

**The hemodynamics of oxytocin and other vasoactive agents during neuraxial anesthesia for cesarean delivery: findings in six cases**

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Oxytocin is a commonly used uterotonic that can cause significant and even fatal hypotension, particularly when given as a bolus. The resulting hypotension can be produced by a decrease in systemic vascular resistance or cardiac output through a decrease in venous return. Parturients with normal volume status, heart valves and pulmonary vasculature most often respond to this hypotension with a compensatory increase in heart rate and stroke volume. Oxytocin-induced hypotension at cesarean delivery may be incorrectly attributed to blood loss. Pulse power analysis (also called "pulse contour analysis") of an arterial pressure wave form allows continuous evaluation of systemic vascular resistance and cardiac output in real time, thereby elucidating the causative factors behind changes in blood pressure. Pulse power analysis was conducted in six cases of cesarean delivery performed under neuraxial anesthesia. Hypotension in response to oxytocin was associated with a decrease in systemic vascular resistance and a compensatory increase in stroke volume, heart rate and cardiac output. Pulse power analysis may be helpful in determining the etiology of and treating hypotension during cesarean delivery under neuraxial anesthesia.