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I would like to wish all of you a happy and prosperous 2016. That being said there is a lot of work to be done to ensure that 2016, and the future for that matter, will be both. Medicine, as always, is under attack both financially and professionally.

Even though we are in a non legislative year, the wheels of politics are turning in Austin, and physicians issues are in the forefront. It has been stated several times that the first bill being dropped in the 2017 legislative session will address Balanced Billing for out of network benefits. At first glance this may not seem like a big problem, but consider the physician providing emergency services or hospital coverage.

If a patient presents to the hospital and requires emergency medical services, the physician is required to provide them. If the physician is not in the patient’s network, then he will be reimbursed at the networks contracted rate and then send a bill to the patient for the difference between the physician’s charges and the amount paid—all of which seems logical and fair. In 2015 the legislature, with backing of insurers and consumer groups, passed a law allowing the use of mediation to settle disputes involving sums of more than $500, with the loser paying mediation costs.

The question that was never addressed is why physicians aren't in the network, and the answer is complicated. The negative spin is that the “Greedy Doctors and Hospitals” are looking to make more money by gouging the patient and driving up costs, but there are other, more viable reasons for this. Many insurance networks are small and exclusive by design in order to save money, so the physician could never be in network. Other times the patient belongs to a network with rates so unfavorable that the physician has found it economically unfeasible to accept their rates. Additionally, the patient may be from another area and physician participation in that plan is impossible. There are many more reasons but these are the ones that easily spring to mind.

The important things is that we “Don’t throw out the baby with the bathwater”. We need to protect our ability to provide patient care, while being fairly compensated. Our cost of doing business does not go down based on our “out of network” status, but neither does the quality or level of care we provide. Consumers may feel victimized by what they see as an unjust system, but this should be addressed by their insurance carrier proactively, explaining to the consumer exactly what they are buying. This problem would be better addressed by fair market pricing for services and better plan participation and negotiation rather than legislation. Giving the insurance companies the unilateral power to determine rates for all physicians, both in and out of network, will have severe financial implications and ultimately compromise access to care.

The positive in all of this is that the patient is on our side for the most part. Research done on behalf of the Texas Medical Association (TMA), shows that the public believes that we should be fairly compensated for our work, but it was the element of surprise that bothered them. If they could budget for the cost, the sting of the bill would not be so bad. Price transparency may be an avenue that we as physicians need to consider in the future. The exact mechanism of this will need to be considered carefully, but certainly openness is generally a good policy.

Regardless of the ultimate outcome of this saga, know that the the El Paso County Medical Society and the TMA will be fight for the most positive outcome for Medicine. Membership in these organizations, regardless of institutional affiliation, is essential to maintaining access to quality patient care. I therefore urge everyone to renew their membership, or become first time members, give to the Political Action Committees, and stay involved. We all need to remain a part of the process to ensure the best for physicians and our patients.

David J. Mansfield, MD
President, El Paso County Medical Society

The El Paso County Medical Society is once again updating our files. In this ever changing technological world, we realize emails and phone numbers change frequently. Please assist us by sending us your current Practice Name, Address, Phone Numbers, Email and if you have a current photograph please email to epmedsoc@aol.com
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“In ancient mythology,” Langdon offered, “a hero in denial is the ultimate manifestation of hubris and pride. No man is more prideful than he who believes himself immune to the dangers of the world.”

— Dan Brown, Inferno

Infectious disease exists at this intersection between real science, medicine, public health, social policy, and human conflict. There’s a tendency of people to try and make a group out of those who have the disease. It makes people who don’t have the disease feel safer.

— Andrea Barrett

We are no longer a country in isolation. In the late 20th century, if you were a resident of the United States you would have been largely protected from dangerous infectious disease. Smallpox was gone, polio had been eradicated in this country, and other childhood vaccines had made deaths from Pertussis, invasive HiB disease and Measles a thing of the past. Dengue, Ebola, and Malaria were diseases to which only people from “foreign” countries succumbed. However, the 21st century has seen an emergence in new infectious diseases within the United States. Much of this is due to the increase in travel (both U.S. citizens traveling abroad and foreign citizens traveling here) and more fluid borders, in general. Other causes of increased infectious disease include the back lash against childhood vaccines and the lack of understanding behind public health measures to prevent these diseases.

The CDC defines emerging diseases as “infectious diseases whose incidence in humans has increased in the past 2 decades or threatens to increase in the near future. These diseases, which respect no national boundaries, include:

- New infections resulting from changes or evolution of existing organisms
- Known infections spreading to new geographic areas or populations
- Previously unrecognized infections appearing in areas undergoing ecologic transformation
- Old infections reemerging as a result of antimicrobial resistance in known agents or breakdowns in public health measures.”

In the last 3 years, the United States has seen several outbreaks of Measles and Pertussis, plus the Ebola scare. The influenza virus underwent antigen shift recently in 2009 when the H1N1 strain emerged. Additionally, mosquito-borne viruses like Dengue, West Nile and Chikungunya continue to cause morbidity and mortality yearly. This year, we have the Zika virus, transmitted by the same mosquitoes causing Dengue and Chikungunya.

Prior to 2015, Zika virus cases had been seen only in Africa, Southeast Asia and the Pacific Islands. First case of Zika seen in Western Hemisphere was in Brazil in May 2015. Since that time, there have been a total of 193 travel associated cases reported in the United States (at least 1 case reported in every U.S. state, although no locally transmitted cases at this point). Additional local cases have been reported in U.S. Territories, with 159 cases in Puerto Rico, 13 in American Samoa and 1 in the U.S. Virgin Islands.

On February 1, 2016, The WHO called Zika virus a Public Health Emergency of International Concern. With our proximity to Mexico and a migrating population, it will not be long before we have a local case of Zika in Texas. If you are a practitioner who works in areas of Maternal/Child Health or International Health it is prudent for you to be updated on the current recommendations for infants, children and pregnant women (or women considering pregnancy).

Please see the more specific information in the article by the El Paso Dept. of Public Health in this issue.

We should never again feel that any infectious disease is in someone else’s back yard.


3Op. Cit

In Memoriam

On November 8, 2015, Dr. Lelia Teresa Gaines, Army Lt Colonel-Retired, decided after a brief illness that she could no longer delay her eternal space odyssey. Dr. Gaines was born in Washington, D.C. on August 5, 1943 to Ruth and Mosely C. Gaines, both preceded her in death. Besides her Best Friend Forever of 29 years and caretaker, Dr. T.A. Ware-Asbury, Dr. Gaines is also survived by a sister, Marlene Stringfellow of FT Washington, Maryland and brother, Mosely C. Gaines (Edie) of Washington, D.C. Dr. Gaines graduated with honors from Howard University with BS degree in Zoology and received her MD from Howard University School of Medicine. Dr. Gaines was commissioned a physician in the US Army Medical Corps where she specialized in Allergy and Immunology. During her Army Career, she served in numerous command positions and duty stations and was recognized with numerous awards including the Army's Legion of Merit. After retiring from the army in 1993 and opened her private medical practice in Allergy and Immunology and practiced until January, 2014. During her stay in El Paso, Dr. Gaines was very active in many civic and political organizations. Dr. Gaines was interred in Arlington National Cemetery, Arlington, Virginia, with full Military Honors on March 3, 2016.
Atrial Fibrillation Ablation with Cryoballon and Rotors Modulation: Local Experience with Initial 40 Cases

K. Wong, MD
David Beltran, RN
Alex Munoz, CVT
Eddy Velez, RN
Alejandro Sangines, CAS
Yolanda Lespron, CEPS

Abstract: Medical treatment for atrial fibrillation has been unsatisfactory for symptomatic patients who fail anti-arrhythmic drug therapies. Ablations, which have become safer and efficient, provide more options for some.

Atrial fibrillation (AF) currently affects more than 2 million US adults. It is a leading cause of hospitalization, congestive heart failure, death and perhaps dementia. Rates of inadequate responses to therapy intended to control ventricular rate, or to restore and maintain sinus rhythm have been disappointing. Since the observation of Haissaguerre, et al1 that ectopic beats from the muscle fibers in the vicinity of pulmonary veins can trigger AF in the vulnerable left atrial, percutaneous procedures were designed to electrically sequester the arrhythmogenic pulmonary veins (PVs) from the rest of the atrium. Point by point welding of the atrial tissue with radio frequency energy has been the standard method to isolate the PVs. That procedure is time-consuming and its effectiveness to achieve durable transmural lesions is unpredictable. Over the last decade, cryoballoon ablation, by achieving a tissue temperature below -50C, has emerged as an effective alternative method to induced durable circumferential lesions in the antrum of PVs with shorter procedure time. Medtronic Arctic Front cryoballoon system was used in more than 70,000 procedures globally with long term success being equal to or perhaps better than radio frequency ablation and with a lesser risk of complications of thromboembolism and post-op atrial arrhythmias.

Ectopies from the PVs can surely trigger AF, but instances of sustained AF after the trigger mechanism had been suppressed defy explanation. Results from animal and clinical studies4, indicate that both paroxysmal and persistent AF are sustained by spiral waves (rotors) and focal sources. The locations of rotors and focal sources are patient specific and are sufficiently stable to be mapped and eliminated by localized ablation. Focal Impulse and Rotor Modulation, so called "FIRM" is an FDA-approved procedure for AF ablation since 2013.

