Fall 2015
Volume 5 Number1

What's TAPANing

The Official Newsletter of West Texas and Panhandle Region of TAPAN

What's inside this issue

Welcome back to the wesTpan neswletter!
We are excited to see a revival of energy in our region!

President's Message

By Jeanette Frantz MSN, RN

Looking Forward-(Midland)

Well, officially we are new… and small. However, my Mother always told me to never discount the power of something small. So with that said, I would like to introduce myself and Trina Mora for those of you that did not attend the Leadership Institute in Austin. And for those of you who did, here is a big Texas "Howdy".

Trina and I started about two years ago encouraging the nurses on the POCU/PACU to become more involved in our professional organization. Since then, we have moved from one member (Trina) to three, including myself. So we are hoping to have growth in the very near future.

We have moved from having one certified nurse (Trina) to having four. Are you beginning to see why I hitched my wagon to Trina's? Currently we have 17 nurses in a study group that will hopefully sit for their certification this fall or next spring.

I want to invite all of you to attend the pediatric seminar that is scheduled here in Midland at Midland Memorial Health. The date is October 24th. Registration begins at 7:30 am. We are currently working with an organization to have breakfast snacks and drinks provided and also with a rep that hopefully will provide lunch. More to come in the very near future regarding those details. Our community project will be to bring a canned goods to donate to our local food pantry.

With the support and training of our Abilene friends, Trina and I have agreed to serve as Vice President and President of our region. It has become increasingly apparent to me with every American Society of PeriAnesthesia Nurses (ASPAN) event I have attended, that ASPAN supports its members. We are looking forward to serving with our other officers.

Immediate Past President's Message

By Ellen Abaquin BSN, RN

As my tenure as President of West Texas and Panhandle Region (wesTpan) comes to an end, I cannot help but reflect on a few of our region's activities and accomplishments.

With the generous contributions of Mallinckrodt Pharmaceuticals and Ronnie Smith Transmission, wesTpan region was able to offer an educational presentation on April 11, 2015. Attendees were charged minimal registration fee, awarded 3.5 continuing education hours, and treated to free breakfast and lunch.

Amanda Raymundo (Lubbock) won the essay competition on "Why I Want To Go To Nurse Day at the Capitol". TAPAN awarded her an expense-paid trip to Austin on February 23-24 to attend the Nurse Day at the Capitol.

ASPAN National Conference was held this year in San Antonio, Texas on April 26-30.
Special mention goes to Conference Chair Cindy Hill (Lubbock) for a successful event. Edna Pabruada, Kat Tollett, Dale Connell, Jeanette Frantz, Lorna Taylor, and Vicky Lessing joined many TAPAN members as they celebrated for winning the much coveted Gold Leaf Award and Peoples' Choice Award for TAPAN's Eyeopener.

Our financial status is such that we continue to be able to offer scholarships to assist deserving region members with renewal of ASPAN/TAPAN membership, initial or renewal of CPAN or CAPA, as well as attendance to perianesthesia/perioperative related seminars. Scholarship is based on merit points and more information and application forms can be obtained from www.tapan-westtexas-panhandle.com

We donated toiletries to Hope Haven and the Serenity House in Abilene and canned goods to Food Bank of West Central Texas. Collecting non-perishable goods is our year round community project.

On August 8 and 9, Kat Tollett, Edna Pabruada, Jeanette Frantz, Trina Mora , and myself were able to represent our region to TAPAN Leadership Development Institute that was held in Austin, Texas. The information we learned will definitely be helpful in promoting the missions of TAPAN and wesTpan region.I also had the honor of presenting our new slate of officers: Jeanette Frantz (Midland) -President; Trina Mora (Midland) -Vice President; Kat Tollett (Abilene) Treasurer/Secretary and Newsletter Editor.

Thank you for the opportunity to serve you. My sincere gratitude goes to Lorna Taylor, Edna Pabruada, and Vicky Lessing for sticking with me through the years. From the bottom of my heart- thank you for all that you do.

I hope that you enjoy the rest of the summer. Be safe and stay in the shade if you can.

wesTpan Region Officers

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Editor's Note:

What's TAPANing is the official Newsletter of West Texas-Panhandle Region.

Contributions to *What's TAPANing* are encouraged. All articles and comments relevant to Perianesthesia care must be double spaced and typed. The author is responsible for providing appropriate references for accuracy and reliability of information.

