

Bariatric anesthesia ladder

Anesthesia for bariatric surgery in the morbid obese patients is challenging. In our previous report on “road map” toward establishing a clinical practice guidelines for anesthesia in the morbid obese patient, we have described the methodology we have used to reach those guidelines.^[1] We sought to sum up our preferred anesthetic technique for the morbid obese patients undergoing weight loss surgery in a kind of template that we called it “bariatric anesthesia ladder” [Figure 1]. We understand that the anesthetic management of the morbid obese patient requires a significant focus on a number of issues beginning with a background of the comorbidities associated with these patients. In the background box in the ladder, we focused on the importance of the anatomical, physiological, pharmacological, and pathological issues of these patients with special reference to cardiorespiratory system and control of diabetes mellitus with common association of delayed gastric emptying and possible aspiration. Furthermore in the background section, we surfaced the difficulties encountered during patient transfer and positioning on the operating table and the importance of protecting the superficial nerves from external pressures. We have focused on the careful preoperative evaluation and seizing the preexisting disease, if any, with the anesthetic management plan. Obstructive sleep apnea (OSA) disorder, difficult airway, and premedication were among the most important issues encountered in the preoperative evaluation section in the ladder with special reference to thromboprophylaxis. Then we moved to the intraoperative section the ladder where we have focused on preoxygenation to lessen the likelihood of desaturation during apnea that may be a valuable tool if difficulty is encountered in tracheal intubation. Intraoperative analgesia can be better achieved using continuous intravenous remifentanyl infusion. Also, we have focused on the monitoring with special reference to the neuromuscular transmission and its likelihood importance in monitoring the depth and adequacy of the neuromuscular junction (NMJ) since these patients usually require deep NMJ blockade. Also, the importance of the NMJ monitoring extended to the recovery phase whereby tracheal extubation to be performed only when the train of

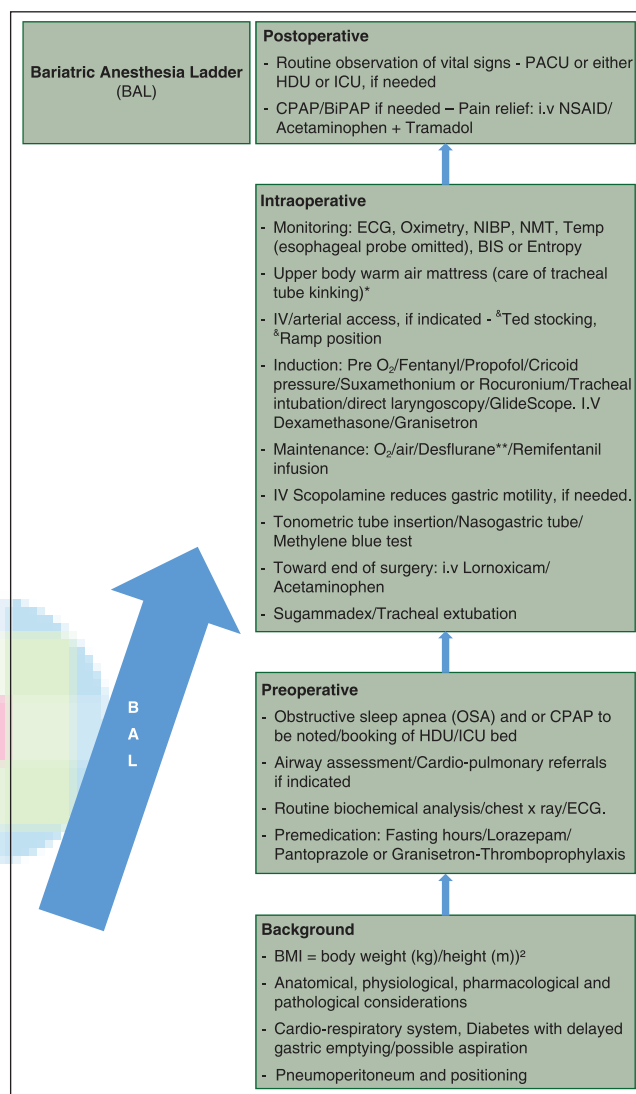


Figure 1: “Bariatric anesthesia ladder”. *Warm air flow mattress will soften the tracheal tube with possible kinking leads to sudden rise of airway, *pressure (personal observation), **desflurane reported as ideal for bariatric anesthesia due to its unique physical properties

four ratio attained a figure >0.9. Tracheal intubation better facilitated with either suxamethonium or rocuronium with the patient in ramp position to aid in successful tracheal intubation when a laryngoscope is employed. We have stressed upon the importance of using the GlideScope for tracheal intubation as well as for tonometric tube insertion in the esophagus under direct vision. Since the introduction of sugammadex as selective reversal agent to rocuronium fast track bariatric anesthesia became feasible. We believe that the sugammadex has changes the anesthesia practice in bariatric surgery with special reference to patients with

Access this article online	
Quick Response Code:	Website: www.saudija.org
	DOI: 10.4103/1658-354X.152816

OSA where the patients will be able to control their reflexes without any postoperative residual curarization. Regarding inhalation anesthetics, it was reported that desflurane is ideal for bariatric anesthesia due to its unique physical properties.

^[2] Intraoperative anesthetic management can be guided with a processed electroencephalogram monitor, bispectral index or entropy to help improve emergence and to enhance wakefulness in the postanesthesia care unit. The last section in the ladder is the postoperative period. We believe that the postoperative analgesia period begins upon the completion of the surgical procedure. In our practice, we use to give nonsteroidal anti-inflammatory drugs (NSAIDs) and acetaminophen as well as a small dose of opioid analgesic provided no contraindication. Careful consideration must be given to postoperative analgesic needs by minimizing the use of opioids and employing nonopioid analgesics including NSAIDs and acetaminophen.

We believe that such kind of “bariatric anesthesia ladder” will provide anesthesiologists with a comprehensive

anesthetic protocol for perioperative management of morbid obese patients undergoing weight loss surgery.

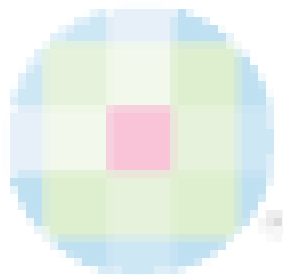
Abdelazeem Eldawlatly

*Department of Anesthesia, College of Medicine,
King Saud University, Riyadh, Saudi Arabia
E-mail: dawlatly@ksu.edu.sa*

REFERENCES

1. Eldawlatly A, Qureshi S, Schumann R. “ROAD MAP” toward establishing clinical practice guidelines for anesthesia in morbidly obese patients undergoing weight loss surgery. *Saudi J Anaesth* 2012;6:319-21.
2. La Colla L, Albertin A, La Colla G, Mangano A. Faster wash-out and recovery for desflurane vs sevoflurane in morbidly obese patients when no premedication is used. *Br J Anaesth* 2007;99:353-8.

How to cite this article: Eldawlatly A. Bariatric anesthesia ladder. *Saudi J Anaesth* 2015;9:115-6.



Announcement

iPhone App



Download
**iPhone, iPad
application**

FREE

A free application to browse and search the journal's content is now available for iPhone/iPad. The application provides “Table of Contents” of the latest issues, which are stored on the device for future offline browsing. Internet connection is required to access the back issues and search facility. The application is Compatible with iPhone, iPod touch, and iPad and Requires iOS 3.1 or later. The application can be downloaded from <http://itunes.apple.com/us/app/medknow-journals/id458064375?ls=1&mt=8>. For suggestions and comments do write back to us.