The authors have been performing cryoballoon ablations and FIRM-guided ablations for AF over the last two years. This article is reporting results of our first 20 cases of cryoballoon and first 20 cases of FIRM-guided ablations in patients with AF.

Methods
All patients with persistent symptomatic AF despite anti-arrhythmic therapy were informed of cryoballoon ablations and FIRM-guided ablations as options. The inclusion criteria: candidates for general anesthesia, have TEE proven clean left atria with absence of thrombus in the atrium and atrial appendages, and established adequate oral anticoagulants for at least 3 weeks. Warfarin [Coumadin®] was continued throughout the pre-op and post-op periods. New oral anticoagulants (NOAC) were discontinued 36-48 hours before the procedures, and resumed 2-3 hours after the procedures once adequate hemostasis was achieved at the vascular access sites. During the procedure, all patients received heparin titrated to maintain ACT >350 seconds. Prior anti-arrhythmic drug therapies were continued for three months after the procedure (blanking period), and other than cardioversion for symptomatic arrhythmias, no repeated EP procedures were performed within that 3-month period. Recurrence of AF, defined as any AF lasting longer than 30 seconds was monitored at office visits ascertained using EKGs, Holter recordings at 3, 6 and 9 months, and some patients had clinically indicated pacemakers and ICDs with AF detection algorithms.

Cryoballoon Ablation Procedure:
Deflectable "Flex Cath" is placed via trans-septal puncture into the left atrium. A 28mm diameter 2nd Generation Cryoballoon with circular mapping catheter (Achieve-TM) is placed in the

Fig 1. Contrast injection to the left superior pulmonary vein to confirm complete occlusion of the vein with no leaking of contrast back to the left atrium. Patient had mitral tissue prosthetic valve.

Continued on page 8
pulmonary vein after ACT is > 350 seconds. Circumferential occlusion of the pulmonary vein is confirmed by contrast injection, (Fig 1) end-tidal CO₂ reduction° and wedge pressure recordingº from the distal port of the cryoballon.

Freeze and thaw cycle of 3-4 minutes was started. Dissociation of PV potential from the left atrium far-field potential is indicative of effective ablation. (Fig 2)

The esophageal temperature probe is moved as close as possible to the cryoballon. If at any time the esophageal temperature drops below -25°C, freezing is terminated to avoid esophageal damage. A rapid drop to -40°C within 30 seconds of freezing also requires that freezing is stopped immediately, because it indicates that the balloon is located too far distally, thus risking damage to the pulmonary veins. The sequence of ablation proceeds initially with the left superior pulmonary vein, followed by the left inferior pulmonary vein, right inferior pulmonary vein, and lastly the right superior pulmonary vein. Ablation of the right pulmonary veins confers risk of damage from hypothermia because of the close proximity of the right phrenic nerve. Using general anesthesia without paralytic agents, pacing the phrenic nerve is achieved by an electrode placed at the high SVC. The strength of diaphragmatic excursion is ascertained by placing the operator’s hand over the patient’s right lower abdomen. Any reduction of contractile power of abdominal muscle requires immediate termination of cryoablation to avoid phrenic nerve damage. After all the PVs are ablated, the circular mapping electrode is again placed into each vein to confirm continued electrical isolation. If the patient remains in AF, electric cardioversion is performed before the patient is recovered from general anesthesia. Patients are discharged after an over-night stay.

FIRM-guided procedure: An intra-cardiac echocardiogram (ICE) catheter is used to guide trans-septal puncture, and to measure the left atrial size, which dictates selection of the optimal 50, 60 or 70 cm diameter mapping basket size. Electro-anatomical mapping of the left atrium is obtained using Carto system (BioSense Webster, Diamond Bar, California). A 64-pole mapping basket of proper size is deployed inside the left atrium with a deflectable sheath. (Fig 3)

Contact of the basket to the atrial wall is of paramount importance for accurate mapping of rotors and focal impulses. Mapping is done in AF, so if the patient is in sinus rhythm, then rapid atrial pacing is performed to induce AF. AF recordings from the widefield-of-view basket are exported for analysis to a computa-

Fig 2. Progressive separation of atrial potential (A) from pulmonary vein potential (PV) until complete block in the 4th complex

Fig 3. 64 poles Mapping basket deployed in left atrium with ablation catheter placed over base of left appendage for energy application to the rotor

Fig 4. AF termination during rotor ablation

Continued on page 9
Atrial Fibrillation Ablation with Cryoballon and Rotors Modulation: Local Experience with Initial 40 Cases (Continued)

A pressure-sensitive electrode was used recently for ablations. The area of ablation averaged 2 square cm. The rotors have no local electronic "fingerprint", and was not related to complex fractionated atrial electrogram (CFAE). After all rotors and foci are ablated, repeat mapping is done to confirm rotor elimination. Based on the results of PRECISE-PAF Trial and other recent studies, no pulmonary veins isolation is performed. Electrical cardioversion is done if the patient is still in AF and patients are discharged after an overnight stay. The demographic characteristic of the patients and the results are tabulated in Table 1.

Discussion:
Both cryoballoon ablation and FIRM-guided procedures effectively achieve sinus rhythm in patients with paroxysmal and persistent AF, with a success rate in excess of 70%. In our small study, FIRM-guided ablation patients had more unfavorable demographic factors such as sleep apnea, COPD, obesity, low left ventricular ejection fraction, longer duration in AF and larger left atrial size. Our lab acquired the equipment to perform FIRM ablation procedures later, so follow-up of FIRM cases was accordingly shorter. Two of the 4 patients who had AF recurrence after cryoballoon ablation subsequently underwent FIRM procedures with no clinical recurrence.

Cryoballoon ablation can stop AF "Cold". FIRM-guided ablation is "Scorching Hot". These ablations can be accomplished "Fast and Furious" with minimal collateral damage to the surrounding tissues. There were no major complications in our series. Perhaps, we are closer to a cure for the arrhythmia than before. With ongoing technical advances and clinical experience, the procedures can stop AF formost patients, and thus prevent complications of AF such as congestive heart failure, stroke, cardiovascular disease. Especially in younger patients, it is important to terminate AF early to preempt progression to irreversible mechanical and electrical remodeling of the atria.

Acknowledgements
The authors are thankful to our hospital CEO Sally Hurt-Deitch for her dedication to acquire the equipment for patient care. Special thanks are expressed to the cath lab team members who work "hot" and "cold" during the procedures. The procedures could not be accomplished without help from our dedicated anesthesiology colleagues.

REFERENCES
9. Calkins H. Has the time come to abandon the concept that "Pulmonary vein isolation is the cornerstone of AF ablation"? Circ Arrhythm Electrophysiol 2013; 6:241-242

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographic of all the 40 patients</th>
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<tr>
<td><strong>Demographic</strong></td>
<td><strong>Cryoballoon (first 20 patients)</strong></td>
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<tr>
<td>Age</td>
<td>74 years</td>
</tr>
<tr>
<td>Male/female</td>
<td>8/12</td>
</tr>
<tr>
<td>Left atrial dimension by echo</td>
<td>4.6 cm</td>
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<tr>
<td>LV Ejection fraction by echo</td>
<td>50%</td>
</tr>
<tr>
<td>Presence of hypertension</td>
<td>100%</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>30%</td>
</tr>
<tr>
<td>Body weight</td>
<td>156 lb (separate M/F)</td>
</tr>
<tr>
<td>AF duration (estimate)</td>
<td>3.5 years</td>
</tr>
<tr>
<td>Implantable cardiac monitor/ pacemaker/ ICD</td>
<td>7/20</td>
</tr>
<tr>
<td>Follow-up from procedure up to 10/1/2015</td>
<td>415 days</td>
</tr>
<tr>
<td>Recurrence of AF during follow-up</td>
<td>20% (4/20)</td>
</tr>
<tr>
<td>Success rate (sinus rhythm with no anti-arrhythmic)</td>
<td>80%</td>
</tr>
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</table>

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Cervical Spine Evaluation in Obtunded Trauma Patients: When to Omit the CS-MRI.

Ahmad Othman, M.D.; Komila Azimova; Christopher Dodoo, M.S.; Jayanta Gupta, M.D.; Joshua P Herzog, M.D.; Alan H. Tyroch, M.D.

INTRODUCTION
Cervical Spine (CS) clearance in trauma patients has been well studied but controversy still exists regarding its evaluation in obtunded trauma patients. We hypothesize that a 64-slice CT of the cervical spine in the appropriate clinical setting is adequate to clear the cervical collar in the obtunded trauma patients.

METHODS AND PROCEDURES
We used the trauma registry at our level one trauma center to identify obtunded trauma patients (GCS 3-14) that underwent both 64-slice CS-CT and CS-MRI between January 2011 and March 2015. We compared results of CS-CT & CS-MRI and assessed all variables that would affect CS-CT adequacy in clearing the cervical spine.

Continuous variables were described using mean and standard deviation. Categorical variables were described using frequencies and proportions. McNemar test was used to assess concordance between CT and MRI results. Spearman’s correlation coefficient was used to assess the association between time of MRI scan and GCS at time of MRI. P values less than 0.05 were considered statistically significant. All analyses were performed using SAS V9.3.