Submission Deadlines:

Feb 15- Spring newsletter
May 15- Summer newsletter
August 15- Fall Newsletter
November 15- Winter newsletter

Send comments, suggestions, and/or submissions (including individual achievements!) to: tollettk473@gmail.com

Volunteer View

Submitted by Sussan Talamas

The recovery area in Hendrick Medical Center Hospital is an excellent place to experience great medical care. In PACU I, the nurses are very attentive to the patients who are released from the surgery rooms. At Hendrick Hospital, patients are always the number one priority, so I have learned to be attentive to anything the nurses and patients require. After volunteering this summer on Monday, Wednesday, and Friday in the mornings, I realized how much effort nurses input into their tasks so that their patients recuperate from a long, difficult, and exhausting surgery in an expeditious manner. Additionally, I had the opportunity to witness many types of surgeries that I never knew existed, and so many surgeries that I thought were very uncommon. After a surgery was completed, the doctor would check on their patients and some of the patients were really hurt from surgeries, while there were others who were really calm and restful. Therefore, I could see that the doctors cared not just about their patients while performing surgery, but also after the surgery was completed. On Fridays, there were many patients that were children in the surgery and recovery rooms, but most of them were just dental restorations. Even though they cried a lot, it was interesting to see how most of the kids remained calm, while some of the other children cried at the top of their lungs. I could see the different ranges of pain tolerance of the patients and their reactions after the medicine had entered their bodies. Hence, I was given not only a medical perspective, but also a psychological perspective.

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Being involved in such an active environment meant that every day was a completely different day. Some days there were only about 20 patients for the entire day. Then there were about 40 patients that were going through the surgery room and into the recovery area where I was volunteering. Again, even when there were several people to attend to, the doctors that performed surgeries still had the capacity to be very nice and really humble. I can say that I did not meet a single doctor that came from the surgery room and did not check and visit their patients, which served as a great example for me to follow.

During my first day in the recovery area at Hendrick Hospital, I felt very welcomed by all the nurses, especially Ellen who is the head nurse at that station. Ellen directed me to the changing room and helped me get into the rhythm of the working and performing well at the recovery area. There were times when I wanted to do even more to help, but the nurses were very appreciative of anything I could do to assist them. I also had the pleasure of meeting the technicians, Reyna and Abraham, who were always very approachable and really funny. Whenever I needed immediate help, like trying to find something within the recovery area, they would assist me in any way possible.

Ultimately, I decided to volunteer at the Hendrick Medical Center Hospital for the purpose of learning and gaining experience at a hospital. Luckily, I gained even more than I had hoped for because I was able to experience the psychological aspects and the medical aspects. Plus, I made wonderful connections and I learned how everything operates within the surgery and recovery area. Because I am from Mexico, I could compare how the processes within the hospitals in Mexico are very different from the ones in the United States. In Mexico, there are no pre-op stations or a PACU II station. There is simply only the surgery room and the recovery area (PACU I). Therefore, having an experience of hospitals from both countries is really important because it is easier to recognize how hospitals in a first world country function compared to hospitals in a third world country. Thus, my experience in the recovery area as a volunteer really was beneficial and I am going to continue volunteering in the recovery area throughout my semesters at Abilene Christian University.

Sussan Talamas, a very energetic volunteer, is a pre-med student at Abilene Cristian University. With her bright smile, she lights up the day in PACU.

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Save the Date!!

- July 13-Sep 7 CPAN-CAPA Registration Deadline
- Sep 18-20 in Clayton, MO. *Leadership Development Institute.* Interested in becoming an active participant in ASPAN? This is a great starting point!
- Sep 26 in Houston- *Perianesthesia Certification Review- Updated!*Presented by Myrna Mamaril.
- Oct 5-Nov 28 Fall Certification Administration window
- Oct 16-18 The 39th Annual State Conference: *Ignite, Inspire & Renew Your Perianesthesia Passion!* In Sugarland, TX. Various topics will be presented including Ethics and Jurisprudence requirements for TX BON. Visit http://www.tapan.org for more info!
- Oct 24 in Midland-*Pediatrics:Little Bodies, Big Differences.* Presented by Kim Kraft

Registration and further information can be found at www.aspan.org or ask a member of TAPAN!

Submtted by Kristen Brehm

In Romans 12:10, God calls His people to "love one another with brotherly affection," and I have seen no better example of this than during my time as a volunteer at Hendricks Medical Center. As a PreMed/Biochemistry Major at ACU, I thought it would be a good idea to immerse myself in the hospital environment as soon as possible – allowing myself to be exposed to this atmosphere to gain career experience for future reference, but to also help me decide whether or not this path was truly God's calling for my life.

