CAMS 59th Annual Scientific Meeting

Championing Medicine & Public Health for Our Communities

A Virtual Event

Saturday November 5, 2022 & Sunday November 6, 2022 1:00 PM to 5:00 PM ET

ACCREDITATION FOR JOINT PROVIDERSHIP

This activity has been planned and implemented in accordance with the **accreditation requirements** and Policies of the Medical Society of the State of New York (MSSNY) through the joint **providership** of NewYork Presbyterian Queens and Chinese American Medical Society. NewYork Presbyterian Queens is accredited by the MSSNY to provide continuing medical education for physicians.

NewYork Presbyterian Queens designates this LIVE ACTIVITY for a maximum of 6.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



AMERICAN BOARD OF INTERNAL MEDICINE RECOGNITION STATEMENT

"Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 6.25 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit."



NewYork-Presbyterian CAMS 59th Annual Scientific Meeting **Championing Medicine & Public Health for Our Communities**



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CONFERENCE BACKGROUND

In 2022, our medical and public communities began to recover from the COVID-19 pandemic while still suffering from long-COVID sequelae at multiple levels. In the current environment, Asian American, Native Hawaiian and Pacific Islanders (AANHPI) leaders and organizations must learn to lead effectively more than ever.

In this conference, we address the gaps in our public health system, new developments for the medical and Chinese communities, as well as more attention to the "basics" and preventive health strategies. Renowned speakers will discuss food as medicine, eye health, lung cancer screening in the Chinese population, and leadership strategies, with new and exciting research findings and technological developments. Gaps exist in medical education of physicians around nutritional advice and counseling, indications for lung cancer screening, population based approach to vision care, latest developments on long COVID, and leadership strategies for Chinese American physicians.

Our CAMS Program Committee will introduce a new and engaging format to deliver the most recent and important advances among AANHPI populations in a "State of the Science" presentation.

KNOWLEDGE

- Summarize post-COVID sequelae at physical, psychosocial, and public health levels.
- Appraise new knowledge about the impact of COVID-19 on public health and mental health
- Describe new developments in eye health and food as medicine
- Describe advances in preventive medicine for adults and pediatrics populations

COMPETENCE

- Describe strategies to improve public health
- Translate nutritional strategies into care of patients with metabolic syndromes, DM, HTN, chronic kidney disease and
- · Stimulate ongoing research and increase the clinical knowledge base for medical providers serving Asian American
- · Employ highly effective leadership strategies to improve public health and preventative care

PRACTICE

- Incorporate nutritional strategies into care of patients with metabolic syndromes, DM, HTN, chronic kidney disease and
- Perform self-assessment and leave the conference with 2 actionable strategies and goals to improve patient care.
- Apply 2 nutritional and/or dietary counseling interventions for Chinese American patients for health improvement.
- Utilize contemporary screening methods for lung cancer and vision care
- Integrate new developments in public health with practice





Saturday November 5, 2022, 1:00 PM to 5:00 PM Eastern Time

1:00 PM to 1:10 PM | OPENING REMARKS

Victor T. Chang, MD

President, Chinese American Medical Society

Benjamin E. Lee, MD & Cynthia X. Pan, MD Co-Chairs, CAMS Program Committee

1:10 PM to 1:35 PM | RESEARCH UPDATES ON POST-ACUTE SEQUELAE OF SARS-

COV-2

MODERATOR: Mary Lee-Wong, MD Helen Y. Chu, MD, MPH

Associate Professor of Medicine and Epidemiology

University of Washington

1:35 PM to 1:45 PM | Q/A

1:45 PM to 2:00 PM | BREAK *Not for CME

2:00 PM to 2:45 PM | KEYNOTE: CAMS SCIENTIFIC AWARD LECTURE

FOOD AS MEDICINE: EAST MEETS WEST

Moderator: Cynthia X. Pan, MD

Frank B. Hu, MD, PhD

Professor of Medicine, Harvard Medical School and Channing Division of Network Medicine, Brigham and Women's Hospital Director, Boston Nutrition Obesity Research Center (BNORC)

