The Risks of Central Neuraxial Anesthesia

To the Editor — Ho et al. report on the successful use of combined spinal and epidural anesthesia for the management of labor and delivery in a patient with idiopathic hypertrophic subaortic stenosis (IHSS).

Idiopathic hypertrophic subaortic stenosis, or hypertrophic obstructive cardiomyopathy (HOCM), as it is also known, is a cardiomyopathy characterized by asymmetric septal hypertrophy, and dynamic left ventricular outflow tract (LVOT) obstruction, which worsens with hypovolemia, increased left ventricular contractility, and vascular dilation. The diagnosis is confirmed with two-dimensional echocardiography, and the LVOT gradient is quantified by Doppler echocardiography. Provocative testing with inhaled amyl nitrate is used to accentuate the gradient.

In the current case, the diagnosis of IHSS was made several years before pregnancy, but we are given no details regarding its severity; specifically, no mention is made of a provoked gradient at diagnosis. Without this information, the reader has no way of knowing what the severity of the condition was and therefore no way of knowing the risks of sympathetic blockade with neuraxial anesthesia. For the patient with the potential for severe LVOT obstruction, the risks of central neuraxial anesthesia are profound and should never be underestimated.

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References

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Although the response to amyl nitrite may provide some measure of severity, its use is not universal, it is not commonly used in our institution, and there are few data to support its safe use in pregnancy. We concur with Dr. Oxorn that hypovolemia, in-