RESULTS
113 patients were included in the final analysis. 81 patients (72%) were male. The mean age was 48. The mean timing for CS-MRI was hospital day 3. Mean GCS at the time CS-MRI was obtained was 9.

29 patients (26%) had false negative CS-CT. The CS-MRI changed the management in 2 (1.7%) of these patients. The most common missed injury was soft tissue injury in 15 patients (42%). Other injuries that were missed included ligamentous injuries in 10 patients (28%) and intra-spinal hemorrhage (SDH/EPH) in 4 patients (11%).

CS-CT quality was inadequate in 3 patients (2.6%) but the results were concordant with CS-MRI in identifying an injury.

5 patients (4.4%) required extended C-Collar placement. 4 patients (3.5%) had concordant results between their 64-slice CS-CT and CS-MRI. 1 patient (0.9%) had a normal CS-CT but required extended C-collare placement due to severe ligamentous injury identified on CS-MRI.

10 patients (9%) required surgical intervention of the cervical spine. 9 patients (8%) had concordant results between their 64-slice CS-CT and CS-MRI. 1 patient (0.9%) had a normal CS-CT but required surgical intervention due to spinal cord edema identified on CS-MRI.

Table: Concordance between CS-CT and CS-MRI

<table>
<thead>
<tr>
<th>Result</th>
<th>MRI Result</th>
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<tbody>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Positive</td>
<td>2 (3.92)</td>
</tr>
</tbody>
</table>

CONCLUSION
64-slice CT of the cervical spine is not adequate to clear the cervical collar in the obtunded trauma patients. Although eliminating the CS-MRI would result in large cost savings and earlier cervical spine clearance, further studies are needed to define when the CS-MRI can be omitted.

 Pediatric Snakebites: Experience from a South-Western-Texas Trauma Center

Samara Lewis, Pranit Chotai, MD, Thomas Pyo, Amr Abdelgawad, MD

INTRODUCTION
Snakebites are responsible for considerable morbidity and mortality, with an estimated average of 421,000 envenomation and 20,000 deaths per year, worldwide. In the United States (US) however, snakebites remain only a minor problem, averaging 9000 reported cases of bites and approximately 5 deaths per year. Pit vipers, from the crotalidae family, are responsible for most of the snakebites in the US. 80% of crotalidae bites result in enveno-

Continued on page 14
Pediatric snakebites are rare, but when encountered they may result in massive tissue edema, sepsis, necrosis of tissue with resultant fasciotomy or amputation, and in some cases even death. Compared to adults, snakebites in children need special attention because the low total dilution volume results in a relatively larger dose of venom. The severity of the injury usually depends on the size of the snake, the site of injury, the size of the patient, the patient’s susceptibility to venom, and the depth of the bite, especially when fascia has been penetrated. The aim of this study is to assess the prevalence of pediatric snakebites including the management experience and outcomes at a Level I trauma center in Southwestern Texas.

METHODOLOGY
After obtaining Institutional review board (IRB) approval, hospital charts of all pediatric snakebite patients treated at our level I trauma center between January 1, 2006 and December 31, 2013 were retrospectively reviewed. All patients under 18 years of age with a known diagnosis of snakebite were included. Patients 18 years or older and those with animal bites other than snakebite were excluded.

RESULTS
Twelve male and eight female patients (n=20) with a mean age of 7.5 years (range, 1-17 years) met the inclusion criteria. Of these 20 patients, eight (40%) were bitten on the hand, whereas 12 (60%) bites were on the lower extremity. The species of the snake was known in 18 (90%) cases, and rattlesnake bite was the most frequent (65%). More than half of the patients (>50%) arrived within 2 hours of the snakebite. Twelve (60%) patients received antivenin; 11 patients received Crotaalidae polyvalent immune fab (Crofab®, Savage Laboratories, Melville, NY) and one patient received Crotaulidae immune fab (Anavip®, InstitutoBiosclon, S.A. de C.V., Mexico). Analgesics and antibiotics were administered at the discretion of the treating physician. Six patients (30%) received antibiotics, 5 (25%) received an opiate for pain relief and 5 (25%) were given acetaminophen. Out of the 20 cases, 11 (55%) patients stayed in the hospital for more than one day. Twelve of the twenty patients were admitted to the hospital, of which 10 were admitted to the intensive care unit (ICU). Except for one patient who was delayed and under dosed with antivenin, all patients were discharged within 4 days of admission and did not require any surgical intervention. There were no mortalities. All incidents occurred in the spring, summer or fall, with no cases occurring during the winter months.

SUMMARY/DISCUSSION
Our data was consistent with that of other studies, in that most bites occurred during the warmer seasons and all of them involved Continued on page 15
the upper and lower extremities. Our data correlates with the current understanding of treatment, in that all envenomation that had been treated with antivenin resolved fairly quickly, and the one patient that had complications did in fact, receive an inadequate dose of antivenin six hours after the bite, which is significantly longer than what is recommended.

REFERENCES


Comparing Patient Satisfaction between Standard of Care and Emerging Technology for the Detection of Cervical Dysplasia

Chris Prompuntagorn, BA; Christina Gutierrez, MS; Jane Monteagle, PhD; Zuber D. Mulli, PhD; Thelma Carrillo, MPH; Kayla E. Castaneda, MSN; Salvador Saldivar, MD; Michele Follen, MD, PhD; J Salvador Saldivar, MD; Harvey Greenberg, MD

Introduction
Patients’ perspective on the acceptability of technology must be taken into account during the development of new technologies. The purpose of this project was to evaluate patient satisfaction towards a clinical research device, the Multispectral Digital Colposcope (MDC).

Materials and Methods
Patients were recruited and consented to participate in the MDC clinical trial. Participation involved the acquisition of cervical images and optical spectra measurements using a research device, the MDC. A survey was administered to compare patient satisfaction between MDC to the Standard of Care Colposcope (SOC), and the Colposcope-assisted Biopsy. Participants answered survey questions about the provider, their comfort during the procedure, and perceived sensitivity/specificity of the MDC at detecting cervical dysplasia. Each answer was assigned points and tallied among the assigned categories: Provider (score range 0-8, higher more favorable), Discomfort (range 0-8, lower more favorable), and Confidence (range 2-10, lower more favorable); then compared using paired t-test.

Results
Between the MDC and SOC 216 participants answered the Provider score questions with a mean of 7.912037 for MDC, 7.824074 for SOC (two-tailed p=0.0044). For the Discomfort score 248 participants answered with a mean score of 1.358871 for MDC, 1.822581 for SOC (p<0.0001). For the Confidence score 252 participants answered with a mean score of 2.936508 for MDC, 3.630952 for SOC (p<0.0001).

Conclusions
Analysis of all data showed statistical significance in demonstrating more favorable scores for the MDC compared to SOC. The MDC therefore can be used with adequate satisfaction among patients undergoing colposcopic examination to detect cervical dysplasia.

Relationship between Temperament and Character Traits with Mood in Bipolar Disorder Type 1

Sergio B. Chavez, MD; Robert Gonzalez, MD

Introduction
Bipolar disorder type 1 (BDI) is an illness that results in mood fluctuations. The relationship between mood and personality and character traits in bipolar disorder type 1 is unclear at this time.

Materials and Methods
Mood was assessed via Young Mania Rating Scale (YMRS) and the Inventory of Depressive Symptomatology (IDS-C-30). Temperament and character traits were assessed via the Temperament and Character Inventory (TCI) in 42 BDI patients. Multivariate analysis tested relationships between mood and temperament and

Continued on page 17
character traits with the effects of possible cofactors taken into account (e.g. age, gender, medications).

Results
We noted a positive correlation between YMRS scores and Novelty Seeking (p = 0.03). There was a positive correlation between IDS-30-C scores and Harm Avoidance (p = 0.0002) and a negative correlation with Self Directedness (p < 0.0001) scores. No relationships were noted with possible covariates with the exception of Self Directedness where female gender (p = 0.04) and antidepressant use (p = 0.05) were related to higher scores and where antipsychotic use (p = 0.02) was related to lower scores.

Conclusions
The findings of our study suggest that some personality and character traits may vary according to mood state in patients with BDI. Our findings also suggest that gender and medications used to treat the illness may influence self-directedness. Longitudinal studies are required to fully characterize the relationships between personality and character traits and mood state in BDI.

Case Report: A Novel Cause of Wheezing - Churg-Strauss Syndrome
Wei Cheng, MD; Jose Rodarte, MD; Oscar Noriega, MD

Introduction
A 58 year old female who presented to the Emergency Department due to worsening of a non-blanching diffuse purpuric rash over her extremities and abdomen.

Materials and Methods
Patient has a history of asthma exacerbations that led to more than 5 hospitalizations per year. She has nasal polyps, cerebrovascular accident, diabetes, peripheral neuropathy, vision impairment, chronic abdominal pain, and recurrent deep venous thrombosis without pulmonary embolism, and a benign nasal sinus tumor with chronically eosinophilia on blood count. Patient was diagnosed with Churg-Strauss Syndrome (CSS). Pubmed literature search was conducted to find publication on the diagnosis and treatment of CSS within the last 5 years. Twenty-five papers were identified for evaluation by the authors. Seven papers were included for the poster presentation based on content and relevance.

