

5th World Congress on
**Clinical Surgery
and Anesthesia**

November 21, 2022 | Webinar

Accepted Abstracts



5th World Congress on Clinical Surgery and Anesthesia

November 21, 2022 | Webinar

Received date: 12-10-2022 | Accepted date: 15-10-2022 | Published date: 05-12-2022

Evaluation of diaphragmatic function after interscalene block with liposomal bupivacaine: A randomized controlled trial

Aaron Berg D O
University of Minnesota, USA

Background: Interscalene blocks provide analgesia for shoulder surgery but also cause phrenic nerve paralysis. Liposomal bupivacaine is approved for use in interscalene blocks with the potential to provide longer pain control. However, the impact of liposomal bupivacaine on the phrenic nerve has not been evaluated. It was hypothesized that patients who received an interscalene block with the addition of liposomal bupivacaine would have a decreased diaphragmatic excursion at 24h.

Methods: This was a double-blinded study of adult patients who were randomized to receive an interscalene block either with 20 ml 0.5% bupivacaine (bupivacaine group) or 10 ml 0.5% bupivacaine plus 10 ml liposomal bupivacaine. Twenty-six patients were randomized with 22 included in the analysis. Diaphragmatic excursion (via ultrasound) and spirometry were assessed before the block, in PACU, and at 24 h. The primary outcome was diaphragm excursion with sigh.

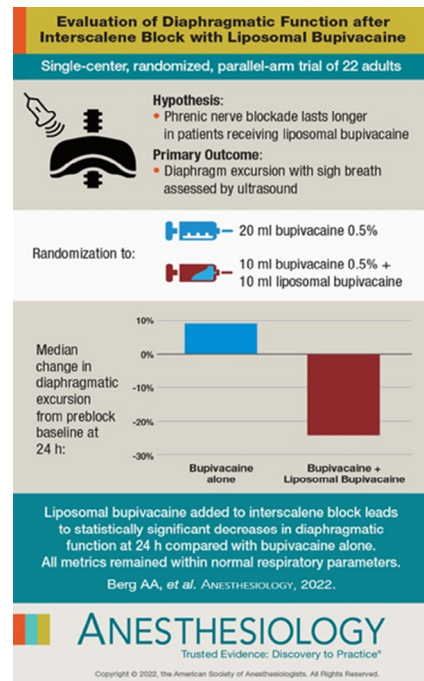
Results: At 24 h, the liposomal bupivacaine group median [25th, 75th], had a greater percent change in diaphragmatic excursion during sigh breath compared to the bupivacaine group, -24% [-30, -9] versus 9% [-8, 26], difference in location, 32 (95% CI, 12 to 52), $P = 0.007$. Five patients in the liposomal bupivacaine group had a greater than 25% reduction in diaphragmatic excursion at 24 h versus zero in the bupivacaine group. They also had a significantly greater percent reduction in FEV1 and FVC compared with the bupivacaine group at 24 h (median decrease of 22% vs. 2%, $P = 0.006$, and median decrease of 19% vs. 1%, $P = 0.049$, respectively).

Conclusions: The addition of liposomal bupivacaine to bupivacaine in an interscalene block results in statistically significant reductions in diaphragm excursion and pulmonary function testing 24 h after block placement when compared to bupivacaine alone. This reduction, however, falls within the range of normal diaphragmatic function.

Recent Publications

- Sommer, M.*; de Rijke, J. M.*; van Kleef, M.*; Kessels, A. G. H.†; Peters, M. L.‡; Geurts, J. W. J. M.*; Gramke, H.-F.*; Marcus, M. A. E.* The prevalence of postoperative pain in a sample of 1490 surgical inpatients, *European Journal of Anaesthesiology*: April 2008 - Volume 25 - Issue 4 - p 267-274
- Salviz EA, Xu D, Frulla A, Kwofie K, Shastri U, Chen J, Shariat AN, Littwin S, Lin E, Choi J, Hobeika P, Hadzic A: Continuous Interscalene Block in Patients Having Outpatient Rotator Cuff Repair Surgery: A Prospective Randomized Trial. *Anesth Analg* 2013; 117:1485-1492
- Ilfeld, Brian M. MD, MS Continuous Peripheral Nerve Blocks, *Anesthesia & Analgesia*: October 2011 - Volume 113 - Issue 4 - p 904-925

bergx831@umn.edu



5th World Congress on Clinical Surgery and Anesthesia

November 21, 2022 | Webinar

Received date: 06-07-2022 | Accepted date: 10-07-2022 | Published date: 05-12-2022

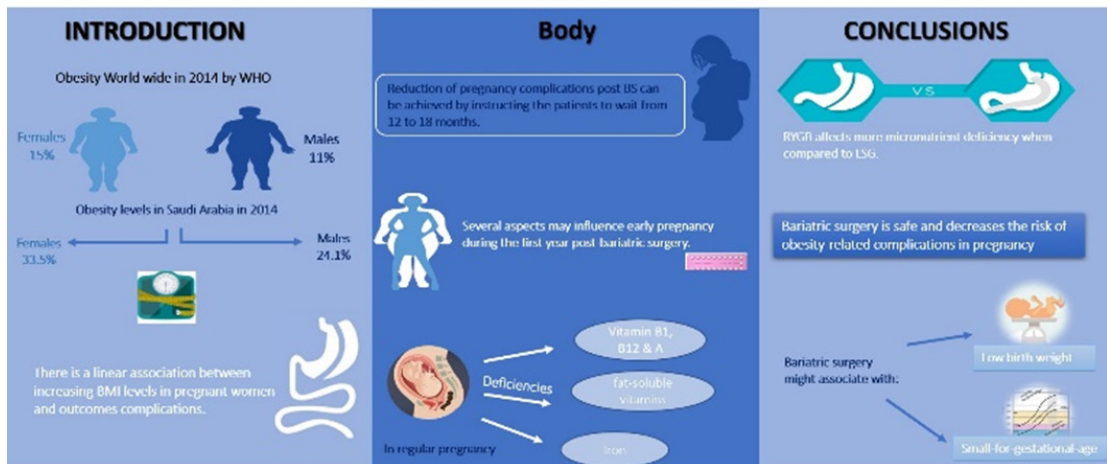
Maternal nutritional status and pregnancy outcomes post-bariatric surgery

Alamri S

National Guard Health Affairs, KSA

Obesity in childbearing women leads to pregnancy-related complications such as gestational diabetes mellitus, pregnancy-associated hypertensive disorders, and macrosomia. Weight loss helps reduce these complications. Studies show bariatric surgery reduces obesity-related complications during and after pregnancy. However, bariatric surgery might be associated with adverse outcomes, such as low birth weight and small-for-gestational-age infants. In addition, several studies suggest pregnancy occurring less than a year post-bariatric surgery adversely affects pregnancy outcomes and causes micronutrients deficiency since the dramatic weight loss occurs in the first year. These adverse outcomes may lead to nutritional malabsorption, such as anemia, low vitamin B12 and folic acid levels. The review aims to overview obesity-related complications during pregnancy and the benefits and risks of bariatric surgery on pregnancy outcomes and maternal nutrition status.

Maternal nutritional status and pregnancy outcomes post-Bariatric Surgery



Sara H. Alamri: RD, MSc^{1,2} and Ghalia N. Abdeen^{1,3*}, PhD



Recent Publications

1. Alamri, S., & Abdeen, G. (2022). Maternal Nutritional Status and Pregnancy Outcomes Post-bariatric Surgery. *Obesity Surgery*, 32(4), 1325-1340.

al3mri.sara@gmail.com