Epidemiology and Genetics Core

Co-Director, Program in Obesity Epidemiology and Prevention,

HSPH

2:45 PM to 2:55 PM | Q/A

2:55 PM to 3:05 PM | BREAK*Not for CME

3:05 PM to 3:25 PM | CAMS BUSINESS MEETING*Not for CME

Victor T. Chang, MD

President, Chinese American Medical Society





3:25 PM to 3:50 PM | NEW INNOVATIVE DIRECTIONS IN OPHTHALMIC

TELEMEDICINE, AI, & REMOTE MONITORING

MODERATOR: Stanley Yang, MD James C. Tsai, MD, MBA

President, New York Eye and Ear Infirmary of Mount Sinai

Delafield-Rodgers Professor & Health System Chair

Department of Ophthalmology

Icahn School of Medicine at Mount Sinai

3:50 PM to 4:00 PM | Q/A

4:00 PM to 4:15 PM | BREAK*Not for CME

4:15 PM to 4:55 PM | LUNG CANCER - CURRENT RECOMMENDATIONS AND

FUTURE DIRECTIONS

MODERATOR: Benjamin E. Lee, MD

Jennifer C.F. Leng, MD, MPH

Memorial Sloan Kettering Cancer Center

Elaine Shum, MD

Assistant Professor, Department of Medicine

NYU Grossman School of Medicine

4:55 PM to 5:05 PM | Q/A

5:05 PM DAY 1 CLOSING REMARKS

Sunday November 6, 2022, 1:00 PM to 5:00 PM Eastern Time

1:00 PM to 1:10 PM | OPENING REMARKS

Cynthia X. Pan, MD & Benjamin E. Lee, MD Co-Chairs, CAMS Program Committee

1:10 PM to 1:35 PM | HOW TO CREATE YOUR CULINARY MED RX

MODERATOR: Cynthia X. Pan, MD

Dara Huang, MD, MMSc

Nephrology; Culinary & Cannabinoid Medicine

New York Culinary Medicine





1:35 PM to 1:45 PM | Q/A

1:45 PM to 2:00 PM | BREAK*Not for CME

2:00 PM to 2:45 PM | KEYNOTE: WILSON KO, MD MEMORIAL LEADERSHIP LECTURE

LESSONS IN PUBLIC HEALTH: ASIAN AMERICANS

MODERATOR: Hanson Hsu, MD

Kathy Ko Chin, MS

CEO, Jasper Inclusion Advisors

2:45 PM to 2:55 PM | Q/A

2:55 PM to 3:05 PM | BREAK*Not for CME

3:05 PM to 3:20 PM | SCREEN AT 23*Not for CME

George L. King, MD

Thomas J. Beatson, Jr. Professor of Medicine and Ophthalmology

Harvard Medical School Chief Scientific Officer Joslin Diabetes Center

3:20 PM to 3:45 PM | STATE OF THE SCIENCE

Christopher Lau, MD

Associate Professor of Cardiothoracic Surgery

Weill Cornell Medical College

Ning Lin, MD

Assistant Professor of Neurological Surgery

Weill Cornell Medical College

3:45 PM to 3:55 PM | Q/A

3:55 PM to 4:10 PM | BREAK*Not for CME

4:10 PM to 5:00 PM | RESEARCH SYMPOSIUM

MODERATOR: John R. Lee, MD





COMPARING BIOMARKER PROFILES BETWEEN THE OBESE AND NON-OBESE CHINESE AMERICAN NAFLD POPULATION

Vincent Yao CUNY School of Medicine Michael Sun

LOW SERUM CREATININE AS AN INDEPENDENT PREDICTOR OF MODERATE-TO-SEVERE FIBROSIS IN NON-OBESE CHINESE AMERICANS

Michael Sun

Vincent Yao CUNY School of Medicine

DIAGNOSING EARLY STAGES OF GASTRIC CANCER IN IMMIGRANTS FROM EAST ASIA

Josephine Tam

Columbia Mailman School of Public Health

Shimin Cao, MD, PhDPrivate Practice

HEALTH CARE DISPARITIES AMONG CHINESE AMERICANS
PRESENTING TO URBAN EMERGENCY DEPARTMENT

Pon-Hsiu Yeh, MDAssistant Professor of Clinical Emergency Medicine
Weill Cornell Medicine

5:00 PM | CONCLUDING REMARKS





COURSE DIRECTORS

Benjamin Lee, MD Cynthia X. Pan, MD

PLANNING COMMITTEE

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Professor of Medicine Harvard Medical School &





Channing Division of Network Medicine
Brigham & Women's Hospital
Director, Boston Nutrition Obesity Research Center (BNORC)
Epidemiology & Genetics Core
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Chair, Department of Ophthalmology
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Kathy Ko Chin, MS

CEO, Jasper Inclusion Advisors

Ning Lin, MD

Assistant Professor of Neurological Surgery Weill Cornell Medical College

RESEARCH SYMPOSIUM PRESENTERS

Josephine Tam Michael Sun Pon-Hsiu Yeh, MD Shimin Cao, MD, PhD Vincent Yao

MODERATORS





Benjamin E. Lee, MD Christopher Lau, MD Cynthia X. Pan, MD Hanson Hsu, MD Jiun-Ruey Hu, MD, MPH John R. Lee, MD Mary Lee-Wong, MD Ning Lin, MD Stanley Yang, MD

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RESEARCH SYMPOSIUM

ABSTRACTS

COMPARING BIOMARKER PROFILES BETWEEN THE OBESE AND NON-OBESE CHINESE AMERICAN NAFLD POPULATION

Michael Sun¹, Vincent J. H. Yao², Aivi A. Rahman², Saud Rehman², Kevin Liu³, Alan C. Yao⁴ ¹Cornell University, College of Agriculture and Life Sciences, Ithaca, NY

²Sophie Davis Biomedical Education Program at the CUNY School of Medicine, New York, NY

³New York University, College of Arts and Sciences, New York, NY

⁴Long Island Jewish Medical Center, Northwell Health, Queens, NY

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BACKGROUND: Non-alcoholic fatty liver disease (NAFLD) is closely associated with obesity. However, eastern studies found an estimated 15%-21% of NAFLD patients had a body mass index (BMI)<25kg/m² (non-obese NAFLD), much higher compared to the U.S.'s 9.6%. Due to its lack of conventional risk factors, non-obese NAFLD tends to remain underdiagnosed. To better understand non-obese NAFLD in Asian populations, this study retrospectively compared the biomarker profiles of obese and non-obese Chinese American NAFLD patients.

METHODS: 296 Chinese American NAFLD patients were categorized by BMI and then examined for differences in lab profiles. Per WHO guidelines for Asians, obese NAFLD (BMI≥25 kg/m²) was identified in 191 patients (64.5%) and non-obese NAFLD (BMI<25kg/m²) was identified in 105 patients (35.5%). Biomarkers were obtained from previous physical exams and laboratory reports. To assess differences between both groups, Mann-Whitney U tests, Student's t-tests, and chi-squared tests were conducted.

RESULTS: The following biomarker levels were found to be significantly different between obese and non-obese NAFLD patients: age, blood pressure, BMI, creatinine, glucose, high-density lipoprotein (HDL), leukocytes, aspartate aminotransferase/alanine aminotransferase, total cholesterol/HDL, and triglycerides/HDL. Furthermore, when compared with obese NAFLD patients, non-obese NAFLD patients were older and had lower blood pressure, triglycerides, leukocytes, glucose, and creatinine. Lastly, non-obese NAFLD patients had higher hemoglobin levels and lower rates of metabolic syndrome.

CONCLUSIONS: In our study, non-obese Chinese American NAFLD patients were older and had a less severe metabolic profile. Additionally, non-obese NAFLD patients had higher hemoglobin levels, lower creatinine levels, and lower leukocyte counts, biomarkers that have not been widely researched in non-obese NAFLD. Future studies should further investigate the roles of hemoglobin, creatinine, and leukocytes in non-obese NAFLD to better understand their underlying mechanisms. This can help to improve the reporting and early intervention of non-obese NAFLD, especially in the Asian population.

CONTENT CATEGORY: Clinical Science

KEYWORDS: Non-Obese NAFLD, Risk Factor, Biomarker, Asian

LOW SERUM CREATININE AS AN INDEPENDENT PREDICTOR OF MODERATE-TO-SEVERE FIBROSIS IN NON-OBESE CHINESE AMERICANS

Michael Sun¹, Vincent J. H. Yao², Aivi A. Rahman², Saud Rehman², Kevin Liu³, Alan C. Yao⁴ ¹Cornell University, College of Agriculture and Life Sciences, Ithaca, NY

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Corresponding Address: AE&LY Medical Associates 136-33 37th Ave. Flushing, NY 11354 Corresponding Author: Michael Sun, 917-861-4658, ms2665@cornell.edu

BACKGROUND: Non-alcoholic fatty liver disease (NAFLD) is closely linked to the emerging obesity epidemic. However, NAFLD is also observed in non-obese patients with a body mass index (BMI)<25kg/m² (Asians). While severe NAFLD is associated with metabolic syndrome, it is uncertain whether this trend persists in severe non-obese NAFLD. Thus, this retrospective study examined a variety of prominent biomarkers and their ability to predict moderate-to-severe fibrosis in a non-obese Chinese American NAFLD cohort.

METHODS: 105 non-obese Chinese American NAFLD patients were sorted based on fibrosis severity into either F0-F1 or ≥F2 groups, with 7.5 kPa being the F2 cutoff. As per the WHO's Asian guidelines, non-obese NAFLD was identified as BMI<25kg/m². Biomarker levels were retrieved from laboratory profiles and physical exams, and liver stiffness measurements from FibroScan imaging. A multiple logistic regression was conducted to analyze the independent predictors of moderate-to-severe fibrosis (≥F2).