Results
CSS is a small and medium vessel vasculitis. The incidence of this condition ranges from 0.11 to 2.66 per million people per year with prevalence of 10.7 to 14 per million. Sufferers are predominately female with an average age of 38 to 54 years. Diagnosis is often delayed due to varied timing of symptom presentation. American College of Rheumatology and the Chapel Hill Consensus Conference are accepted by diagnosis, while treatment is generally guided by the Fiver Factor Score (FFS).

Conclusions
Patient has an ANCA(-) CSS with biopsy consistent with cosinophilic infiltration. The patient FFS score was 1 and responded well to Prednisone and in remission on Methotrexate. As clinicians, we need to remember that not all wheezing is asthma and that frequent recurrent exacerbation may warrant further evaluation.

The Zinc Finger Protein ZPR1 Improves Spinal Muscular Atrophy Phenotype in Mice
Xiaoting Jiang, MD; Lan He, PhD; Laxman Gangwani, PhD

Introduction
Spinal muscular atrophy (SMA) is caused by mutation of the survival motor neurons 1 (SMN1) gene and is characterized by degeneration of spinal motor neurons. The zinc finger protein ZPR1 interacts with the SMN protein and is required for nuclear accumulation of SMN. SMA patients express low levels of ZPR1. Low level of ZPR1 causes neurodegeneration in mice. Reduced expression of ZPR1 causes increase in the loss of motor neurons, increases disease severity and reduces the lifespan of mice with SMA. Overexpression of ZPR1 corrects defects in the nuclear accumulation of SMN in the cells derived from SMA patients. ZPR1
overexpression rescues axonal growth defects in motor neurons derived from SMA mice.

Materials and Methods
We generated transgenic mice, overexpressing recombinant Flag-ZPR1, by pronuclear injection of DNA on FVB background. Transgenic mice were characterized and expression of Flag-ZPR1 was detected in the spinal cord using immunoblot analysis. Mice were genotyped by PCR.

Results
To test whether ZPR1 overexpression will help reduce severity of SMA disease, we examined the effect of ZPR1 overexpression in mice with SMA. Transgenic ZPR1 mice were crossed with SMA mice to generate SMA mice with ZPR1 overexpression. The phenotype of littermates was examined. We report that the increase in ZPR1 overexpression improves the growth, decreases severity of disease and prolongs the lifespan of mice with SMA.

Conclusions
These data suggest that ZPR1 may be a protective modifier of SMA. Increasing expression of ZPR1 may help reduce the severity of SMA disease.

Seizures in an 8-day old, Hispanic Male Newborn
Amr Morsi, MD; Ma Teresa Ambat, MD

Introduction
Present a rare case of neonatal seizures due to hypocalcemia secondary to vitamin D deficiency.

Case Presentation
An 8-day-old Hispanic male presents to the emergency room with seizures characterized as clonic movement of all extremities. An episode upon admission to the Neonatal ICU was followed by laryngospasm and post-ictal somnolence. Physical and neurologic examinations were otherwise normal except for transient drowsiness noted after the seizure. The infant was born by spontaneous vaginal delivery after an uncomplicated pregnancy at 40 weeks. He was discharged exclusively breastfed after 2 days of uneventful well-baby nursery stay. He is the sixth child born to a healthy, 35-year-old woman who has dark skin tone and admits to limited sun exposure. Results of tests recommended for initial evaluation of neonatal seizures are all negative except for a low serum calcium concentration. Hypocalcemia and seizures resolve after administration of intravenous calcium. Further laboratory test reveals low level of 25(OH)D supporting the diagnosis of vitamin D deficiency. Skeletal survey shows signs of early osteomalacia. The mother was also later confirmed to be vitamin D deficient. Baby and mother was treated with ergocalciferol and calcium supplements.

Conclusions
Maternal vitamin D deficiency is the major risk factor for neonatal vitamin D deficiency presenting as hypocalcemia. Recognition of risk factors and early detection of vitamin D deficiency during pregnancy are important in order to prevent neonatal vitamin D deficiency and related complications.

Cytomegalovirus Cholestasis a Cause for Prolonged Conjugated Hyperbilirubinemia
Leena Mathew, MD

Introduction
A 6-day-old male was admitted for evaluation of conjugated hyperbilirubinemia. Examination showed jaundice and hepatomegaly. All anthropometric measurements were plotted at the 3rd percentile. He was born via vaginal delivery at 39 weeks, birth weight of 2.8 kg, to a healthy 22-year-old primigravida. He developed feeding difficulties on day 1. Chest radiograph revealed pneumonia for which IV antibiotics were given for 7 days. He was noted to be jaundiced on day 3 with marked elevation of direct bilirubin of 3.5 mg/dl. GGT of 611 units/L. Abdominal ultrasound showed atretic gallbladder and HIDA scan was concerning for biliary atresia. The laboratory and diagnostic work-up were repeated: T. bilirubin 7.3 mg/dL, D. bilirubin 3.3 mg/L, GGT 1132 units/L, abdominal ultrasound and HIDA scan - normal anatomy of liver and gall bladder, ruling out biliary atresia. Results of laboratory tests recommended for evaluation of neonatal conjugated hyperbilirubinemia were all negative except for TORCH antibodies which were equivocal for CMV. Urine culture for CMV was positive, confirming congenital CMV. He failed the hearing screen. Treatment was not indicated per ID recommendation. He was discharged home on day of life 10.

Discussion
Neonatal jaundice associated with a rise in conjugated bilirubin is always pathological. This case illustrates the importance of considering congenital infections, especially TORCH in the evaluation of neonatal cholestasis. This case is remarkable as CMV cholestasis is uncommon. Multiple literature reviews identify the association but only few case reports have been reported.

Conclusion
The diagnosis of congenital CMV should be considered in infants presenting with conjugated hyperbilirubinemia.
abdominal aortic aneurysms (AAA). Endovascular AAA repair (EVAR) combines a less-invasive approach with lower morbidity and mortality. We report our experience of EVAR at the US-Mexico border by an innovative partnership between cardiologists and general surgeons.

Materials and Methods
This is a retrospective review at University Medical Center of El Paso between August 2013 and May 2014. Patients were recruited by cardiologists (Texas Tech University Health Sciences Center of El Paso). Charts were reviewed for: Gender, ethnicity, medical comorbidities, aneurysm size, and outcomes at thirty days, ninety days, and one year.

Results
Four patients with abdominal aortic aneurysms received EVAR between August 2013 and May 2014. Three of four were male. Two of four were Hispanic, and two of four were White Non-Hispanic. Four had comorbid hypertension, three of four had chronic obstructive pulmonary disease, and two had hyperlipidemia. Aneurysms ranged from 3.4-7.6cm, with a mean maximum diameter of 5.3 cm. Two had concomitant right common iliac aneurysms with maximum diameter ranging from 3.4 – 4.3 cm. One experienced post-operative cholesterol embolus syndrome. Two had no complications at 30 days, 90 days, and 1 year. Two had no complications at 30 days, but did not follow up at 90 days or 1 year.

Conclusions
EVAR is effective when performed by cardiologists with surgical support. We demonstrate an acceptable procedural and post-operative success rate using a multidisciplinary approach. In a medically underserved area EVAR with cardiology and general surgery support improve quality of care.

Cervical Cancer and Human Papilloma Virus Knowledge and Beliefs Among Uninsured Border Women Due for Screening

Navikaran Shokan, MA, MD, MPH; Theresa L Byrd, DrPH; Silvia Flores, PhD; Jessica Calderon-Mora, MPH; Alok Dwivedi, PhD; Erieth Penaranda, MD; Jennifer Molokwu, MD

Introduction
Women residing on the border have a high cervical cancer incidence and one of the highest mortalities in the US. We sought to estimate baseline knowledge and beliefs about cervical cancer screening and human papilloma virus (HPV) among participants due for cervical cancer screening within a community-based intervention.

Materials and Methods
Inclusion criteria: age 21-65, uninsured, and due for cervical cancer screening. Exclusion criteria: cervical cancer. Instrument: Validated items covering demographics, cervical cancer and HPV knowledge, perceived susceptibility, seriousness, benefits, barriers, subjective norms, processes of change, and self-efficacy. Analysis: Quantitative data were described using mean, standard deviation (SD), and range; categorical data were described using frequency and proportion.

Results
Survey response rate was 82.3% (301/364). Mean age=44 years (SD 10.68); Hispanic=96.3%; 7.3% had never had a pap smear; 21% had a past abnormal pap. Common barriers to screening: lack of insurance, expense, unaware where to go for testing, embarrassment, and pain. Mean scores: Knowledge=3.72 (SD 1.4, range 0-8); Benefits=10.71 (SD 2.47, range 6-24); Barriers=34.41 (SD 4.48, range 12-48); Subjective Norms=13.82 (SD 2.05, range 6-24); Processes of Change=10.23 (SD 1.71, range 4-16); Self-Efficacy=35.56 (SD 6.54, range 9-45); HPV knowledge=34.48 (SD 1.44, range 0-6). HPV awareness=23.9%, HPV vaccine awareness=10.0%.
Conclusions
Overall, women had favorable beliefs about barriers and benefits to screening: logistic and socioeconomic barriers predominated over cognitive barriers; awareness of HPV and HPV vaccination rates were low. These findings will inform future strategies to address cervical cancer disparities in this community.

