Nitrous Oxide for Labor Pain

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A product of the Patient Education Subcommittee
1. **WHAT IS Nitrous Oxide?**

Nitrous oxide is gas that can be inhaled in a mixture with oxygen to help relieve labor pain. It is commonly referred to as “laughing gas”. You may have heard of it because it is commonly used in dental offices.

2. **HOW IS IT ADMINISTERED?**

Some Labor and Delivery units have access to a machine that can provide the gas mixture. It is a portable device that can be brought into your labor and delivery room by your nurse. You will have a mask that is connected to oxygen and nitrous oxide. When you inhale through the mask, the machine will give you a dose of the gas. The gas will not make your pain go away, but it will make it more bearable. When you take the mask away from your face, the effect of the gas is gone very quickly. Sometimes, the gas makes people feel dizzy. For safety reasons, another person is not allowed to hold the mask for you. If you are getting too drowsy, you will let go of the mask and stop breathing the gas. This is for your safety and ensures you won’t get too much.

3. **CAN I HAVE IT WHENEVER I WANT? OR CAN I ONLY USE IT FOR A LIMITED TIME PERIOD?**

Yes, you can receive nitrous oxide at any point during your labor and there is no limit to how long you use the nitrous. It can be used for hours until you have your baby. It can also help give you some comfort if you need to have stitches done after delivery.

4. **HOW DO I KNOW WHEN TO USE IT?**

It starts working very quickly after you start breathing. The effect of the gas also wears off very quickly after you stop breathing it. We recommend you start breathing through the mask about 30 seconds before the start of a contraction and continue until the worst pain of the contraction.

5. **WHAT ARE THE SIDE EFFECTS FOR ME?**

Nitrous oxide can make you dizzy or nauseated. The use of the mask can make some people feel claustrophobic (fear of closed spaces). While it has been used safely in most mothers, there are some conditions that can prevent you from being able to use nitrous oxide. This is something you should discuss with your anesthesia provider.

6. **IS IT DANGEROUS FOR ME?**

The use of inhaled nitrous oxide is a common option for labor pain management in several countries including the United States, United Kingdom, Finland, Sweden, Canada, Australia, and New Zealand. Many studies have found that mothers have high levels of satisfaction with nitrous oxide, even though it doesn’t completely take away the labor pain.
7. **IS IT DANGEROUS FOR MY BABY?**

Many studies have demonstrated no harm to the baby when looking at the baby’s Apgar score (this is the score used to evaluate how your baby is doing right after birth at 1 and 5 minutes) or neonatal behavioral score (how your baby is behaving according to some well known evaluation methods).

8. **HOW DO I KNOW IF I CANNOT HAVE IT?**

Nitrous oxide may not be safe if you have a vitamin B12 deficiency or if your oxygen level is low for another reason. It is also not recommended if you are unable to hold the mask on your face by yourself, or if your baby’s heart tracing is worrisome.

9. **DOES IT REALLY HELP WITH PAIN?**

Nitrous oxide does not completely relieve the pain of labor but decreases your awareness of the pain. In other words, you can still feel some pain, but it does not bother you as much.

10. **CAN I STILL HAVE AN EPIDURAL AFTER IF IT DOES NOT WORK?**

You can change your mind and choose to have an epidural placed as long as there is not another reason an epidural may not be right for you at that time.

*SMOG Grade: 9.2*