

FIFTH ANNUAL EVENING OF RESEARCH

MAY 8, 2019

DYKER BEACH

GOLF CLUB



PROGRAM

POSTER PRESENTATIONS

OPENING REMARKS

KENNETH D. GIBBS

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MAIMONIDES MEDICAL CENTER

AUSTIN A. SCHLECKER ACADEMIC ACHIEVEMENT AWARD

RECIPIENT

MURALI K. PAGALA, PH.D

KEYNOTE ADDRESS

JASON M. LAZAR, MD, MPH

DISTINGUISHED TEACHING PROFESSOR STATE UNIVERSITY OF NEW YORK (SUNY) DOWNSTATE MEDICAL CENTER

ORAL PRESENTATIONS

MODERATOR ROBIN GITMAN

PRESENTERS

MARIA-PAMELA JANAIRO, MD

FELLOW, EMERGENCY MEDICINE

TESS STUDHOLME, BSN, RN, CEN, EMT

NURSING

SIRIVALLI CHAMARTI, MD

PERFORMANCE IMPROVEMENT, EMERGENCY MEDICINE

ANDREW WOOD, MD

RESIDENT, SURGERY

DINNER

CLOSING REMARKS

POSTER VIEWING

AUSTIN A. SCHLECKER ACADEMIC ACHIEVEMENT AWARD



MURALI K. PAGALA, PH.D

The Austin A. Schlecker Academic Achievement Award is given to the person who best embodies the ideals of research and what research stands for. This award is given to Dr. Murali Pagala for all that he has given to this institution in the 36 years of his tenure at MMC and to research in general.

The last position at Maimonides Medical Center that Dr. Pagala held prior to retirement was that of the Director of Research Education and Training. Dr. Pagala was not only a researcher, but was an inventor as well. His inventions include physiological monitoring devices such as an in-vitro electromyography chamber; an in vitro multi-muscle tension recording chamber; and a digital monitor for the quantitative assessment of the swimming activity of mice.

Dr. Pagala holds a bachelor's degree in zoology, master's degrees in neurophysiology and computer science and a PhD in muscle physiology. After his initial education in India, he pursued post-doctoral work in the United States at the Institute for Muscle Disease, New York, as a mentee of the eminent neurophysiologist, Dr. Alexander Sandow. Additionally, he acquired advanced training in telemetry for safety pharmacology of experimental animals from DSI, Montreal, Canada.

During his long scientific career, Dr. Pagala published over 75 research papers and has presented research work at numerous conferences.

His best known qualities include humility and a strong work ethic. His unflagging enthusiasm and his willingness to help the residents and fellows to design research projects and conduct analysis set him apart as a committed and passionate advocate for medical research.

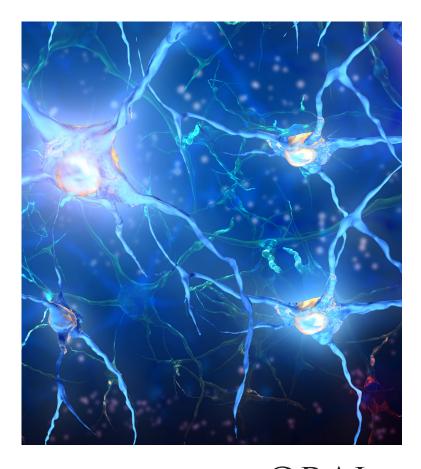
KEYNOTE ADDRESS



JASON M. LAZAR, MD, MPH

Jason M. Lazar, MD, MPH, is a professor who holds appointments in the Cardiology Division of the Department of Medicine, the Departments of Molecular and Cell Biology and Neurology, and in the School of Public Health at the State University of New York (SUNY) Downstate Medical Center. In addition to his teaching responsibilities in the Department of Medicine and the Cardiology Division, Dr. Lazar regularly lectures in the physician assistant and ultrasound programs. He serves as Chair of the Graduate Medical Education Research Committee, an oversight group charged with developing and implementing the highest quality research experiences for nearly 1,000 residents regardless of specialty or subspecialty. He is also an expert in population health and launched initiatives to educate students in the principles of this approach.