Cytomegalovirus Cholestasis a Cause for Prolonged Conjugated Hyperbilirubinemia

Leena Mathew, MD

Introduction
A 6-day old male was admitted for evaluation of conjugated hyperbilirubinemia. Examination showed jaundice and hepatomegaly. All anthropometric measurements were plotted at the 3rd percentile. He was born via vaginal delivery at 39 weeks, birth weight of 2.8kg, to a healthy 22 year old primigravida. He developed feeding difficulties on day 1. Chest radiograph revealed pneumonia for which IV antibiotics were given for 7 days. He was noted to be jaundiced on day 3 with marked elevation of direct bilirubin of 3.5mg/dL. GGT of 611units/L. Abdominal ultrasound showed atropic gallbladder and HIDA scan was concerning for biliary atresia. The laboratory and diagnostic work-up were repeated: T.bilirubin 7.3 mg/dL, D.bilirubin 3.3mg/L, GGT 1132units/L, abdominal ultrasound and HIDA scan - normal anatomy of liver and gall bladder, ruling out biliary atresia. Results of laboratory tests recommended for evaluation of neonatal conjugated hyperbilirubinemia were all negative except for TORCH antibodies which were equivocal for CMV. Urine culture for CMV was positive, confirming congenital CMV. He failed the hearing screen. Treatment was not indicated per ID recommendation. He was discharged home on day of life 10.

Discussion
Neonatal jaundice associated with a rise in conjugated bilirubin is always pathological. This case illustrates the importance of considering congenital infections, especially TORCH in the evaluation of neonatal cholestasis. This case is remarkable as CMV cholestasis is uncommon. Multiple literature reviews identify the association but only few case reports have been reported.

Conclusion
The diagnosis of congenital CMV should be considered in infants presenting with conjugated hyperbilirubinemia.

Characteristics and Management of Blunt Renal Trauma Injury in Children

Alan H. Tyroch, MD, FACS, FCCM; Yuichi Ishida, MD; Nader Emami, MD; Susan F. McLean, MD, FACS; Emily Rogers Delmas, MD

Introduction
Renal trauma in the pediatric population is due to blunt mechanism of injury. Our purpose was to determine the incidence, features, associated injuries, management, and outcomes of kidney injuries resulting from blunt trauma in the pediatric population in a single Level I Trauma Center.

Materials and Methods
This was a retrospective chart and trauma registry review of all pediatric blunt renal injuries at a regional level I trauma center that provides care to injured adults and children. The inclusion dates were January 2001 to June 2014.

Results
Of 5,790 pediatric blunt trauma admissions over 14.5 years, 68 children sustained blunt renal trauma (incidence: 1.2%). Their mean age was 12.4 years (range: 9 months to 17 years) and 66% were male. The mean hospital LOS was 9±9.5 days and 37% of patients were admitted to ICU with mean ICU LOS of 3±6 days. The mean ISS was 21±14. The most common mechanism of injury was MVC (46%). 57% of the patients had associated intra-abdominal injury with the liver being the predominant organ followed by the spleen. The mortality was 5.8% and none were caused by renal injury.

Conclusions
Renal trauma is rare in pediatric blunt trauma; most of them are low AAST injury grade. It’s commonly associated with intra-abdominal injuries, especially liver and spleen. The nephrectomy rate in pediatric trauma is low compared to adult trauma. The higher the grade is, more likely to have gross hematuria.

Perfect Office Space
(865 N. Resler Dr. Ste F & G) for lease becoming available March or April 2016. The office is conveniently located catty corner to Franklin High School on the corner of Resler and Redd (same shopping center as Ardivino’s restaurant). The office is currently being occupied by an optometrist. It is 2400 square feet with open space (approximately 900 sq ft) where the optical is and has 4 exam rooms with potential for a 5th room all with plumbing. There is a bookkeeping room with built in shelves. There is a perfect storage room for pharmaceutical supplies with shelves. It has a private office with private bathroom and two bathrooms for public/staff use. There is a lab/kitchen in the back as well. There is a big reception desk in the front with plenty of waiting area. Current lease is $3500 base rent with CAM fees of $918. If interested, please contact Stephen Applebaum, O.D. at 915-474-4040.
INTRODUCTION
Over 1 million people in the United States are infected with HIV.1 The rates of deaths resulting from HIV have decreased, from 45,000 in 1996 to under 10,000 in 2010, due to increased treatment options. At the same time, rates of newly diagnosed individuals demonstrates that HIV remains a major health concern.2 This concern is even more prominent in places such as El Paso County, where rates of newly diagnosed individuals have increased from 10.1% in 2008 to 14.1% in 2013.3

Due to the growth and success of efficacious HIV treatment options, tolerability and convenience of regimens have become key factors for healthcare professionals when deciding initial regimens. As a result of the significant impact a patient’s adherence has on the success of antiretroviral therapy, single-tablet combination regimens have become the focus of many pharmaceutical companies in recent years. Triumeq® is the newest single-tablet regimen, which combines a 2nd generation integrase inhibitor (INSTI), dolutegravir, with the dual nucleoside reverse transcriptase inhibitors (NRTI) backbone, abacavir and lamivudine.4 This is a significant development in antiretroviral therapy, as Triumeq® is the first single-tablet regimen that does not contain the dual NRTI backbone, tenofovir and emtricitabine. Additionally, dolutegravir has demonstrated promising data with regards to efficacy and resistance.5,6

CURRENT GUIDELINES
The Department of Health and Human Services and International Antiviral Society – USA practice guidelines recommend that optimal HIV treatment should consist of two nucleoside reverse transcriptase inhibitors (NRTI) in combination with a third active antiretroviral drug from the following drug classes: an integrase inhibitor (INSTI) or a boosted protease inhibitor (PI), specifically ritonavir-boosted darunavir.7,8 The guidelines were updated in 2014 to endorse the use of the 2nd generation INSTI, dolutegravir, in combination with two NRTIs as a first-line regimen for treatment-naïve patients. This coincides closely with the August 2014 FDA approval of Triumeq®.4 Most recently, the April 2015 guidelines no longer recommends Atripla® (efavirenz/emtricitabine/tenofovir) and Complera® (rilpivirine/emtricitabine/tenofovir) as first-line options for treatment-naïve patients. Consequently, Stribild® (elvitegravir/cobicistat/tenofovir/emtricitabine) and Triumeq® are the only twosingle-tablet combination regimens recommended as first-line for treatment-naïve patients.

TRIUMEQ® (dolutegravir/abacavir/lamivudine)

CLINICAL Efficacy
Triumeq® is the newest one-pill, once-a-day, fixed dose combination regimen and the FDA approval was based partially on three pivotal randomized-controlled trials comparing dolutegravir with current first-line options in treatment-naïve HIV patients.1 In the SINGLE trial, dolutegravir plus abacavir/lamivudine combination once daily was compared with Atripla®.9 At 48 weeks, sustained virologic response was demonstrated in 88% of the dolutegravir-group versus 81% in the efavirenz group.9 This is significant as the dolutegravir plus abacavir/lamivudine regimen is the first regimen to show one-year superiority over Atripla®. The dolutegravir group also resulted in statistically significant shorter times to viral suppression and greater increases in CD4 counts compared with the Atripla® group.9

The FLAMINGO trial, which compared dolutegravir with ritonavir-boosted darunavir, significantly demonstrated at 48 weeks, sustained virologic response in 90% of dolutegravir patients versus 83% of darunavir patients.3 Again, this is the first time a regimen has demonstrated superiority to ritonavir-boosted darunavir. Both the SINGLE and FLAMINGO trials established superiority of

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Table 1—Initial Combination Regimens for the Treatment-Naïve Patients

<table>
<thead>
<tr>
<th>Integrase Strand Transfer Inhibitor-Based Regimens:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dolutegravir/abacavir/lamivudine—only for HLA-B*5701 negative patients</td>
</tr>
<tr>
<td>• Dolutegravir plus tenofovir/emtricitabine</td>
</tr>
<tr>
<td>• Elvitegravir/cobicistat/tenofovir/emtricitabine—only for patients with pre-therapy CrCl &gt;70 mL/min</td>
</tr>
<tr>
<td>• Raltegravir plus tenofovir/emtricitabine</td>
</tr>
</tbody>
</table>

Protease Inhibitor-Based Regimen:

• Darunavir/ritonavir plus tenofovir/emtricitabine

Continued on page 22
dolutegravir with the comparator. The SPRING-2 trial showed non-inferiority when comparing once daily dolutegravir with twice-daily raltegravir at 96 weeks.

SAFETY

In the SINGLE trial, the dolutegravir group demonstrated statistical superiority to Atripla®, primarily due to the higher discontinuation rate because of adverse events in the Atripla® group. The dolutegravir group exhibited a generally more favorable safety profile than the Atripla® group, with specifically less CNS adverse events and lipid profile changes. The most common adverse events reported for dolutegravir group were nausea, diarrhea, nasopharyngitis, headache and insomnia.