For many people, hospitals are not typically their favorite place to be – it is associated with past pain, suffering, sickness, and bad news; however, Hendricks is not like other hospitals where patients are simply a name on a piece of paper containing a medical health history. Instead, patients are treated like real people – people who need comfort, instruction, help, and healing. When asked, I struggled to fully express the experience I have had as a PACU-1 volunteer. I received hands-on training for the different tasks that must be completed to keep the hospital system running cohesively, and also for the many caregiving processes done during patient care and recovery. But while this first-hand exposure is pricelessly beneficial, I have learned far more than just technical information and procedures. I have gained the knowledge of what it is like to be part of a community of nurses who love their patients, their coworkers, and their job. I experienced what it feels like to know you are helping someone who cannot help themselves. And most importantly, I now know what a special calling, privilege, and responsibility it is to be the healing hands of Christ.

The nurse family in PACU-1 has taught me the importance of maintaining a Christian character when dealing with medical responsibility – witnessing as they turn fear into comfort, anxiety into peace, and pain into smiles for their patients. Our greatest weapon in this world of disaster, tragedy, and brokenness is love, and I have been greatly blessed during my time as a volunteer to be a part of the many different forms of love and genuine care that fill the halls of Hendrick Medical Center.

Kristen is a pre-med student at Abilene Cristian University. A hard worker and fast learner, she is an asset to the healthcare field.

Vicky Lessing, Paulita Narag, Ellen Abaquin, and Christy Garcia

These are a few of the folks attending joint conferences held with wesTpan and AACN.
Sharing knowledge for the brain and the belly!

Pre-op and PACU nurses enjoy an informative lecture and dinner.

Tranexamic Acid Overview

Submitted by Amy Perry RPh, OR Pharmacy Coordinator Hendrick Medical Center

By now you have probably seen many orthopedic surgeons ordering tranexamic acid. This will provide basic information you can use for general information in your practice.

Tranexamic Acid is currently being ordered IV to decrease perioperative bleeding and blood transfusions during and after total shoulder, knee and hip procedures. Each surgeon has their own ordering regimen, call your facility's pharmacy if you are needing clarification. You might from time to time even see an order for this after a dental procedure (this will be ordered as the PO form), again this is to decrease bleeding.

Currently, dosing is 20mg/kg IV as a one time dose just before the procedure begins, preferably before the tourniquet is placed if one is used during the procedure. It can be given over 5-30minutes and works as a antifibrinolytic/antihemophilic/hemostatic agent.

Although complications are rare with this drug, here are the Contraindications and Warnings/Precautions as listed in Lexi-Comp. This will give you an idea of what to watch for:

Contraindications

Injection: Hypersensitivity to tranexamic acid or any component of the formulation; acquired defective color vision; active intravascular clotting; subarachnoid hemorrhage

Oral: Hypersensitivity to tranexamic acid or any component of the formulation; active thromboembolic disease (eg, cerebral thrombosis, DVT, or PE); history of thrombosis or thromboembolism, including retinal vein or retinal artery occlusion; intrinsic risk of thrombosis or thromboembolism (eg, hypercoagulopathy, thrombogenic cardiac rhythm disease, thrombogenic valvular disease); concurrent use of combination hormonal contraception

Warnings/Precautions

Concerns related to adverse effects:

• CNS depression: May cause CNS depression, which may impair physical or mental abilities; patients must be cautioned about performing tasks which require mental alertness (eg, operating machinery or driving).

• Hypersensitivity reactions: Severe hypersensitivity reactions have rarely been reported. A case of anaphylactic shock has also been reported in a patient who received an IV bolus of tranexamic acid.

• Ocular effects: Visual defects (eg, color vision change, visual loss) and retinal venous and arterial occlusions have been reported; discontinue treatment if ocular changes occur; prompt ophthalmic examination should be performed by an ophthalmologist. Use of the injection is contraindicated in patients with acquired defective color vision since this would prohibit monitoring one endpoint as a measure of ophthalmic toxicity. Ligneous conjunctivitis has been reported with the oral formulation, but resolved upon discontinuation of therapy.

• Seizure: Seizures have been reported with use; most often with intraoperative use (eg, open chamber cardiac surgery) and in older patients (Murkin 2010). The mechanism by which tranexamic acid use results in seizures may be secondary to neuronal gamma aminobutyric acid (GABA) inhibition.