Dr. Lazar has published more than 170 peer-reviewed publications and more than 30 invited articles and book chapters. He has a national and international reputation as a non-invasive cardiologist studying macro and microvascular physiology and their effects on conditions such as sickle cell disease, HIV, and lupus.



ORAL ABSTRACT PRESENTERS

FELLOW Abstract

Maria-Pamela Janairo, MD Emergency Medicine

Bougie Use with Direct Laryngoscopy Does Not Outperform Video-Assisted Laryngoscopy in Endotracheal Intubation

Objective

Evidence suggests the use of a gum elastic bougie (GEB) in conjunction with direct laryngoscopy (DL) using a standard geometry blade (SGB) and a second operator to assist provides superior intubation metrics over other single operator methods to place an endotracheal tube (ETT). The literature also suggests that video-assisted laryngoscopy (VL) with a hyper-angulated blade (HAB) produces better performance metrics over DL. Our purpose was to determine if differences exist between DL and SGB with GEB specifically compared to VL and HAB with rigid stylet (RS) among EM providers.

Methods

On identical manikins, 36 emergency medicine physicians performed DL with SGB and GEB with the assistance of a second operator to pass the ETT and independently performed VL with HAB and RS. Performance metrics included time to successful intubation, number of attempts, psychomotor skill (PS) and technical skill (TS). PS and TS each were assessed by independent raters blinded to performance on the opposite modality on a scale of 1-8. PS represented characteristics such as hand eye coordination and dexterity. TS represented characteristics such as positioning and ability to avoid "rocking" the blade with DL and adherence to the four-step approach to using VL with a HAB.

Results

Time to intubation favored VL and HAB with RS (20 seconds, 95%CI = 17-22), over DL and SGB with GEB (32 seconds, 95%CI = 24-39) significantly (p =0.0008). Number of attempts were equal (1. 03 average for both groups). There was no difference with TS (4. 6, 95%CI 4. 3-4. 9 vs 4. 7, 95%CI = 4. 4-5. 0, p=0.524). PS favored bougie (5. 0, 95%CI = 4. 8-5. 3, vs 4. 8, 95%CI = 4. 5-5. 0), but there was no statistical difference (p=0.071). Interrater reliability for measurements of PS and TS for each modality was excellent (intraclass correlation range 0.85-0.91). Internal consistency of PS and TS for each modality was good (Cronbach's α = 0.84-0.87).

Conclusion

In operators of equivalent skill, VL with HAB and RS produces faster intubation times and similar success rates when compared to DL with SGB and GEB.

NURSING ABSTRACT

Tess Studholme, BSN, RN, CEN, EMT Nursing

IPASS as a Handoff Tool Between Emergency Medical Services and ED Triage Nurses

Objective

Effective communication is essential for promotion of safe patient care in Emergency Departments (EDs). Miscommunication during hand-off between healthcare providers results in increased risk of negative patient outcomes. IPASS (I=Illness severity; P=Patient Summary; A=Action List; S=Situational Awareness and Contingency Plan; S=Summary) is a hand-off tool currently utilized in many healthcare institutions as a structured hand-off mnemonic to organize patient needs when sent from one provider to another. The purpose of this study is to assess the impact of IPASS between EMS personnel and receiving triage ED nurses at Maimonides Medical Center.

Methods

A 10-question survey was self-administered at pre and post IPASS implementation. Each question had a score of 0-6 with 0 being strongly disagree and 6 being strongly agree. IPASS implementation included the dispersal of lecture, huddle and email about IPASS to providers and an 8-week period of IPASS use between EMS personnel and ED triage nurses. IPASS was utilized as a handoff tool between EMS personnel and ED triage nurses in the triage areas of the ED. Data analyses included independent sample t-test, chi-square, and linear regression.