The lack of the tenofovir component in Triumeq®, may allow this regimen to be an option for patients with renal dysfunction, although the package insert does not recommend in patients with a creatinine clearance less than 50ml/min. Although slight increases in creatinine serum concentrations have been initially noted in patients on dolutegravir, these increases remain stable during follow-up and combined analysis of the SINGLE and SPRING-2 trials found no significant difference in renal safety when compared to efavirenz or raltegravir.

There are also disadvantages to this regimen. The abacavir component requires patients to receive HLA-B*5701 genetic testing before initiation in order to identify those at risk for developing abacavir-associated hypersensitivity reactions. It should also be noted that controversy exists regarding the impact of abacavir on cardiovascular disease and risk for myocardial infarction. This link is currently unclear and there remains conflicting data on whether abacavir should be avoided in patients with cardiovascular disease.

RESISTANCE

Results from numerous trials demonstrate promising resistance data with the use of dolutegravir. In the SINGLE trial, none of the dolutegravir arm patients developed resistance mutations to dolutegravir upon early virological failure. Results from the VIKING trial demonstrate that unlike elvitegravir, dolutegravir demonstrates a significantly greater barrier to resistance; dolutegravir remains active in the majority of patients possessing 1st generation INSTI associated resistance mutations. This indicates that Triumeq® may be a better regimen option for treatment-experienced patients than Striibl, which contains elvitegravir.

However, there are still concerns regarding whether the genetic barrier to resistance with dolutegravir is comparable to that of a boosted PI regimen, in which patients very rarely develop resistance. There are clinical trials in progress that are evaluating this concern. The results of these trials will help determine whether Triumeq® should be used in patients with high risk for poor adherence, which facilitates resistance development.

ADDITIONAL CONSIDERATIONS

Triumeq® does not have food requirements nor concerns regarding meal fat content, which is an advantage over Striibl® and other therapy options. Another potential advantage to Triumeq® is that dolutegravir is metabolized primarily through the UGT1A1 enzyme and minimally via CYP3A4, which reduces the drug-drug interactions with dolutegravir when compared to other antiretroviral agents. Additionally, there are no significant drug interactions with proton pump inhibitors, methadone nor oral contraceptives. However, similar to Striibl®, administration of antacids, calcium, and/or other cation-containing supplements should be separated from dolutegravir administration due to reduction of dolutegravir serum concentrations.

The cost of a 30-day supply of Triumeq® is $2650, which is slightly less than Striibl® at $2950. Fortunately, both single-tablet regimens are available through the Texas HIV Medication Program.

PLACE IN THERAPY

With the recent approvals of three new single-tablet regimens over the last 5 years and more co-formulations in the pipeline, healthcare providers are being provided with various treatment options for treatment-naïve HIV patients. Triumeq® demonstrates superiority in comparison to the previous first-line regimens Atripla® and ritonavir-boosted darunavir regimen. In addition, Triumeq® may be a better option in renal impairment that Striibl®, although, the mandatory genetic screening test for HLA-B*5701 is a disadvantage to Triumeq®, the minimal risk for significant drug-drug interactions and promising resistance data are both persuasive points for the use of Triumeq®.

Acknowledgements: Grecia Heredia, PharmD

REFERENCE


Continued on page 23


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Samantha Strong, PharmD, PGY1 Community Pharmacy Resident 2014-15, Centro de Salud Familiar La Fe, Inc., UTEP/UT Austin Cooperative Pharmacy Program.

Sarah Perez, PharmD, BCAC, was a Clinical Pharmacist with Centro de Salud La Fe.

Ogechika K. Alozie, MD, CPHIMS, Texas Tech University Health Sciences Center, El Paso, Texas.

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The RotaCare Clinic leadership team and the AMA/TMA student organization are excited for a new year of providing healthcare services to the Yselta and surrounding community and representing TTUHSC Paul L. Foster School of Medicine at local and national conferences. We began the year by electing new student officers, who will be training to fill some big shoes of previous leaders: Jerry Fan, Jen Nielson, Jared Bell, Eric Cline, and Haley Swanson.

Our first service opportunity of the year outside of the RotaCare Clinic was on February 20th, where we had two booths set-up at the SUNS Health Fair at Dolphin Terrace Elementary School. Through a grant provided by the Texas Medical Association Be Wise – Immunize initiative we administered 19 immunizations out of a possible 100 provided for by the grant. Fortunately, there was less of a need for immunizations than we had anticipated since most people’s shot records were up-to-date.

Our second booth at the health fair provided 100 bicycle helmets to kids. This was very popular with the children and their parents, and the medical students enjoyed helping kids try on helmets, talking to them about bicycle safety, and having them sign a pledge promising to always wear their helmet when they ride their bike. The donations provided by the following sponsors made a lot of kids very happy to be receiving a new helmet:

The Texas Medical Association’s Hard Hats for Little Heads program promotes exercise and teaches children and their parents about the importance of wearing a helmet when bicycling, in-line skating, skateboarding, and riding scooters.

Texas Medical Association’s Hard Hats for Little Heads program promotes exercise and teaches children and their parents about the importance of wearing a helmet when bicycling, in-line skating, skateboarding, and riding scooters.

Communities across Texas through Hard Hats for Little Heads.

Hard Hats for Little Heads is supported through a TMA Foundation grant thanks to top donors — Blue Cross and Blue Shield of Texas, an anonymous physician and spouse, TMAF Make-A-Difference donors, and the Baptist Health Foundation of San Antonio — and generous gifts from TMA and TMA Alliance members, and friends of medicine.

It is our pleasure to announce RotaCare will be open every Saturday morning. We view this as an important step in providing reliable and effective care for the community. This year began with a new Medical Director, Dr. Jose Espinosa, and the continuing efforts of our Clinic Manager, Betty Gallegos. Screening for new clinical studies has also expanded. One study is enrolling patients for inguinal hernia repairs and the other study is enrolling patients with diabetic foot ulcers. Furthermore, RotaCare is looking to partner with radiologists in the community, and we may start offering ultrasound services onsite. Lastly, in continuing our specialty clinics, we will be offering these services to meet our community’s needs: Women’s Health Day on March 5th, Allergy Clinic on March 12th, and an Orthopedic Clinic on March 26th. These are but a few of the thrilling developments at RotaCare. The future of this promising, free clinic gets brighter every year.

If you would like to volunteer your services to RotaCare, please contact our new Student Director: Micah Ellowitz, micah.ellowitz@ttuhsc.edu

Phillip Snodgrass, MS1, AMA/TMA Secretary.
Zika Virus Disease, International Public Health Emergency

Fernando Gonzalez, MD, MPH

On Monday February 1, 2016, the World Health Organization declared an International emergency, citing the Zika virus disease outbreaks in Brazil where health authorities have observed an increase in Guillain-Barré syndrome which coincided with Zika virus infections in the general public, as well as an increase in babies born with microcephaly in northeast Brazil.

Zika virus, a mosquito-borne flavivirus (Genus Flavivirus also include west nile virus, dengue virus and yellow fever virus), is transmitted by Aedes mosquitoes, including Aedes aegypti and potentially Aedes albopictus, which are found in Texas and along the U.S.-Mexico Border. Aedes mosquitoes typically lay eggs in standing water in containers such as buckets, bowls, animal dishes, flower pots and vases. They are aggressive daytime biters and live indoors and outdoors near people.

The first laboratory confirmed case was reported in Brazil in May 2015, and by the end of January 2016, 26 countries from the Americas had been affected, including Puerto Rico and Mexico. Projections indicate that in a 12 month period there could be 3-4 million cases of Zika in the Americas. In the United States there are 35 travel-associated Zika virus disease cases reported, and no locally acquired vector-borne cases.

Transmission of Zika virus occurs in a human-mosquito-human cycle. Transmission is also associated with blood transfusion and sexual intercourse. Maternal-fetal transmission of Zika virus has been documented and the association to neurological diseases is currently under research. The U.S. Centers for Disease Control and Prevention has issued new recommendations for asymptomatic pregnant women to be tested after returning from affected areas, and for men with pregnant sex partners who live in or have traveled to Zika-affected areas to consistently and correctly use condoms during sex or abstain for the duration of the pregnancy.

The disease is usually mild with approximately 80 percent of those infected unaware of their infection. Severe presentations and associated mortality are uncommon. Symptoms appear 2 to 7 days after infected mosquito exposure, the most common are: fever with maculopapular rash, conjunctivitis, myalgia/arthritis, malaise, headache, retro-orbital pain, and vomiting.

There is currently no vaccine. Treatment is symptomatic/supportive, oriented at relieving fever and pain.

To avoid local transmission, it is recommend that Zika virus infection cases or suspects avoid sustaining mosquito bites during the first 7 days following illness onset. Patients are also urged to eliminate mosquito breeding habitats around their homes.

Diagnostic and Laboratory testing instructions:

1. Clinical illness is consistent with Zika virus disease if two or more symptoms (including acute onset of fever, maculopapular rash, arthralgia, or conjunctivitis) are present during or within 2 weeks of any time spent in an area with ongoing Zika virus transmission.

