

High Spinal & Nausea

Anesthetic Pearls: Anesthetic Implications of a High Subarachnoid Block

Patients receiving spinal anesthetics will often experience many different symptoms. Surgical sites such as the abdomen, pelvis, or lower extremities can affect the symptoms experienced by the patient through surgical manipulation and into the recovery period.

Nausea is one of the most common symptoms and occurs in approximately 13% - 42% of spinal anesthetics. Intra-op and post-op nausea is frequently seen in female, obese, delayed GI motility, and obstetric / gynecologic patients with lots of surgical manipulation of the abdomen. The treatment of choice is often anti-emetics such as Zofran, Phenergan, or Reglan. However, another possible cause occurs when a spinal anesthetic reaches a high level (higher than T4 level). The hypotension that ensues and will often drop the blood pressure below the autoregulation level of cerebral blood flow (MAP ~ 60). A key point is that the autoregulation point is higher in patients that have hypertension. The hypotension that occurs with a high spinal can lead to cerebral hypoxia and thereby lead to nausea. It is vital to treat the hypotension. When nausea and vomiting occur during spinal anesthesia, immediate attention should be to whether hypotension is present and blood pressure should be restored while providing oxygen therapy. Treatment options include fluid therapy, pressors, Trendelberg position, and oxygen which are all imperative to improving cerebral blood flow and hypoxia. In pregnant patients, the pressors of choice are Phenylephrine or Ephedrine; as both have been shown to improve systemic blood pressure but not affect uterine blood flow.

Parasympathetic vasovagal responses or traction mediated reflexes by surgical manipulation can also cause hypotension with bradycardia. The treatment of choice is fluid therapy, Atropine, and pressors.