RESULTS: NAFLD patients had a median age of 60 years and a median BMI of 23.5 kg/m². 9 (8.6%) NAFLD patients were identified with type 2 diabetes, and 9 (8.6%) NAFLD patients with moderate-to-severe fibrosis. Our cohort had a mean serum creatinine of 67.2±20.3µmol/L, a much lower quantity when compared to a normal elderly cohort: 101.66±20.33µmol/L (men) and 85.75±17.68µmol/L (women). Creatinine (p<0.01; OR, 0.88) was also the only independent predictor of moderate-to-severe fibrosis.

CONCLUSIONS: This study demonstrated low serum creatinine as an independent predictor of moderate-to-severe fibrosis in non-obese Chinese American NAFLD patients. Prior studies have also suggested low serum creatinine, an indicator of sarcopenia, to be linked with NAFLD progression. Interestingly, a high prevalence of non-obese NAFLD and sarcopenia exists in Asian Americans, being 8%-19% and 18.5%-35.7%, respectively. Future studies should examine the association between creatinine and other ethnic populations within the non-obese NAFLD cohort, and to look further into the mechanisms behind these relationships.

CONTENT CATEGORY: Clinical Science

KEYWORDS: Non-Obese NAFLD, Creatinine, Risk Factor, Fibrosis, Asian

DIAGNOSING EARLY STAGES OF GASTRIC CANCER IN IMMIGRANTS FROM EAST ASIA

Josephine Tam, Praveen Medabalmi, Kavya Reddy Katta, and Shimin Cao Charles B. Wang Community Health Center, 13626 37th Ave # 4FL, Flushing, NY 11354

BACKGROUND: Gastric cancer is the sixth most common cancer worldwide, yet the United States does not have standardized gastric cancer screening guidelines. Many studies have shown that gastric cancer incidence is higher in racial and ethnic minorities, having up to 50% increased risk compared to the non-Hispanic whites. Our goal is to assess the need for a gastric cancer screening program for high-risk individuals in a patient population that primarily consists of first-generation immigrants and Asian Americans.

METHODS: Secondary data analysis on patient data from Charles B. Wang Community Health Center from 2006 to 2021 was conducted to ascertain the incidence of gastric cancer in our patient population as well the incidence of intestinal metaplasia and H. pylori infection in our community amongst screened individuals.

RESULTS: Our study results suggest that between age groups 40-49 and 50-59, there is a 33.3% increase in risk for developing gastric cancer. Of 69 patients newly diagnosed with gastric cancer, 41 (59.4%) were diagnosed at their first screening encounter, with a 78.6% 5-year survival rate. When comparing our non-Hispanic White (NHW) and Asian populations, there was a 66.02% decrease (95% CI [0.1952, 0.5915]) in odds of being diagnosed with gastric cancer if the subject was NHW. The crude rate of gastric cancer in our patient population is 16.73 cases per 100,000 person-years and 71.46 cases per 100,000 people.

CONCLUSIONS: Our center's patient population is a high-risk group for gastric cancer with high incidence of H. pylori infection and a population that primarily consists of immigrants from East Asian countries. Between the age groups 40-49 and 50-59, the risk of gastric cancer increases most significantly.

CONTENT CATEGORY: Epidemiology, gastroenterology, translational science

KEYWORDS: Stomach cancer; Helicobacter pylori; risk factors, esophagogastroduodenoscopy (EGD)

HEALTH CARE DISPARITIES AMONG CHINESE AMERICANS PRESENTING TO URBAN EMERGENCY DEPARTMENT

Pon-Hsiu Yeh, MD

New York Presbyterian Hospital-Weill Cornell Department of Emergency Medicine

Dr Pon-Hsiu Yeh: 345 Union Ave, Apt 1B Brooklyn, NY 10021

BACKGROUND

Asian Americans are the fastest growing ethnic population in the United States. This study focuses specifically on health care outcome disparities in the Chinese American population entering the emergency department at Lower Manhattan Hospital (LMH) in New York City.

METHODS

This is a retrospective study of all patients > 18 years old presenting to this emergency department from 2014 to 2019. Descriptive characteristics were compared between Chinese and non Chinese patients. These characteristics of interest were demographics, indicators of access to medical care, burden of chronic illness, acuity of illness, and secular trends. Outcomes were compared between the two patient populations. The outcomes of interest in this study were 1) length of stay in ED 2) whether patient was admitted to the hospital and 3) whether patient died in the ED. Differences in outcomes were adjusted for with regression analyses.

RESULTS

Chinese patients were nearly 30 years older than non-Chinese, and nearly 75% had public insurance compared with only 36% of non-Chinese patients. In terms of outcomes, Chinese patients had longer lengths of stay in the ED, were more likely to be admitted, and were more likely to die in the ED than non-Chinese patients. Demographics, acuity, and access to care accounted for nearly all of the longer LOS. Age accounted for half of the excess risk of admission with a residual risk 8% higher for Chinese patients not accounted for. Age played a major role in differences in mortality, with a modest role of acuity and access to care; however, there were 50% higher odds of death in the fully adjusted mortality models.

CONCLUSION

This study found significant differences in patient LOS, disposition, and mortality despite being adjusted for demographics, access to care, acuity, burden of chronic disease, and secular trends between Chinese and non Chinese patients in the emergency department.

CONTENT CATEGORIES: Epidemiology, Clinical care

KEYWORDS: Healthcare disparities, Asian American, Chinese American, Emergency

Department

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POSTER PRESENTATION

ABSTRACTS

INCREASING ORAL HEALTH LITERACY FOR CHICAGOLAND CHINESE AMERICAN YOUTH

Amy Lin; Dr. Brittaney Hill, DDS, MS, MPH; Dr. Christine D. Wu, PhD; Courtnie Akande, MPH; J. Austin Buen-Gharib; Susie Shin; Samantha Schaller; Wanda Nguyen; Ji Young Yoon, MS; Max Bouvagnet; Department of Pediatrics at University of Illinois at Chicago College of Dentistry, 801 S Paulina St, Chicago, IL 60612

BACKGROUND: With a rapidly growing Asian population in the United States, the purpose of this eight-week study was to evaluate if there was a difference between the comprehension of proper oral hygiene instructions and knowledge of bilingual adolescents (10 to 18 year olds) if information was taught using their preferred language i.e. (Mandarin Chinese or English). Our hypothesis was that oral hygiene instructions would be more effective if taught to adolescents in their preferred language.

METHODS: Programs catering to Chinese American youth were identified. Programs were then narrowed down to those with summer programming receptive to presentations and research within 10 weeks. Two different programs agreed to participate. Identical pre/post tests and oral health focused educational presentations were administered to each organization. Subsequently, the data was combined. Both programs had children with similar age ranges from 10-18 years old. Educational sessions for the first organization (n=19) were held in person while sessions for the second organization (n=12) took place virtually. Props and a lesson plan were utilized as adjunct methods for encouragement to improve oral hygiene. Secret numbers were assigned during first visits and participants took a pre-test. Afterwards, participants were split up randomly in half and both groups were taught oral hygiene instructions, nutritional counseling, and smoking/vaping effects on oral health in Mandarin Chinese or English. At the second visit, participants were divided into the same groups and the lesson plan was reinforced in the same language. Once more, the same survey test was administered. Data analysis was completed using SPSS.