2. Please notify the DSHS regional office and the Local Health Department if you have a suspected Zika virus case and would like to have specimens tested. Support will be provided for laboratory sampling requirements and shipment guidance.

3. After consultation with the health department, specimens should be sent to the DSHS laboratory in Austin. The specimens will be tested for chikungunya and dengue virus at the Texas Department of State Health Services (DSHS) laboratory while a split specimen is sent to the Centers for Disease Control and Prevention (CDC) for Zika testing.

4. If a provider does not already have an account with the DSHS laboratory, they should call 512-776-7557 or submit the Submitter ID Request Form located at: http://www.dshs.state.tx.us/lab/mrs_forms.shtml. The completed Submitter ID Request Form can be faxed to 512-776-7533.

5. Extensive cross-reactivity would be expected in sample from DENV/ZIKV circulation areas. A positive IgM assay with either antigen should be confirmed using PRNT against both Zika virus and dengue virus as well as any other flavivirus that might be found in that area. Plaque reduction neutralization test (PRNT) are performed at the CDC and include any flavivirus (e.g. SLEV, ZIKV, WNV, etc.) that might be found in that geographic area (including travel areas) in order to confirm specific virus causing the infection.

The El Paso Department of Public Health invites physicians to register and report notifiable conditions electronically at: https://elpaso.phims.org/cnr/login.aspx or by calling (915) 212-6520 or fax (915) 212-0170.

For references and more information on CDC Guidelines and Laboratory Criteria, please refer to the City of El Paso Department of Public Health website, Physicians-Provider and Zika links: www.ephealth.com

Fernando Gonzalez, MD, MPH is the Lead Epidemiologist for the Department of Public Health, El Paso, Texas.
**Current Situation**

- Harris County Texas health officials confirmed a case of Zika virus imported into the United States on Monday, 11JAN16.
- The patient recently returned to Houston, Texas after touring El Salvador.
- Zika virus has increased its presence in 14 Countries and Territories in Central and South America and the Caribbean. CDC issued a Level-2 (Practice Enhanced Precautions) travel alert on 18JAN16 for personnel traveling to: Brazil, Colombia, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Suriname, Venezuela, and the Commonwealth of Puerto Rico.
- No cases have been reported in the DoD

**Prevention and Treatment**

- The occasional tourist importing Zika back to the U.S. is unlikely to cause an outbreak.
- Mosquito protection: Head & bed netting and use only DEET or EPA-registered insect repellent.
- NO vaccine or medications are available to prevent or treat Zika infections.
- Treat symptoms with plenty of rest and fluid intake to prevent dehydration.
- To avoid the risk of hemorrhage, aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided until Dengue infection is ruled out by a healthcare provider.
- See doctor early if symptoms develop after travelling to endemic area.
- Pregnant women need to take special care due to the potential of poor pregnancy outcomes in babies if infected with Zikavirus.

**Signs and Symptoms**

- 1 in 5 people infected with Zika virus become ill from the virus.
- Illness is usually mild with symptoms lasting several days to a week.
- Severe disease requiring hospitalization is uncommon and deaths are rare.
- Symptoms include:
  - Rash
  - Joint Pain
  - Conjunctivitis (red eyes)
  - Headaches
  - Fever

** Transmission**

- Zika virus is transmitted to people through the bite of an infected *Aedes* species mosquito.
- Mosquitoes become infective when they feed on a person already infected with the virus. Infective mosquitoes can then spread the virus to other people through bites.
- Therefore, as more people get infected (high local density), the likelihood to cause an outbreak could increase.
- Possible spread through blood transfusion or sexual contact.

**Key Facts**

- Zika virus spread can mirror that of Dengue fever and Chikungunya virus.
- Twenty-two imported Zika cases have been identified in the mainland since 2007.
- Two imported cases (one in Harris County, TX and one in British Columbia) on 11JAN16.

**Medical/Military Concerns**

- Force health protection guidance for travel to affected areas is the same for all arthropod transmitted diseases: Use proper Personal Protective Equipment (PPE); mosquito nets DEET or EPA-registered insect repellent.
- Out of an abundance of caution, CDC recommends pregnant women are advised to consider postponing travel to areas where Zika virus transmission is ongoing.
- **NORTHCOM AOR MISSION IMPACT:** Military and Civilian personnel traveling to Mexico or Puerto Rico need to take the necessary Personal Protective Measures (PPM) to avoid becoming infected with the Zika Virus.

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Thomas.A.Kohler1.mil@mail.mil
210-221-0346

Sources: DoD Armed Forces Health Surveillance Branch and the Centers for Disease Control
The Texas Delegation to the American Medical Association met at the Winter Conference of the TMA held in Austin, January 30, 2016. Dr. Steven Stack, the president of the AMA, addressed the delegation. Dr. Susan Bailey (Speaker) and Russ Kridel (Trustee) gave their reports in their capacity as AMA Board members. TEXMED will be held April 29-30 in Dallas. I wish to commend those delegates who regularly attend year after year.

At the Council on Legislation meeting we discussed the balanced billing threats, telemedicine (Teledoc vs Texas Medical Board) and narrow networks as well as transparency demands. The TMA Medicaid Congress met with new Medicaid leadership. Texas Health and Human Services Executive Commissioner Chris Taylor addressed physician concerns. At the TEXPAC meeting, an incredible explanation of why physicians have suffered so much under Obamacare was presented by a TEXPAC political analyst.

I wish to commend Dr. Syed Yusufa for his service as our president last year and congratulate Dr. Mansfield as our new president. I wish to thank Dr. Luis Urrea and his family for their commitment to our candidate Adolfo Lopez. I wish to express my gratitude to Dr. Tomas Garcia, TMA President, for coming to El Paso for the January Inauguration and for his comments in the Texas Medicine January Issue. “I want you to know that TMA has fought, is fighting, and will continue to fight intrusions upon medicine. We work directly with our elected officials, file formal comments and complaints with state and federal regulators, and call public attention to the repeated insults to our profession. We fought 14 years and finally repealed the SGR. We won passage of a tough new law reimposing overzealous Medicaid fraud and abusive investigators”.

There is a beautiful summary by Steve Levine in the same issue of TexMed summarizing the AMA meeting highlights. I want you to pay special attention to what TMA is doing about Balance Billing. For many of you, if this battle is lost it will be a game changer for you so you need to “get in the game”. The National Health Insurance Lobby and their cronies in the Texas Association of Health Plans released their annual report citing physicians for “exorbitant” bills for out of network services.

Revised Texas Medical Board rules took effect August 4, 2015. A new requirement includes a mandate to refer a patient with chronic pain for further evaluation and treatment “as necessary” and to use a written pain management agreement for any treatment plan that includes extended drug therapy. Visit www.texmed.org/RegsAndPains. One of the provisions includes allowing one physician to prescribe dangerous and scheduled drugs and one patient selected pharmacy. Should one of your patients get in an accident while on a controlled substance you prescribed, failure to have a drug screening policy and compliance plan may be used to arrest you as a guilty party in negative outcomes.

In summary, the EPCMS, TMA and AMA staff and volunteer physicians are hard at work on your behalf. Please send your membership in a timely manner and contribute to the associate political action committees of at least one. Have a great day!
New Laws About Concealed and Open Carry Handguns on Private Property

TMA’s General Counsel

Since 1995, Texas concealed handgun license holders have been allowed to carry concealed handguns anywhere in Texas unless expressly prohibited by law. As of Jan. 1, 2016, House Bill 910 allows Texas handgun license holders to carry handguns in plain view (“open carry”) if the handgun is carried in a shoulder or belt holster.

Even handgun license holders are not allowed to carry handguns in schools, school vehicles, polling places, courts, racetracks, airports, bars, sporting events, amusement parks, churches, nursing homes, and most hospitals.

Physicians have asked TMA whether they can post a notice at their practices prohibiting anyone from entering with a handgun — concealed or in sight. The answer depends on the type of property on which the medical office is located. Private property owners also can post a notice prohibiting the carrying of handguns, but that notice comes with many requirements.

TMA’s Office of the General Counsel provides this information as a service to Texas physicians. Texas law in this area contains numerous exceptions and defenses to prosecution that may apply; contact your legal counsel for specific legal advice.

FAQs
I have a “30.06 sign” posted. Am I covered?
No. A 30.06 sign prohibits only the concealed carry of handguns; 30.07 signs prohibit the open carry of handguns.

Furthermore, because the required language for 30.06 signs differs from the pre-2016 required language, your pre-2016 30.06 sign no longer is effective notice to prohibit concealed carry.

What language does a 30.06 sign require?
“Pursuant to Section 30.06, Penal Code (trespass by license holder with a concealed handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a concealed handgun.”

Are there any other requirements for my new 30.06 sign?
The language must be identical to that above, in both English and Spanish, in contrasting colors and in block letters at least 1 inch tall, and be displayed in a conspicuous manner clearly visible to the public.

My current 30.06 sign looks a lot like that. Can I just use it?
No. Texas Penal Code Section 30.06 states that for written communication (including signs) to serve as effective notice, the language must be identical to that currently in statute.

