# EDUCATION - CLINICAL

- OUR FUTURE



# SRNA Sedation Sequels





FALL 2015, ISSUE 1

# DOSE-DEPENDENT ASSOCIATION BETWEEN INTERMEDIATE-ACTING NMB AGENTS AND POSTOPERATIVE RESPIRATORY COMPLICATIONS

**Background:** Duration of action increases with repeated administration of neuromuscular-blocking agents, and intraoperative use of high doses of neuromuscular-blocking agent may affect respiratory safety.

**Methods:** In a hospital-based registry study on 48,499 patients who received intermediate-acting neuromuscular-blocking agents, the authors tested the primary hypothesis that neuromuscular-blocking agents are dose dependently associated with the risk of postoperative respiratory complications. In the secondary analysis, the authors evaluated the association between neostigmine dose given for reversal of neuromuscularblocking agents and respiratory complications. Post hoc, the authors evaluated the effects of appropriate neostigmine reversal (neostigmine ≤60 g/kg

after recovery of train-of-four count of 2) on respiratory complications. The authors controlled for patient-, anesthesia-, and surgical complexity—related risk factors.

**Results:** High doses of neuromuscular blocking agents were associated with an increased risk of postoperative respiratory complications (n = 644) compared with low doses (n = 205) (odds ratio [OR], 1.28; 95% CI, 1.04 to 1.57). Neostigmine was associated with a dose-dependent increase risk of postoperative respiratory complications (OR, 1.51; 95% CI, 1.25 to 1.83). Post hoc analysis revealed that appropriate neostigmine reversal eliminated the dose-dependent association between neuromuscular-blocking agents and respiratory complications (for neuromuscular-blocking agent effects with appropriate reversal: OR, 0.98; 95% CI, 0.63 to 1.52).

Conclusions: The use of neuromuscular-blocking agents was dose dependently associated with increased risk of postoperative respiratory complications. Neostigmine reversal was also associated with a dose-dependent increase in the risk of respiratory complications. However, the exploratory data analysis suggests that the proper use of neostigmine guided by neuromuscular transmission monitoring results can help eliminate postoperative respiratory complications associated with the use of neuromuscular-blocking agents.

Ladha, K. S., Kurth, T., & Eikermann, M. (2015). Dose-dependent Association between Intermediate-acting Neuromuscular-blocking Agents and Postoperative Respiratory Complications. *Anesthesiology*, 122(6), 1201.

### **Inside Issue:**

- ✓ Graduation
- ✓ Stress reduction for students in clinical 5 days a week
- ✓ Preparing for the second semester
- ✓ Clinical spotlight Memorial/Mt Sinai



# **Clinical Spotlight**

### **Memorial Regional Hospital**



Lori Tolson is a CRNA at Memorial Regional Hospital. This is her fourth career and has a 4 month old at home that she is very proud of. She stresses the importance of balancing life, work, and home; which she notes is even possible throughout school! She attended CRNA school at Barry University. Prior to CRNA, she obtained a Sports Management degree at Florida State University and received her Nursing degree at Broward College. Lori got into the field of medicine through an influential friend who then suggested that the environment of anesthesia would be a great fit with her personality. She also expressed her love for the increased autonomy, compared to bedside nursing. As a CRNA, she enjoys witnessing first-hand the impact her decisions have on patients. Lori has been a CRNA for more than three years. Her advice to future CRNAs would be to never forget that you were a critical care nurse prior to anesthesia. Students should use that knowledge and experience to your advantage. If you're not scared of this environment or aren't happy with what you're doing everyday, then you should choose a different profession. With that said, go to clinical with confidence, but leave your ego at home!



### STUDENT NEWS

#### Class of 2015

Greetings class of 2017 and welcome to the next level of anesthesia school. From this moment forward, you will be continuously challenged physically, mentally and emotionally. The second semester of our program is notorious for intense academic requirements and ever increasing clinical demands. However, all should take solace in knowing that from this point forward, it will only become more rigorous. Integrity, discipline, motivation and positive attitudes are your most precious allies.



Below I offer pointers designed to guide you in positive directions.

-Form solid study groups of 4 individuals or fewer. Surround yourself with people that challenge, motivate and inspire you.

-No one plans for failure, they simply

fail to plan. Think ahead, prepare yourself, and then over prepare yourself

- -Anesthesia school is your full time job. There are no excuses for lack of preparation in any realm.
- -Look sharp! The expected level of professionalism is lofty. Take pride in your new career and pride in yourself.
- -Think holistically. Schedule yourself mandatory breaks throughout the study day. Plan ahead for days off and family time.
- -Sound nutrition and hard exercise is indispensable. Practice both disciples regularly and consistently. Each of the aforementioned is a skill that must be continually repeated and honed.
- -A healthy mind begets a healthy body and vice versa. Maintaining healthy weight and physical readiness pays immense dividends towards attaining high levels of performance and razor sharp focus.

Lastly, I challenge everyone in the Class of 2017 to actively seek out the path of MOST resistance, crush your perceived "limits" and excel to exceptional levels of professionalism and personal development.

Kevin Svercek, SRNA DNAP Class President 2015

#### Class of 2016

On behalf of the class of 2016 I would like to congratulate you on completing your first semester as SRNA's. The first semester tested us all and undoubtedly changed your daily life significantly. So now it is time to relax, don't pick up any books, don't concern yourself about what's to come, just enjoy time with your family and friends. This is because the spring will be perhaps the toughest semester you will encounter during the program. A full load of classes, a lab and two clinical days is no easy task. However, at this point, it is uncommon for students to fail, so keep doing what made you successful to this point and you will be fine.