RESULTS: Improvement was seen in oral health knowledge, regardless of the language that the adolescents received the instruction. A statistically significant improvement was noted in the answering of the questions regarding vaping (E-cigarettes) affecting the teeth and gums (P value =0.046) and knowledge about the appropriate shape one should use when flossing (P value=0.017). The adolescents that were taught in their preferred language were more likely to respond correctly to the question regarding the need to brush only the teeth versus the teeth and gums (p value =0.026).

CONCLUSIONS: The majority of adolescents had prior oral health knowledge and scored highly on the pre-test survey. Oral hygiene instructions taught in students' preferred language may improve overall oral health literacy for some, but further research should be conducted. A larger sample size would be beneficial to expound on specific topics, such as the effects of vaping (Ecigarettes), as vaping frequency has become more prevalent among adolescents.

CONTENT CATEGORY: Patient care

KEYWORDS: Oral health literacy, preferred language, bilingual children, survey

DIGITAL HOLOGRAPHIC DISPLAYS (HDS) AND WIGGLE STEREOSCOPY FOR INEXPENSIVE GLASSES FREE VIEWING OF STEREO-IMAGES.

Lemanski BCP¹, Lemanski N¹, and Cheng M¹

1) Mabel MP Cheng MD PLLC, 3140 Troy Schenectady Road, Niskayuna, NY 12309

BACKGROUND: Stereo imaging is a mainstay in ophthalmology, providing depth to ophthalmic images. However, viewing stereo images is difficult: the crossview technique / 3D headsets are not tolerable through a clinic day, cross view prism glasses limit the cone of view, analyphs sacrifice color rendering, parallax barrier screens are expensive. We developed a workflow for inexpensive glasses free viewing using holographic displays or wiggle stereoscopy graphics interchange format (GIF) files.

METHODS: Stereo images were captured in office or from archive and imported into StereoPhotoMaker [SPM] (Muttyan et al., 2003). Stereo images were auto or manually aligned, exported through SPM at 10x10 millisecond oscillations, from 10 milliseconds to 50 milliseconds in 10 millisecond intervals, for wiggle stereoscopy or, for HD viewing, analyzed in DMAG9b (Ugo Capeto, 2011) for depth map creation, rendered, and viewed in Looking Glass Portrait HD.

RESULTS: Most stereoimages were auto aligned / rendered for wiggle stereoscopy or HD in 3 min. Optomap stereo images needed manual alignment to boost parallax. Wiggle stereograms and holographic display stereo images were viewed simultaneously by multiple providers, whom had no preference of wiggle stereograms vs holographic display.

CONCLUSIONS: 5 Hz (20x10 millisecond oscillation) was found to be the most tolerable for wiggle stereograms. To our knowledge, this is the first application of wiggle stereography or holographic for glasses free viewing of stereo images in a medical context. Given low cost (holographic display <400 USD, wiggle stereograms, free) and ease of generation, glasses free viewing of stereo images has the potential to return stereo images to common and routine clinic use.

CONTENT CATEGORY: Basic Science

KEYWORDS: Stereographic, Holographic, Wiggle Stereograms

PILOT OF A SUBSIDIZED AND CULTURALLY-ADAPTED COMMUNITY SUPPORTED AGRICULTURE PROGRAM FOR THE CHINESE AMERICAN COMMUNITY OF BROOKLYN, NY

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Stella Chong, NYU Langone Health Department of Population Health180 Madison Avenue, New York, NY 10016

BACKGROUND: Asian Americans have one of the highest risks of diabetes and non-alcoholic fatty liver disease among racial/ethnic minority groups. However, existing policies/programs to improve diet quality have been limited in their reach. Community-supported agriculture (CSA) have demonstrated to be an effective way to increase fruit and vegetable intake in studies with mostly White participants. Although CSAs show promise for low income, Asian American communities, an upfront payment to participate often makes it untenable. To address this, we partnered with Chinese-American Planning Council, Glynwood Center for Regional Food and Farming, The Table food pantry, and Brooklyn Grange to develop Building Access to Food through Systems and Solidarity (BASIS), a subsidized CSA program to address demands for fresh produce tailored for the Chinese American community.

METHODS: BASIS program development was informed by survey feedback and key informant interviews with Chinese-identifying community members. This single-proof of concept pilot program will be evaluated using a pre-post design. Primary outcome is improvement in diet quality measured by skin carotenoid levels. Secondary outcomes include changes to food insecurity, social cohesion, and self-efficacy in food security. Culturally-focused produce boxes will be provided to participants at Brooklyn Grange's Sunset Park location for 20 weeks. Participants will also receive a recipe card and nutrition handout weekly that center cultural values and traditional preparation techniques to encourage healthy eating behaviors.

RESULTS: BASIS is currently being implemented. Based on informal verbal feedback, participants have enjoyed the quality and variety of produce offered and found the educational content useful in preparing dishes. We hypothesize that providing culturally appropriate food access and information, participants' diet will improve as indicated by an increase in skin carotenoid scores.

CONCLUSIONS: BASIS presents a powerful model to improve diet in immigrant communities by addressing determinants of food access in a community-centered, culturally competent way, and by fortifying community empowerment.

CONTENT CATEGORY: pilot study, community-based participatory research

KEYWORDS: Nutrition, diet, Chinese American, community-supported agriculture, health disparities

HEAD-TO-HEAD COMPARISON OF VISION TESTS INTEGRATED INTO A VIRTUAL REALITY TECHNOLOGY AGAINST THEIR CLINICAL ANALOGUES

Christopher P. Cheng^{1#} and Margarita Labkovich, MS^{1#}; Andrew J. Warburton, MD^{1,2}; Randal A. Serafini, MS¹; James G. Chelnis, MD³

BACKGROUND: Each year, the United States sees 240,000 new cases of minimal vision loss or blindness. For timely treatment of these cases, virtual reality (VR) offers a promising avenue for improving access to vision screening without sacrificing accuracy.

METHODS: A non-inferiority trial was performed at New York Eye and Ear Infirmary 102nd St clinic, where patients received a 24-2 Humphrey Visual Field Analyzer (HVFA) exam, Ishihara color blindness test, ETDRS acuity chart, Pelli-Robson contrast-sensitivity chart, and/or an Amsler Grid vision exam along with their VR analogues in a randomized fashion. Secondary outcomes were also collected, such as the time it took to complete each test and a survey for evaluating the patient experience.

RESULTS: From 86 subjects recruited, 110 eyes underwent Ishihara testing for both VR and non-VR modalities and their respective results demonstrated no significant difference (p = 0.12, U = 1253.5) in a Mann-Whitney U test. 98 eyes took both versions of the Amsler grid test, demonstrating no significant difference (p = 0.81, U = 4514.5). The 24-2 suprathreshold perimetry analog achieved a 78% and 76% overall agreement in the left and right eyes among samples of 41 and 43 eyes, respectively. 34 eyes took both versions of the ETRDS and Pelli-Robson tests twice and the inter/intra-test reliability results demonstrated no significant difference for either eye. Perimetry was much faster on the VR headset (p<0.0001) and patients reported significant preference (p<0.05) for the experience, comfort and speed of VR analogues.