The following illustrates the changes from the pre-2016 language: “Pursuant to Section 30.06, Penal Code (trespass by license holder with of license to carry a concealed handgun), a person licensed under Subchapter H, Chapter 411, Government Code (concealed handgun licensing law), may not enter this property with a concealed handgun.”

What does a sign have to say to prohibit the open carry of handguns?
“Pursuant to Section 30.07, Penal Code (trespass by license holder with an openly carried handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a handgun that is carried openly.”

That looks similar to the language on my 30.06 sign. Can I combine the two signs?
The 30.06 language and the 30.07 language can be posted on the same sign. However, the statute appears to prohibit combining the two paragraphs because both sections 30.06 and 30.07 require the language on the signs to be identical to what is in the statute.

Are there any other requirements for my 30.07 sign?
The language must be identical to that above, in both English and Spanish, appear in contrasting colors and in block letters at least 1 inch tall, and be displayed in a conspicuous manner clearly visible to the public at each entrance to the property.

At "each" entrance? I have to post only "a" 30.06 sign, but I have to post a 30.07 sign at each entrance to my property?
Yes. Unlike Texas Penal Code Section 30.06, Texas Penal Code Section 30.07 states that 30.07 signs must be displayed in a conspicuous manner clearly visible to the public at each entrance to the property.

I've decided to post the signs. Is there anything else I should know?
Private property owners may prohibit the concealed and/or open carry of handguns on premises. “Premises” means a building or a portion of a building but does not include any public or private driveway, street, sidewalk, walkway, parking lot, parking garage,
New Laws About Concealed and Open Carry Handguns on Private Property
(Continued)

or other parking area.

At some parking lots, parking garages or other parking areas, concealed and/or open carry handguns may be prohibited under certain circumstances. You should discuss this with your legal counsel for specific legal advice.

I work at a hospital (or nursing home). Are handguns permitted here?
To prohibit handguns in a hospital or nursing home, the hospital or nursing home must give effective notice under Texas Penal Code Section 30.06 or Section 30.07 that handgun license holders are not permitted to have concealed or open carry handguns “on the premises of a hospital licensed under Chapter 241, Health and Safety Code, or on the premises of a nursing home licensed under Chapter 242, Health and Safety Code, unless the license holder has written authorization of the hospital or nursing home administration, as appropriate.”

Not all hospitals in Texas are licensed under Texas Health and Safety Code Chapter 241. If you are not sure about your hospital, consult the hospital counsel or your legal counsel for specific legal advice.

I work at a medical school. Are handguns permitted here?
This depends on several factors. Some medical schools are public, while others are private; some medical schools are on land owned by hospitals, while others are not; and some facilities used by medical school staff and students are on property that may not be owned by the medical school. Physicians with questions in this area should consult medical school counsel or their legal counsel for specific legal advice.

I work on public property that is not a hospital or medical school. Are handguns permitted here?
The statutes may not cover every type of property or employment situation. Physicians with questions in this area should consult their legal counsel for specific legal advice.

NOTICE: The Texas Medical Association provides this information with the understanding that 1) no attorney-client relationship exists, 2) neither TMA nor its attorneys are engaged in providing legal advice, and 3) the information is of a general character. This is not a substitute for the advice of an attorney. While every effort is made to ensure that content is complete, accurate and timely, TMA cannot guarantee the accuracy and totality of the information contained in this publication and assumes no legal responsibility for loss or damages resulting from the use of this content. You should not rely on this information when dealing with personal legal matters; rather seek legal advice from legal counsel.

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Texas Medical Association
Physicians Caring for Texans
The following is a list of new/re-instated members of the El Paso County Medical Society. Congratulations to all new members!!

BRUNNER, NOEMI, MD
R E M
Universidad La Salle, Mexico D.F., 1992
5001 El Paso Dr. Cab-A02, Radiology Dept.
El Paso, TX 79905
(915) 215-6000

CASHIN, LAURA M., DO
IM
Philadelphia College of Osteopathic Medicine, 2007
4800 Alberta Ave.
El Paso, TX 79905
(915) 215-5205

DI PASCUALE, MARIO A., MD
OPH
UT Southwestern, 2011
2900 Pershing Dr. Ste. 2nd Floor
El Paso, TX 79903
(915) 261-7011

FIGUEROA-CASAS, JUAN B., MD
IM PUD
Universidad Nacional del Litoral, 1991
4800 Alberta Ave.
El Paso, TX 79905
(915) 215-5181

FLAHERTY, STEPHEN F., MD
GS CCS
Tufts University School of Medicine, 1988
10201 Gateway Blvd W., Ste. 130
El Paso, TX 79925
(915) 594-1000

GOMEZ, JAIME R., MD
CRS GS
UT Health Science Center at San Antonio, 1990
3270 Joe Battle Blvd, Ste. 360
El Paso, TX 79938
(915) 544-4042

GREENBERG, HARVEY, MD
GO GYN
SUNY at Buffalo, NY, 1971
4801 Alberta Ave.
El Paso, TX 79905
(915) 215-5025

HOLLINGSWORTH, AMANDA, DO
OBG
Chicago College of Osteopathic Medicine, 2001
1700 N. Oregon, Se. 530
El Paso, TX 79902
(915) 544-2000

MILLER, WILLIAM T., MD
PS
Baylor College of Medicine, 1966
10175 Gateway Blvd W., Ste. 210
El Paso, TX 79925
(915) 590-7900

ORR, JUSTIN D., MD
ORS
University of Chicago, 2003
WBAMC, 5005 N. Piedras
El Paso, TX 79920
(915) 742-2288

PALLADINO, HUMBERTO, MD
PS
University Favaloro, 2000
10175 Gateway Blvd W., Ste. 210
El Paso, TX 79925
(915) 590-7900

PERALTA ROJAS, DIEGO P., MD
ID IM
Pontificia Universidad Catolica del Ecuador, 2002
4800 Alberta Ave., IM Dept.
El Paso, TX 79905
(915) 783-5510

STRADER, WILBUR J., MD
END NM
Indiana University School of Medicine, 1965

Continued on page 31
CONGRATULATIONS TO DR. RICHARD MCCULLUM ON RECEIVING TMA’S GOLD-LEVEL RECOGNITION FOR EXCELLENCE IN ACADEMIC MEDICINE!

On behalf of the TMA Council on Medical Education and Subcommittee for Academic Physicians, it is an honor to congratulate Dr. McCallum as a recipient of the TMA Award for Excellence in Academic Medicine at the Gold Level. This award was designed to allow TMA to recognize physicians like you for their achievements and dedication to teaching and service to academic and organized medicine.

The Council on Medical Education will recognize Dr. McCallum for this award during the April 28 meeting. He will also be recognized in print in an upcoming issue of TMA’s award-winning newsmagazine Texas Medicine, monthly e-newsletter, It’s Academic, and in the Handbook Report for the TMA House of Delegates annual meeting.

On behalf of TMA’s 48,000 members, congratulations on your extraordinary achievements and dedication to preparing future generations of Texas physicians!

SCHOLARSHIP RECIPIENT

Medical Student James Showery, “Best El Paso Student” was awarded with a scholarship on February 9, 2016 at the Executive meeting of the El Paso County Medical Society.

TTUHSC EL PASO ADDS GRADUATE SCHOOL TO GROWING CAMPUS

Texas Tech University Health Sciences Center El Paso (TTUHSC El Paso) has officially added a third school — the Graduate School of Biomedical Sciences (GSBS) — to its bustling campus.

“We are very excited and pleased to add a third school to TTUHSC El Paso,” says University President Richard Lange, M.D., M.B.A. “This is proof that we’re growing as a university, and it will allow us to better serve our community by offering a broader range of advanced educational opportunities to prospective students.”

GSBS was officially added to TTUHSC El Paso on Thursday, Jan. 21, after the Texas Higher Education Coordinating Board (THECB) approved the university’s request to offer a Masters of Science in Biomedical Sciences.

“Students in this new graduate school will be able to work directly with our medical and nursing students on one campus, allowing them to learn interdisciplinary skills and giving them an edge that other graduates don’t have,” Dr. Lange says.

The degree, which launches in the fall of 2016, will prepare students to pursue additional health-related graduate opportunities — such as medicine and veterinary school and doctoral programs in biomedical and related sciences — by teaching four core subjects: biochemistry, cell biology, genes and function, and laboratory methods. Students also will be required to conduct hands-on research in scientific areas related to medical problems prevalent in the U.S.-Mexico border region.

“We hope that our newly approved Master of Science program will be the springboard for a new cohort of outstanding biomedical scientists who will contribute to improving the fabric of our community and region,” says Assistant Vice President for Research Peter Rotwein, M.D. “We look forward to our students developing superb skills as scientists and thriving professionally.”

TTUHSC El Paso has been working toward its own graduate school since 2012 when it was established as a regional biomedical campus for TTUHSC in Lubbock. Students attended master’s classes here in El Paso, but officially earned their M.S. in Biomedical Sciences from TTUHSC in Lubbock.

“This is the next of many steps in growing advanced educational activities here in El Paso, and we plan to build on the successes of our students to create other graduate opportunities, including Ph.D. and combined M.D. and Ph.D. programs in the future,” Dr. Rotwein says.
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  545-2333
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(Continued)

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