• Thrombotic events: Venous and arterial thrombosis or thromboembolism, including central retinal artery/vein obstruction, has been reported. Use the injection with caution in patients with thromboembolic disease; oral formulation is contraindicated in these patients. Concomitant use with certain procoagulant agents (eg, anti-inhibitor coagulant complex/factor IX complex concentrates, oral tretinoin, hormonal contraceptives) may further

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increase the risk of thrombosis; concurrent use with either the oral or injectable formulation may be contraindicated, not recommended, or to be used with caution.

• Ureteral obstruction: Use the injection with caution in patients with upper urinary tract bleeding, ureteral obstruction due to clot formation has been reported.

(Lexi-Comp online).

REFERENCES:

1) Wolters Kluwer health. Lexi-comp online, Hendrick Medical Center intranet. Tranexamic acid: Contraindications, and Warnings/Precautions. http://online.lexi.com/lco/action/doc/retrieve/docid/patch_f/7798 Accessed August 26, 2015.

Kat Tollett and Tina Medina with toiletries donation to Hope Haven

Grab a friend and attend this informative lecture!
Hope to see y'all there!

ASPAN
American Society of PeriAnesthesia Nurses

Summer/Fall 2015 Seminar Series

Pediatrics: Little Bodies, Big Differences

Presented by:

Kim Kraft MSN RN CPAN CAPA

Date:	Saturday, October 24, 2015
Time:	7:30 AM Registration AM Coffee/tea service – LUNCH IS ON YOUR OWN
Program Time:	8:00 AM – 4:55 PM
Location:	Midland Memorial Hospital Conference Center 400 Rosalind Redfern Grover Parkway Midland, TX 79701 www.midland-memorial.com

Topics Include:
- ▶Preanesthesia and Preoperative Assessment
- ▶Procedural Sedation
- ▶Pediatric Anesthesia
- ▶Postanesthesia Complications
- ▶Postanesthesia Care – Phase I through Phase II
- ▶Fluid Management
- ▶Anatomy & Physiology – Special Needs of Pediatric Patients

Target Audience:
All perianesthesia nurses

Purpose:
To enable the nurse to implement competent pediatric patient care in order to maintain standards and safe patient care in the perianesthesia setting

Overall Program Objective:
Discuss age-specific care for the pediatric perianesthesia patient

7.25 Contact Hours

The Registration Form is found on the back of this page.
Please photocopy and pass along to other interested colleagues.

American Society of PeriAnesthesia Nurses (ASPAN) is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (ANCC-COA).

Additional provider numbers: Alabama #ABNP0074, California #CEP5197, Florida #50-114.

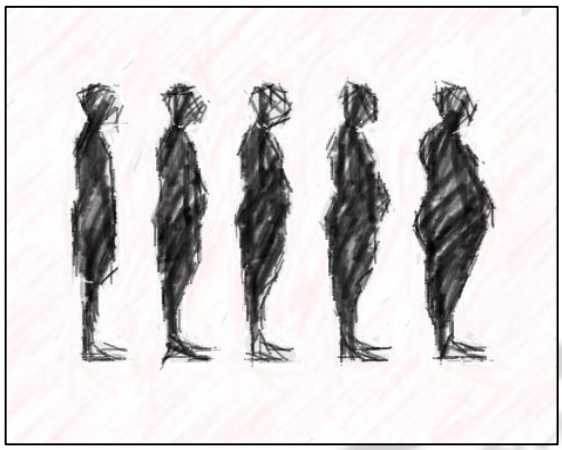
ASPAN - The Source for Perianesthesia Education

Check This Out!!!

39th Annual TAPAN State Conference

October 16 –18, 2015

Sugar Land Marriott Town Square, 16090 City Park, Sugar Land, TX 77479



Opioid use for Obese Patients in the Post-Operative Setting

Submitted by Katherine Tollett BSN, RN, CST

Every body is different and each one reacts differently to medications given. So why is it that obesity-related medication therapy keeps creeping into topics of discussion? What is the *big* deal? For starters, there are similarities among the obese body that affects how medications are distributed and metabolized. Often, patients with obesity have comorbidities that can restrict what medications are available to them for pain control. And these patients must be monitored more closely due to physiologic changes that occur over time due to the effects excess weight. Options for optimum pain control are continuously being studied as the overall population is becoming increasingly obese. Patient safety is always the top priority in caring for our patients, whatever the size.