CONCLUSIONS: VR vision test packages are comparable to traditional tests and can help increase access to vision screening and detect vision abnormalities earlier. VR's impact is helped by its comparatively lower cost, faster speed, and user-friendliness.

CONTENT CATEGORY: Clinical science (trials)

KEYWORDS: virtual reality, vision screening, retinal screening, access to care, ophthalmology

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MODULATING THE RNA-BINDING PROTEIN HUR REGULATES THE PROGRESSION OF ACUTE KIDNEY INJURY

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BACKGROUND: Acute kidney injury is one of the most common complications in critically ill patients with a high risk of developing CKD with no current cause-specific treatment. Hu antigen R (HuR), an RNA-binding protein governing mRNA stability and translation, has been identified as a key modulator in inflammation. We hypothesized that the enhanced HuR/pro-inflammatory actor circuit is a crucial mechanism for the transition of septic AKI to CKD and inhibition of HuR may reverse septic kidney injury.

METHODS: Sustained administration of LPS (5mg/kg BW, i.p. every other day)-induced mice (n=5/each group) were treated without or with HuR inhibitor, KH-39 (50mg/kg BW) or niclosamide (NCS, 10mg/kg BW) i.p. daily for 7 days. Normal mice injected with saline served as controls.

RESULTS: Repeated injections of LPS to mice developed chronic kidney damage, including increased plasma BUN levels and urinary albumin/creatinine. Histologically, LPS-injured kidneys showed accumulative inflammatory cells (including F4/80+ macrophages) infiltration and fibronectin (FN) & collagen (Col) deposition. Both a-SMA and FN as the markers of renal fibrosis were markedly increased using Western blot. Notably, a significantly increased HuR expression was observed in diseased kidney, which was inhibited by HuR inhibitor, KH-39. Immunofluorescent staining for HuR confirmed the Western blot measurement. Inhibition of HuR with KH-39 further largely reduced the elevated plasma BUN levels and albuminuria, and tubular injury, inflammation and tubulointerstitial fibrosis, compared to the untreated LPS-injured mice (P<0.05).

CONCLUSION: These results suggest that HuR is increased in LPS-injured kidneys and the progression of septic AKI to CKD induced by persistent inflammation is strongly reduced by HuR inhibition, at least, through downregulating inflammatory expression. This study may provide a proof-of-concept for repurposing HuR inhibitor as a new therapy for septic kidney injury.

CONTENT CATEGORY: Basic Science and Translation Science

KEYWORDS: Nephrology, Acute Kidney Injury, Chronic Kidney Disease, HuR Inhibitors

TRANSLATION AND VALIDATION OF THE OVERACTIVE BLADDER SYMPTOM SCORE (OABSS) IN CHINESE: AN ANALYSIS OF MANDARIN VERSUS CANTONESE SPEAKERS

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BACKGROUND: Barriers to health care exist in the Chinese patient population due to language and cultural differences. Significant differences exist in reading, writing, and speaking among the various dialects. Our aim was to analyze the differences in validation of Chinese Overactive Bladder Symptom Score (OABSS) between Mandarin and Cantonese speakers.

METHODS: The English version of the OABSS was translated into Chinese. The 5th question in the survey served as a proxy for OAB status. Patients were administered the Chinese OABSS twice and assigned to either Mandarin or Cantonese group based on preferred dialect. Internal validity was calculated using Cronbach's coefficient alpha, test-retest reliability was measured using Spearman's correlation, and t-test was used to assess discriminant validity.

RESULTS: A total of 53 Mandarin speakers and 83 Cantonese speakers were included in this post-hoc analysis. Cronbach's alpha coefficient was 0.65 and 0.82 for Mandarin and Cantonese speakers, respectively. In both models, Spearman's coefficients ranged from 0.48 to 0.93, with all 7 questions and total OAB score showing statistically significant associations (p<0.001). In both models, no significant differences in total OAB score were seen between visits 1 and 2 in either OAB-positive and OAB-negative groups. However, the OAB-positive group had significantly higher mean OAB scores in both visits 1 and 2 compared to the OAB-negative group.

DISCUSSION: An acceptable degree of internal validity, strong test-retest validity, and significant discriminant validity were appreciated on analysis. Few differences were appreciated between Mandarin and Cantonese speakers during the validation process. The Chinese OABSS can be a useful tool in both Mandarin and Cantonese speaking patients.

CONCLUSION: When designing surveys, developers should be aware of the differences within a language. In addition, future efforts can be directed towards investigating the differences in survey interpretation among Chinese dialects.

CONTENT CATEGORIES: clinical science, patient care

KEY WORDS: Overactive Bladder, Incontinence, Chinese, Validation Studies

OPTIMIZATION OF WORKFLOW TO REDUCE PATIENT WAIT TIME IN FREE STUDENT-RUN CLINIC

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BACKGROUND: Prolonged wait times in clinic are associated with poor treatment adherence, higher rates of missed appointments, and failures or delays in treatment initiation. The Paul Hom Asian Clinic is a free student-run clinic in Sacramento staffed by undergraduate, health professional students, and physician volunteers. This study aims to assess patient and staff-level factors contributing to prolonged patient wait times, identify areas of improvement in clinic workflow, and propose interventions to reduce total wait time.

METHODS: A process map outlining all steps in a patient's visit was created. Quantitative data in the form of time intervals representing steps in patient visits were collected. Focus groups were conducted with undergraduate students, professional students, and physicians to inform quantitative findings.

RESULTS: The mean total time a patient spends in clinic is 2 hours, 46 mins. On average, walkins spent 74 mins longer in clinic. There was no difference in visit time between new and existing patients and patients who did and did not require interpretation. There was also considerable variability in visit duration based on non-medical services needed.

Stakeholders identified issues with equipment, staffing, and communication. Limited clinic space and lack of availability of preceptors and professional students_led to prolonged time in clinic for patients. Teaching time and complex care coordination also increased patient wait times.

CONCLUSIONS: Based on suggestions from focus groups, logistic and physical clinic changes, improvement in inter-staff coordination, and optimization of electronic health record usage will be implemented. Additionally, we will design a bulletin board providing timely updates for med student/preceptor location and availability. We will continue to collect data and perform iterative PDSA cycles to assess the effectiveness of implemented interventions.

CONTENT CATEGORY: Patient Care

KEYWORDS: Quality Improvement, Student-Run Clinic, Free Clinic, Clinic Workflow Optimization, Primary Care, Waiting Time

EPIDEMIOLOGY OF THORACOLUMBAR FRACTURES IN THE U.S FROM 2001-2019: PATIENT-RELATED TRENDS, MECHANISMS OF INJURY, AND DISPOSITIONS

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BACKGROUND: Epidemiological data on thoracolumbar fractures in the emergency department setting are limited. Such data is useful in informing management techniques and post-operative/management rehabilitation. In this study, we evaluate patient demographics, mechanism of injury, and disposition to note trends in thoracolumbar fractures over two decades.

