NITROUS OXIDE FOR PAIN MANAGEMENT OF INTRAUTERINE DEVICE INSERTION IN NULLIPAROUS WOMEN

SHANNON CARR, MD

IUDs are exceptional methods of contraception. They do not require daily use and are, therefore, “forgettable” and yet also boast very low failure rates. Women are increasingly interested in these methods of contraception. Yet, evidence has shown that nulliparous women may experience more pain than multiparous women at the time of IUD insertion, typically a moderate pain level. This pain may present a barrier to uptake of these methods.

Nitrous oxide is an inhalational gas that is safe, easy to use and relatively inexpensive to acquire and maintain. In this way, it is ideal for short, painful office procedures. However, NO has not yet been tested in the domain of outpatient gynecologic procedures such as IUD insertion. Other well conducted studies have proven the lack of benefit to previously utilized methods of pain control for IUD insertion including NSAIDs, local anesthesia and cervical ripening.

In this randomized controlled trial conducted at the University of New Mexico, we randomized women to receive a fixed dose of nitrous oxide (50:50) versus 100% oxygen as a placebo at the time of their IUD insertion. We then measured participants’ pain levels and satisfaction using a visual analog scale. On preliminary analysis of our results, we did not find a difference in pain scores or satisfaction between the two groups.

In conclusion, we offered a novel answer to the problem of pain control during outpatient IUD insertion.