Chronic pain is reported to be a prominent problem in obese patients (body mass index of 30-34.9) than in normal weight (18.5- 24.9) patients. The higher weight category correlates with higher rates of osteoarthritis, fibromyalgia, diabetes, and cardiovascular disease which can cause chronic pain [1]. Specific post-operative complications include "respiratory (hypoxia, atelectasis, arrest), cardiovascular (ischaemia, arrhythmias, infarction), thromboembolic episodes, and wound infections" [2] for individuals considered to be obese. While body mass index (BMI) is the most often seen tool to measure patients, the more important factor relating to medication administration is the ratio of adipose tissue to lean body tissue. This is the factor that dictates how the body metabolizes and makes medications available for use. Highly lipophilic drugs may be distributed differently in the presence of excess adipose tissue. In a literature review done by Lloret-Linares et al., it is stated: "Protein binding is thought to be limited in patients with higher ratios of adipose tissue allowing for increased concentration of medications in free plasma"[3]. Basically, some medications can "slide" in and out of fat cells and are likely to be released more slowly into circulation to elicit an effect. In this case, a few doses of opioid may be administered with little results, building up, until it "slides" out to be available to the body for use, at which time the patient could be excessively sedated or worse. Obese patients' liver fatty changes may also affect total clearance of medications.

Decreased renal function and, therefore, altered creatinine clearance, affects the metabolism of medications. Also present in the liver is the CYP450 enzymes pathway affecting processing of medications which influences drug effects and clearance [1]. Another common factor in the patient who is obese is decreased cardiac performance. Tissue perfusion may be reduced as a result of the heart's inability to effectively perfuse all the tissues present limiting the delivery of the drug(s) to the target area [1]. More common in the obese patient than in normal weight patients is the presence of the G allele of the OPRM1 gene in the mu receptor (the central nervous system receptor for opioid medications). This means that pain sensitivity and morphine-related pain relief is decreased. On the other hand, this also means that the requirement for morphine and fentanyl for pain relief is increased [3]. Genetic and physical alterations from that of normal weight patients greatly influence the kinetic and distributive properties of medications used in the perioperative arena.

Patients with excessive weight have a higher incidence of respiratory issues (such as obstructive sleep apnea) which can be further compromised by

certain sites of surgery (especially thoracic or abdominal). The nurse must exercise close monitoring of respiratory status in these cases. Fentanyl, due to its lipid solubility, is favored in patients with any type of end organ failure and has minimal hemodynamic effects but can complicate assessment of those with less severe pain [4]. For most intravenous opioids and anesthetic drug administration, it is optimal to use lean body weight as opposed to total body weight. Often, adult recommended dose or total body weight is used to determine the amount of drug administered. This practice can result in overdose and should be avoided, particularly by anesthesia providers [5].

What does all of this mean in *my big* picture, in *my* practice? According to the National Guideline Clearinghouse, "the postoperative use of opioids should be avoided in obese patients unless absolutely necessary" [2]. If it is deemed necessary and a patient controlled analgesia machine is ordered, a basal rate should not be included for the obese patient population [2]. Another tactic, currently becoming more popular as standard practice, is the multimodal approach. The use of medications that block pain at various areas of pain perception along the pain pathways reduce the amount of opioids needed for control. Medications such as pregabalin (ie: Lyrica), gabapentin (ie: Neurontin), and ofirmev given preoperatively can reduce the amount of opioids used postoperatively. In addition, regional anesthesia like epidurals and femoral nerve catheters can lower the need for opioid administration [1]. In order to safely care for the patient with excessive weight, multimodal pain control, supplemental oxygen, maintenance of head of bed at 30 degrees or higher, continuous pulse oximeter (until patient holding at or above 90% while asleep) or end-tidal carbon dioxide monitoring, blood pressure management, and early mobilization are strategies which should be employed [1,6]. Obese patients' respiratory status is of utmost concern due to many factors. Body habitus creating pressure on the chest and often difficult intubation are reasons to monitor these patients closely and continuously in the post-operative phase of care. "According to the American Society of Anesthesiologists closed claims database, 48% of adverse respiratory events secondary to opioids were in obese or morbidly obese individuals"[5]. A final safety note for any patient regardless of weight, dose amount should not be dependent on patient pain rating [4]. Consider the patient who needs to be aroused from sleep in order to ascertain a report of pain. Scales to measure a patient's sedation level can help keep tabs on the condition of a patient as it relates to the use of opioids. While several exist, one scale was developed specifically for use in patients being medicated with opioids: the Pasero Opioid Sedation Scale (POSS). "S" for sleep and numbers 1 through 4 give a value to the patient's level of sedation with 4 being "somnolent with minimal or no response to verbal or physical stimulation"[7]. Sedation is a precursor to respiratory depression and, especially in the obese patient, some may be more sensitive to and/or experience delayed reaction to the sedative effects of opioids. If the patient is assessed at a level of 4 on the POSS after administration

$$ wesTpan Financial Report $$

Quarterly report as of 6/30/15 totals
INCOME (including dues, registration fees, fundraising, sponsorship): $694.15
EXPENSES (seminar expenses, scholarship): $434.47
BALANCE as of 6-30-15: $2,235.19

opioid(s), they are in distress and immediate intervention(s) must be initiated.