METHODS: The National Electronic Injury Surveillance System was queried to identify patients with thoracolumbar spinal injuries presented to the emergency department between 2001 and 2019. Available patient demographics including age, sex, and race, disposition, and mechanism of injury were collected and analyzed. Government census data were used to determine the estimated cases over time and incidence rates (IR) (1 million person-year) by age, sex, and race per year.

RESULTS: 4952 patients were identified between 2001 and 2019 with an estimated total of 190,568 thoracolumbar fractures (IR-30.1). The mean patient age is 64.2 ± 21.2 , minimum age 18 and maximum age 103. 42.1% (IR-26.15) of thoracolumbar fractures occur in male patients while 57.9% (IR-34.5) occur in female patients. Data on race/ethnicity is available for 57.8% of patients. Of the available racial/ethnicity data (57.8%), Asians (7.14%) were fourth most common after white (26.15%), Alaskan-Native/American-Indian (15.12%), and Native-Hawaiian/Pacific-Islander (9.50%).

CONCLUSIONS: There are interesting trends in our analyses. The incidence rate persons-year is greater as the patients' age increases. As for mechanism of injury, the most common cause of thoracolumbar fractures is due to fall injuries, then other, and sports and exercise. Men presented more than women overall. By studying epidemiology, we may inform better documentation, management, and prevention methods to reduce cases. Further categorizing by fall type and other factor can help inform management after traumatic presentation. Further studies are needed to assess odds-ratio and how certain preventive interventions by group may affect the frequency of specific mechanism of injuries, such as falls, in different age groups.

CONTENT CATEGORY: Epidemiology

KEYWORDS: Thoracolumbar Fracture, Epidemiology, Falls, Prevention, Incidence

EFFECT OF EARLY MEDICAID EXPANSION ON INCIDENCE OF UROLOGIC CANCERS IN ASIANS AND PACIFIC ISLANDERS

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BACKGROUND: Medicaid expansion (ME) under the Patient Protection and Affordable Care Act has allowed earlier cancer detection, varying by cancer type. The earliest implementations were among 6 states in 2010-2011. Expansion's effect on urological cancer incidence rate (UroCaI) has been underexplored, especially among Asians/Pacific Islanders (API). Additionally, in 2012, the USPSTF recommended against prostate-specific antigen (PSA) screening, which may obscure the effect of ME on prostate CaI (PCaI). This study aims to determine the effects of early ME on UroCaI and PCaI in APIs.

METHODS: We used SEER Detailed API data from 2007-2009 (pre-ME) and 2012-2014 (ME) to create age-standardized three-year malignant UroCaI and PCaI, stratified by race/ethnicity group. Groups of interest were non-hispanic white, API, Asian Indian/Pakistani, Chinese, Filipino, Japanese, Kampuchean, Korean, Laotian, Vietnamese, Guamanian/Chammorro, Native Hawaiian, and Samoan. We carried out a difference-in-differences analysis to compare cancer incidence by race/ethnicity group and whether the cancer was detected in an early expansion state. We used SAS® OnDemand for Academics for all analyses.

RESULTS: UroCaI per million API was 541 pre-ME and 404 in early ME. Early ME is not associated with UroCaI changes in whites (p=0.8) or API (p=0.4). Compared to states that did not expand Medicaid early, UroCaI in Samoans decreased by 60 cases per million (p=0.04) and PCaI in Filipinos decreased by 388 cases per million men (p=0.02) in early ME states.

CONCLUSIONS: Early ME is associated with decreased UroCaI in Samoans and decreased PCaI in Filipino men, but not all API. This confirms the previously reported inter-group variation within API and suggests that different API groups have different urologic care needs. The 2012 USPSTF recommendation against PSA screening could have potentially contributed to this declining cancer incidence.

CONTENT CATEGORY: Epidemiology

KEYWORDS: Early Medicaid Expansion, Patient Protection and Affordable Care Act, Urologic Neoplasms, Prostate Cancer, Asian Americans

INCIDENCE OF UROLOGIC CANCERS IN ASIAN AMERICANS, NATIVE HAWAIIANS, AND PACIFIC ISLANDERS - A SEER ANALYSIS

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BACKGROUND: Asians/Pacific Islanders (API) have relatively low urologic cancer incidence rate (CaIR). Few studies have examined if urologic CaIR varies between API ethnicities. We aim to characterize urologic CaIR trends from 1990-2014 among Asian Indians/Pakistanis, Chinese, Filipinos, Guamanians, Native Hawaiians, Japanese, Kampucheans, Koreans, Laotians, Samoans, and Vietnamese.

METHODS: We queried SEER-Detailed API Database for incident cases of malignant urinary system and male genital cancers from 1990-2014. We compared the age-adjusted urologic CaIR per million of each API ethnicity versus all API by binomial test (p<0.05) in SAS® OnDemand for Academics. Average annual percentage change (AAPC) was calculated by Joinpoint v4.9.1.0 and stratified by cancer type, sex, and race.

RESULTS: Compared to all API men, prostate CaIR (835) is higher in Samoans (1519), Filipinos (1118), Hawaiians (1064), Japanese (1060); testicular CaIR (17) is higher in Hawaiians (45), Japanese (34); and penile CaIR (4) is higher in Kampucheans (19), Asian Indian/Pakistani (12). Compared to all API, bladder CaIR (89) is higher in Hawaiians (115), Japanese (114); kidney/renal pelvis CaIR (69) is higher in Hawaiians (119) and Samoans (91); and no single group had significantly higher ureter CaIR (5).

From 1990 to 2014, the AAPC of urologic CaIR increased in Japanese (1.2) and Filipino females (2.0) but declined in Chinese males (-2.0). AAPC of prostate CaIR declined in Chinese (-2.7) and Filipino males (-3.2). AAPC of bladder CaIR declined in Chinese females (-1.2). AAPC of renal CaIR increased in both sexes for Chinese and Japanese, and Vietnamese males and Filipino females.

CONCLUSIONS: Except ureter cancer, each urologic cancer was associated with certain API groups experiencing significantly increased risk of disease compared to all API. This suggests the need to analyze API ethnicities separately to unmask potentially underserved groups with increased disease burden. More research is needed to examine why renal cancer increased in many different API groups.

CONTENT CATEGORY: Epidemiology

KEYWORDS: Urologic neoplasms; Asian Americans; Health Disparity, Minority and Vulnerable Populations; SEER Program

INCIDENCE OF UROLOGIC CANCERS IN CHINESE AMERICANS AND CHINESE

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BACKGROUND: Urologic cancers (UroCa) are among the most common cancers in the United States (US). Prior research shows incidence differs between Asians in their native countries and those who migrated to the US and their descendants. The impact of country of residence on UroCa incidence is underexplored. This study compares the incidence of UroCa between Chinese Americans and Chinese from 1990 to 2012.

