerebri. *Neurology.* 1993 Jun; 43(6):1071-2.

AUTHORS:

1. D.A. Hiremath

PARTICULARS OF CONTRIBUTORS:

1. Professor, Department of Anaesthesia, S.N. Medical College, Bagalkot, Karnataka.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. D.A. Hiremath,
Professor of Anaesthesia.
S.N. Medical College, Bagalkot – 587102.
Email- dahiremath@yahoo.com

Date of Submission: 06/09/2013.
Date of Peer Review: 07/09/2013.
Date of Acceptance: 19/09/2013.
Date of Publishing: 21/09/2013