Adequate pain control must not be avoided due to these increased risks because under-treatment can lead to multiple post-operative consequences. Increased morbidity and mortality, increased length of stay, lower quality of life, and subsequent development of chronic pain are risks involved in cases of inadequate pain control. Pain affects every body system, hindering normal activity and, therefore, normal healing abilities. A balance exists between adequate pain control and sedative effects but is achievable with the proper education and vigilance of the peri-anesthesia nurse. The *big deal* is to use your knowledge and skills to provide safe patient care while integrating multimodal strategies to achieve pain control. Every day nurses assess thoroughly, address pain appropriately, and maintain awareness of signs of distress. While every body is different, patients with obesity require closer attention for the challenges they provide.

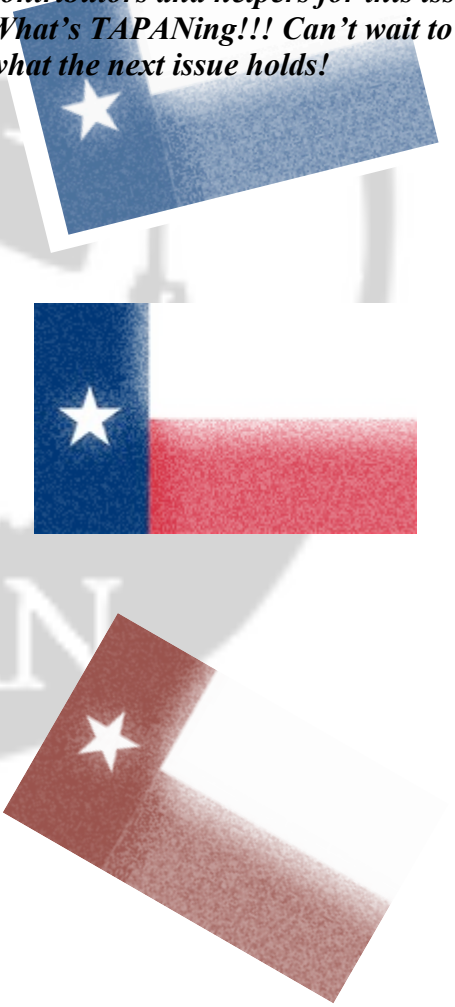
Katherine Tollett graduated from Texas Tech School of Nursing in 2013. Previously a CST, she has worked at Hendrick Medical Center for over 10 years. She enjoys working in PACU and loves to learn something(s) new every day.

References

1. D'Arcy Y. Managing pain in obese patients: meeting weighty challenges. *Nursing2015.* 2015;45(2):42-49.
2. Bader P, Echtle D, Fonteyne V, et al. AHRQ Post-operative pain management. In: Guidelines on Pain Management. Available at: http://www.guideline.gov/content.aspx?id=23897&search=obese+patients+post+operative+pain#Section420. Accessed April 4, 2015.
3. Lloret-Linares C, Lopes A, et al: Challenges in the optimisation of post-operative pain management with opioids in obese patients: a literature review. *Obes Surg.* 2013;23(9):1458-1475.
4. Pasero C. Safe opioid titration in patients with severe acute pain. *J Perianesth Nurs.* 2010;25(5):314-318.
5. Ingrande J, Lemmens, J. Dose adjustment of anaesthetics in the morbidly obese. *Brit J Anaesth.* 2010;105(1):i16-i23.
6. Schug S, Raymann A. Postoperative pain management of the obese patient. *Best Pract Res Clin Anaesthesiol.* 2011;25:73-81.
7. Pasero C. Assessment of sedation during opioid administration for pain management. *J Perianesth Nurs.* 2009;24(3):186-190.

And last but not least…..

A BIG THANK YOU to all of the contributors and helpers for this issue of What's TAPANing!!! Can't wait to see what the next issue holds!



WEST TEXAS AND PANHANDLE REGION
2010
TAPAN