METHODS: Yearly Segi age-adjusted incidence of prostate, testis, kidney, and bladder cancers from 1990-2012 were extracted from Global Cancer Observatory for Chinese and SEER Detailed Asian/Pacific Islanders database for Chinese Americans. Incidence rates of each cancer were compared between Chinese and Chinese Americans using Mann-Whitney U tests. Incidence trends over time in Chinese Americans, Chinese, and ratio of Chinese Americans to Chinese were analyzed by Spearman correlation with significance level 0.05.

RESULTS: Median prostate cancer incidence rate per 100,000 men was greater in Chinese Americans (35.0) than Chinese (12.0). Chinese Americans (30.1) also had higher rates of testicular cancers than Chinese (16.9). There were no differences in kidney or bladder cancer incidences for either sex.

Over time, Chinese Americans had an increased incidence of female kidney cancers (r=.575). Chinese had increased rates of prostate (r=.995), testicular (r=.551), male kidney (r=.976), and female kidney cancer (r=.950). Chinese had decreased incidence of male (r=-.803) and female (r=-.837) bladder cancer. Compared to Chinese, Chinese Americans had an increasing rate of bladder cancer in males (r=-.873) and females (r=-.564).

CONCLUSIONS: Chinese Americans had higher risk of prostate and testicular cancers than Chinese, despite sharing a common genetic background. More research is needed to elucidate cultural/environmental risk factors for urological cancers in the US.

CONTENT CATEGORY: Epidemiology

KEYWORDS: Urologic Neoplasms, Immigrant Health, Chinese Americans

ASSESSING THE READABILITY AND QUALITY OF ONLINE INFORMATION ABOUT BENIGN PROSTATIC HYPERPLASIA

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BACKGROUND: Benign Prostatic Hyperplasia affects nearly half of men in their fifties. With increased accessibility of online health information for patients of all levels of health literacy, it is crucial to assess readability and quality of BPH online information. For many patients, especially those who speak a different language like Mandarin, website readability can be challenging. This study aims to evaluate readability and quality of BPH online information, and the effect of commercial bias on both.

METHODS: Three search engines (Google, Bing, DuckDuckGo) were used with search terms "BPH," "BPH treatment," and "BPH surgery," to mimic a patient seeking further self-education. 204 total websites were identified, of which 62 were unique websites. Among those, 23 were advertisements. Three readability formulas (FKGL, FKRE, SMOG) were used to evaluate website readability. DISCERN standardized questionnaire was used to evaluate quality.

RESULTS: Average readability of BPH online information is significantly more advanced than AMA recommended 6th-grade reading level. Advertisements have significantly easier readability than non-advertisements. Average website quality is "excellent" for non-advertisements, but only "fair" for advertisements.

CONCLUSIONS: While advertisements may hold optimal search result positions and have better readability than non-advertisements, they have biased and lower quality information. It is important to guide patients to high quality online information appropriate for their health literacy, prior knowledge, and cultural background, especially for non-native English speakers. Future efforts should focus on improving readability of BPH patient education materials to facilitate comprehension and informed decision making.

CONTENT CATEGORY: Epidemiology; Patient Care

KEYWORDS: Benign Prostatic Hyperplasia; Internet; Quality; Readability; Literacy

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AN UNUSUAL CASE OF STEWART TREVES SYNDROME ON THE LEG

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BACKGROUND: Stewart Treves Syndrome (STS) is an angiosarcoma that classically appears in women with secondary chronic lymphedema of the arm as a complication of radical mastectomy requiring axillary lymph node resection for breast cancer. STS can be difficult to diagnose initially as it presents like cellulitis, Kaposi's sarcoma, ecchymoses, or stasis dermatitis. Biopsies confirm angiosarcomas by staining positive for CD31 and CD34. The condition is aggressive, and the prognosis is poor with a seven-month median survival period and 35% overall five-year survival rate. Conservative treatment is wide local excision and adjuvant cancer therapy while aggressive treatment is amputation. Most patients die from widespread metastases to the brain, heart, or lungs. Early detection and surgical management are crucial, although risk of recurrence and metastatic disease remain high.

METHODS: One rare case from a New York Dermatology clinic.

RESULTS: A 77-year-old Asian female presented with a ten-day history of erythema with pruritus, burning, and pain in her left leg. Ten years prior, she had uterine carcinoma treated surgically which was complicated by chronic lymphedema in left lower extremity. The patient refused skin biopsy at the initial visit and trimethoprim-sulfamethoxazole was prescribed for possible cellulitis. At one-week follow up, the patient reported improved symptoms and again refused biopsy. She was referred to vascular surgery for management of lymphedema but did not keep the appointment. A month following initial presentation, patient presented with a dusky erythematous plaque encircling the entire lower leg with focal confluence and small violaceous nodule. Left proximal pretibial region skin biopsy was consistent with angiosarcoma. Patient is currently doing well under the care of her oncologist.

CONCLUSIONS: This unusual case of STS in the lower extremity likely secondary from uterine cancer cautions dermatologists to include STS as a differential for patients with chronic lymphedema.

CONTENT CATEGORY: Case Study.

KEYWORDS: Angiosarcoma; Chronic lymphedema; Uterine carcinoma; Stewart Treves Syndrome

EPIDERMODYSPLASIA VERRUCIFORMIS AND ITS MYRIAD OF TREATMENTS DEMONSTRATED IN THREE CASES

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BACKGROUND: In the setting of immunosuppression, epidermodysplasia verruciformis-(EDV) is characterized by a susceptibility to infections with HPV subtypes that do not produce disease in immunocompetent hosts. Treatment of EDV remains a significant challenge for clinicians despite the array of treatment options available.

METHODS: Herein, we report 3 cases of recalcitrant flat warts in individuals with EDV or suspected EDV and review a variety of treatment regimens.

RESULTS: Two of 3 cases presented with EDV in the setting of immunosuppression and the third case presented an immunocompetent patient with lesions clinically compatible with EDV. Treatments trialed amongst all 3 patients included tretinoin 0.025% cream, tazarotene 0.045% cream, fluocinolone 0.01%-hydroquinone 4%-tretinoin 0.05% cream, imiquimod 5% cream, chemical peels, electrodessication, cryotherapy, aminolevulinic acid (ALA)-photodynamic therapy (PDT). Some patients trialed oral cimetidine, intralesional candida and triamcinolone injections in addition to topical 5-fluorouracil cream, cidofovir 3% cream, and oral isotretinoin. Patients saw modest improvement, without complete response in any, while undergoing a variety of multi-drug regimens over extended treatment courses.

CONCLUSIONS: The above armamentarium, though vast, highlights the difficulty with which to treat these patients. The number of different regimens trialed to achieve satisfactory results is testament to how challenging treatment of flat warts in the setting of EDV is for clinicians. Single therapy for flat warts or EDV is rare and physician experience and patient preference is paramount to successful treatment.