Some students in the Mt Sinai cohort will be rotated out to Mercy hospital during the spring and summer semesters. Take full advantage of this opportunity as you will have more autonomy and exposed to regional anesthesia. Regardless of clinical site, now is the time to ask questions and start to fine-tune your skills. Seek out seniors, CRNA's and anesthesiologist; ask questions to fully understand core concepts. Knowledge of specific cases comes later. After clinical go home



and research peer reviewed articles on something you found interesting during the day (like placing arterial lines on the right radial artery during mediastinoscopy). At this point it is all about repetition and patience. "Excellence is not a singular act but a habit. You are what you do repeatedly." — Aristotle. You may feel you are not being exposed enough, deficient of autonomy, just know that your time will come.

Maikel Davalos SRNA Class President 2016

## **Faculty Tips for Success:**

Van der Leeuw, R. M., & Slootweg, I. A. (2013). Twelve tips for making the best use of feedback. *Medical teacher*, 35(5), 348-351.

#### Tip # 5 Balance between being self-confident and being humble:

A high level of self-confidence facilitates clear analysis of the content. Starting from a self-confident position can be helpful to view the content of the feedback even when it evokes emotional feelings because of negative or unconstructive feedback (Sargeant et al. 2008, 2009). This allows you to accept or reject the content of the feedback based on professional grounds. Hold that confidence to address improvement and develop a personal development plan, as it will increase the chance of being successful in the attempt to become a better doctor or teacher. But keep in mind that confidence can only exist with a humble attitude to yourself and the people in your surroundings.

# **Clinical Spotlight**

Mt Sinai Hospital



Jampierre (JP) Mato has over 9 years of experience as an anesthetist, J.P. remains one of Mt. Sinai's most valuable preceptors. His dedicated and humorous nature have helped him develop rapport with students and excel as a preceptor. As well as encouraging others to succeed, JP is maintaining an active stance in his own quest for knowledge. He is currently in the 4th semester of the post-master's DNP program at FIU. J.P. states that the most beneficial aspects of the DNP program have been, "acquiring the skills necessary to critically appraise research reports for possible translation into actual practice and coming to the realization that paradigm-shifting research conclusions are exceedingly rare." When he is not immersed in the DNP program, J.P. enjoys hands-on clinical practice and mentoring student nurse anesthetists in their professional development. J.P. has recognized three main attributes that facilitate a students' success in the clinical setting. The first is a desire to learn lessons from all clinical scenarios, regardless of patient The second is a desire to acuity. actively seek out new learning experiences, even in the face of physical and emotional exhaustion. The final attribute is a desire to pursue life-long learning, highlighting that earning a graduate degree signals the start of a lifetime of professional growth.

#### Class of 2017

The Little Haiti Cultural Event that was held, provided an amazing experience that couldn't have been more thoughtfully orchestrated. Dr. Glymph was leading our group and performed a great job in getting the children motivated to join our stand. Many different disciplines of healthcare joined the event. We were not only surrounded by children, but medical, nursing, and physical therapist's students that were demonstrating a variety of information that pertained to their profession.



In the 2017 class booth, there were manikins and supplies laid out for the children to interact with. As each student presented, fellow classmates would demonstrate proper management of the airway and corresponding techniques. After the presentation the children were asked to take the "challenge" of intubating the mannequin. Many agreed to do so and achieved the task of successfully

intubating. The children became overjoyed and elated when they got the tube in! Besides the excitement of the task, the children were eager to learn more about the profession of being a Certified Registered Nurse Anesthetist (CRNA). Many great questions were asked such as; salary, difficulty of the program, and what was required to become a CRNA. The Little Haiti Cultural Event aided these children by showing them some of their potential abilities, a multitude of career options, and a glimpse of a more rewarding future. As students, this event demonstrated to us the need for future events and mentorship of these children. Many of these children live in impoverished areas of Miami. The Little Haiti Cultural Event was a rewarding experience for us all and we hope to inspire a future generation of healthcare professionals!





## **Upcoming Events:**

#### **ACLS Recertification**

JAN 7 and 8, 2016 -ACLS/PALS/BCLS -Recertification for ALL Class of 2017

#### Conferences

#### **AANA**

Upper and Lower Extremity Nerve Block Workshop. Park Ridge, IL March TBA 2016

Mid-Year Assembly. Washington, DC April 3-6, 2016

#### **FANA**

Third Annual Sand and Surf Anesthesia Symposium. Marco Island February 18th-21<sup>st</sup>

#### **CRNA Day**

Tallahassee FL. January 18-19th.

#### Local

Current Topics in Anesthesia. Miami, FL December 9-12, 2015

Class of 2015 Commencement Date Dec 13, 2015

Dec 13, 2013

#### Class of 2015 Graduation Party

Dec 12, 2015 Courtyard by Marriott Miami Coconut Grove

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Dr. Derrick Glymph

Special thanks: Rebeca Nunez for pictures Mairelys De La Guardia (editing)

#### **Student Resources:**

#### 2017 Class Blog:

http://yysrna.edublogs.org/

Username: yysrna Password: classof2017

#### **Typhon:**

- ✓ Program Documents/ Templates
- ✓ Care plans
- ✓ Specialty rotation questions

