

Benavides R, Wong A, Nguyen H. Improved outcomes for Lap-banding using the Insuflow device compared with heated-only gas. *JSL*. 2009;13:302-5.

LINK - <https://pdfs.semanticscholar.org/3dcb/3dd24bed8f7686f8d9516d354d2d3ca9a21c.pdf>

ABSTRACT

Background and Objectives:

Preconditioning gas by humidification and warming the pneumoperitoneum improves laparoscopic outcomes. This prevents peritoneal desiccation and detrimental events related to traditional cold-dry gas. Few comparisons have been done comparing traditional cold-dry, heated-only, and humidifiedwarmed carbon dioxide.

Methods:

A prospective, controlled, randomized, doubleblind study of laparoscopic gastric banding included 113 patients and compared traditional dry-cold (n35) versus dry-heated (n40), versus humidified-warm gas (n38). Pain medications were standardized for all groups. Endpoints were recovery room length of stay, pain location, pain intensity, and total pain medications used postoperatively for up to 10 days.

Results:

The humidified-warmed group had statistically significant differences from the other 2 groups with improvement in all end points. The dry-heated group had significantly more pain medication use and increased shoulder and chest pain than the other 2 groups had.

Conclusion:

Using warm-humidified gas for laparoscopic gastric banding reduces shoulder pain, shortens recovery room length of stay, and decreases pain medication requirements for up to 10 days postoperatively. Dry-heated gas may cause additional complications as is indicated by the increase in pain medication use and pain intensity.