CONTENT CATEGORY: Case series.

KEYWORDS: Flat warts, epidermodysplasia verruciformis

MITHRAMYCIN A HAS MODEST EFFECTS ON TRABECULAR MICROARCHITECTURE IN SKELETALLY IMMATURE MICE

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BACKGROUND: Mithramycin is a chemotherapeutic agent being evaluated to treat Ewing sarcoma. It was previously used to manage hypercalcemic disorders featuring rampant osteoclasia. We investigated the effect of four weekly doses of Mithramycin on bone growth and morphometry in skeletally immature mice.

METHODS: Four-week-old female c57BL/6J mice were randomized into three groups (n=10) and given four weekly intraperitoneal (IP) injections of either saline vehicle, Mithramycin at 1mg/kg/wk, or 2mg/kg/wk. Bone mineral density and body composition were assessed weekly (DEXA). For dynamic bone morphometry, mice received IP injections of calcein or alizarin red complexone timed seven or two days before end of study. Blood was collected by cardiac puncture one week after the fourth injections. The right femur was measured (digital calipers), analyzed for μCT-based morphometry, and decalcified for paraffin histology. Sections were stained for static morphometry (H&E) and osteoclast activity (TRAP/Fast Green). Tibias were cryosectioned for dynamic bone morphometry. Light and epi-fluorescence images (Keyence BZ-X800) were analyzed (FIJI/ImageJ) for osteoclast numeric density (TRAP/Fast Green), marrow composition and general bone morphometry (H&E), and bone formation rate (Calcein/Alizarin red complexone).

RESULTS: No significant differences were observed between groups for body weight, composition, bone density, femoral length or mid-diaphyseal cortical bone morphometry. Significant reduction of trabecular bone volume fraction (p<0.0001) and trabecular number (p \leq 0.0118), and increased trabecular spacing (p \leq 0.0008), were observed in the 2mg/kg group. Dynamic bone histomorphometry at the proximal tibial metaphysis showed modest reductions of trabecular mineral apposition rate in both 1mg/kg (p=0.0504) and 2mg/kg (p=0.0395), and mineralizing surface (p \leq 0.0012) relative to vehicle controls. Tibia from the 2mg/kg group showed increased osteoclast number (p=0.0084), but no significant differences in osteoclast differentiation serum markers (M-CSF, RANK-L, TRAP5b), and endosteal or periosteal bone formation rates between groups.

CONCLUSIONS: Mithramycin has only modest effects on skeletal maturation in growing mice.

CONTENT CATEGORY: Basic and translational science.

KEYWORDS: Mithramycin A, Ewing sarcoma, skeletal growth, bone mineral density, body composition

POSTPARTUM LISTERIA MENINGITIS: A CASE REPORT

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BACKGROUND: Acute bacterial meningitis is a neurological emergency and fatal if left untreated. Here we present a case of bacterial meningitis, highlighting postpartum listeria monocytogenes infection.

PATIENT PRESENTATION: We present a case of 27 years-old woman with past medical history of migraine and hyperthyroidism, brought to the hospital with acute onset of reduced level of consciousness. A day prior to presentation, she woke up with a severe retro-orbital headache of 10/10 intensity along with nausea, vomiting, photophobia and phonophobia. Her symptoms further progressed to worsening confusion/somnolence with agitation. She had an uncomplicated vaginal delivery a month earlier. On admission, vitals were significant for high grade fever, hypotension, tachypnea and tachycardia. On examination, she was restless, combative, was not following any commands. No focal motor deficit. Nuchal rigidity and Babinski were negative. Labs showed mild anemia, leukocytosis, mild hyponatremia and lactic acidosis. MRI Brain showed faint diffuse leptomeningeal enhancement. CSF analysis showed WBC 732/Ul, SEG: 66%, protein> 300mg/dl and CSF glucose <20mg/dl. Meningitis panel and CSF culture were positive for listeria monocytogenes. Post CSF analysis, her broad spectrum antibiotics were deescalated to ampicillin for 21 days and gentamycin for 7 days for synergistic effects. During the initial treatment phase, she developed horizontal binocular diplopia and her exam showed isolated sixth nerve palsy. MRI brain revealed worsening diffuse leptomeningitis, involving the basal cisterns and the ependymal walls of the lateral ventricles. Eventually, she responded to the treatment and her symptoms resolved slowly.

DISCUSSION & CONCLUSIONS: Listeria Monocytogenes can be a possible cause of postpartum meningoencephalitis due to the underlying transient immunosuppressive condition. Return to a normal immune response may take as long as up to one year after childbirth. Treatment should not be delayed in highly suspicion cases to avoid complications like rhombencephalitis, progressive neurological deficits and eventually death.

CONTENT CATEGORY: Patient care

KEYWORDS: Postpartum listeria monocytogenes, immunosuppression

EVALUATING THE IMPLEMENTATION AND EFFECTIVENESS OF TELEHEALTH SERVICE DELIVERY DURING THE COVID-19 PANDEMIC AT A COMMUNITY HEALTH CENTER

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BACKGROUND: A federally qualified health center (FQHC) serving primarily limited-English proficient, low-income Asian Americans, rapidly adopted and scaled up telehealth services in March 2020 in response to the COVID-19 pandemic. A process evaluation was conducted to assess the feasibility of and satisfaction with telehealth services by patient and staff perspectives.

METHODS: Surveys were administered in July 2022 to 60 FQHC staff and 105 randomly-selected patients (77 internal medicine and mental health adult patients (IM/MH), and 28 pediatric patients' parents (PEDs)). English- and Mandarin-speaking patients/parents of pediatric patients completed surveys by phone or online. FQHC staff respondents anonymously completed an online survey. Descriptive statistical analyses were conducted to summarize survey data. Semi-structured interviews were also conducted with 6 staff. Interview transcripts were coded and analyzed using a grounded theory approach.

RESULTS: The majority of patient respondents were Chinese (76%), female (69%), and within the 25-44 age range (63%). Patient telehealth satisfaction was high for videoconference visits (n=82; index range: 12-60; mean = 49.56; S.D. = 5.62) and phone visits (n=16; index range: 10-50; mean = 39.81; S.D. = 6.57). Most patient respondents did not report challenges with using telehealth (61%). Top factors associated with telehealth use were convenience ("fits schedule better," 52%) and concern for COVID exposure (50%). Sixty-three percent of staff respondents agreed or were neutral regarding having adequate support to provide telehealth services. Key themes emerging from staff interviews included needing more patient education on technology-specific literacy; needing more support staff to improve workflow efficiency; and needing updated guidance regarding appropriate utilization of telehealth versus in-person care.

CONCLUSIONS: Overall, patients and staff are satisfied with telehealth services. Staff identified additional telehealth-specific patient education and support staff, as well as updated guidance regarding appropriateness of telehealth utilization as strategies to improve service delivery and patient experiences.

CONTENT CATEGORY: Patient care

KEYWORDS: telehealth, evaluation, provider perspective, patient perspective, community health center