What does the term "nitrous oxide" bring to your mind? Fits of laughter from the dentist chair no doubt. Have you ever thought of nitrous oxide as part of your birth plan when you deliver your new baby? Well, now you can.

The Birth Center at North Valley Hospital has a history of offering a wide range of amenities and services to women which are most often unavailable at other places across Montana and the region. From acupuncture and acupressure, to massage and water births — nitrous oxide has been a great addition to the lineup of patient-centered services new families can experience during the delivery process.

Widely used in Canada and Europe, nitrous oxide is becoming more mainstream here in the United States as patients become more aware of its benefits. Before North Valley Hospital introduced nitrous here in the Flathead Valley in March, 2015, there were only eight other big hospitals in the country who also offered nitrous. We're following the leads of those research centers and hospitals to pave the way for patients right here in small-town Montana. It's amazing.

So what exactly is it? To most, nitrous oxide is known as laughing gas. Unlike the continuous stream administered in most dentist offices, during labor, the mother doesn't break into the giggles. The mixture of 50% nitrous gas and 50% oxygen is self-administered by the mother and ideally inhaled 30 seconds prior to a contraction. The timing of administering is important because its peak effect provides the greatest relief during the peak of the contraction.

Some women describe the effects of nitrous oxide as a type of euphoria. Breathing the gas mixture gives patients additional oxygen and also releases endorphins, helping to reduce the sensation of pain. It is not an anesthetic. The gas does not affect the woman's ability to push during labor, nor does it cause drowsiness. Extensive research shows that the nitrous oxide mixture is safe for both the mother and baby because it is eliminated from the body through the lungs, rather than through the liver.

The introduction of nitrous oxide is supported by labor and delivery professionals, doctors and the anesthesiologists. It's a complete game changer. Just being able to offer nitrous oxide to patients as another tool to help cope with the enduring pain has made such a night and day difference. I am happy to have this in my supply of services and options to give to patients to help them reach their full potential and deliver in a way that works for them. Patients can use it before we administer an epidural or during the entire labor process without episodic or use post-partum. It's fantastic to visibly see its effect calm a birthing mother to help enable her to do things she didn't think possible.

For more information on the use of nitrous oxide in labor, visit the Birth Center page on the North Valley Hospital website at www.nvhs.org.

About the Author
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