Results

76 providers (34 RNs and 42 EMS personnel) completed the pre-survey and 72 providers (40 RNs and 32 EMS personnel) completed the post-survey. A statistically significant mean positive response was found at post-survey for 5 questions: Current handoff procedure in ambulance triage is clear and consistent, 3.51 (\pm 1.5) vs. 4.03 (\pm 1.5) P<.05; Current handoff practice is standardized and follows a formal procedure, 3.30 (\pm 1.7) vs. 4.06 (\pm 1.6), P<.01; Information during handoff is clear and consistent, you understand the reason for the patient visit, 4.0 (\pm 1.3) vs. 4.6 (\pm 1.2), P<.01; Current handoff procedure translates patient needs consistently, 3.86 (\pm 1.4) vs. 4.32 (\pm 1.4), P<.05; You will use this handoff procedure throughout patient care transfers, 4.61 (\pm 1.4) vs. 5.36 (\pm 0.8), P<.0001. The results were consistent after controlling for gender, years of experience, and provider roles.

Conclusion

ED nurses and EMS personnel gave positive feedback using IPASS as a handoff tool. The providers intend to utilize IPASS in this setting, minimizing information loss and improving patient safety.

PERFORMANCE Improvement Abstract

Sirivalli Chamarti, MD Emergency Medicine



An Innovative Meat Model Based Workshop to Increase Faculty Comfort with Performing Nerve Blocks

Objective

Performing nerve blocks is an increasingly important skill in the practice of emergency medicine (EM). They are an effective means of controlling pain and decreasing opiate utilization. A major barrier to widespread adoption is the lack of comfort with these procedures. Meat models have been described as a way to simulate these procedures, but these models have not described the ability to practice hydro-dissection along a fascial plane. This is important when performing fascial compartment nerve blocks. We describe a low-cost novel meat model that allows for hydro-dissection and its effectiveness in improving comfort with performing two nerve blocks, as well as survey responses of participating physicians.

Methods

40 board certified EM physicians participated in a workshop that consisted of a lecture on the serratus anterior compartment (SACB) and fascia iliaca compartment blocks (FICB), followed by a one hour hands-on session with a live human model and a meat model. Both blocks are large volume fascial plane blocks where the anesthetic is placed in a specific fascial compartment. We surveyed physicians at pre and post workshop.

Results

22 EM physicians responded to our survey. Prior to the workshop, 77% strongly disagreed with feeling comfortable performing the SACB. After, 59% of participants agreed that they felt comfortable with the SACB and 0% strongly disagreed. 48% of participants strongly disagreed with feeling comfortable performing the FICB prior to the workshop. 50% agreed that they felt comfortable after the workshop, and 0% strongly disagreed. This suggests that our meat model for the compartment blocks increases physician comfort with these blocks.

Conclusion

The objective of this workshop is to increase comfort with performing serratus anterior compartment (SACB) and fascia iliaca compartment blocks (FICB). The number of SACB and FICBs performed before and after the workshop did not substantially change. This may indicate improvements are needed, but may also be confounded by the survey being taken within 6 months of the workshop, and the meat model not addressing other barriers to performing this procedure in the emergency department.

RESIDENT ABSTRACT

Andrew Wood, MDSurgery



Biopsy, Laboratory, and Imaging Risk Factors Predict Gleason Upgrade on Active Surveillance

Objective

Recently, active surveillance (AS) has become the preferred management strategy in men with low risk prostate cancer. Despite widespread acceptance, many men that start active surveillance will eventually fail and require treatment. Predicting which men will progress on AS remains a challenging clinical dilemma. The objective of this study is to evaluate for clinical risk factors (RFs) that might aid in the risk stratification of these patients.

Methods

We performed a retrospective review of men on AS for low risk prostate cancer within the Northwell Health System. Records were queried for clinical RFs including PSA density (PSAD), percent free PSA, multiparametric MRI (mp-MRI) findings, and surveillance biopsy results. Univariate and multivariate Chi Square and Logistic Regression analyses were performed to test for associations between Gleason upgrade at last known follow up and clinical, laboratory, and imaging related RFs. Only patients meeting UCSF criteria for active surveillance at time of initial diagnosis were included in analyses (T1 or T2a, Gleason 6, less than 1/3 of total cores positive for cancer).

Results

336 men were identified as having pursued an AS strategy for some length of time. Of those, 212/336 (63.1%) had the necessary data on clinical risk factors, biomarkers, mp-MRI results, and had undergone at least 1 surveillance biopsy. 61 of 212 (28.8%) had Gleason upgrade at the time of last known surveillance biopsy. On univariate analyses, the following variables were statistically significant predictors of Gleason upgrade: initial PSAD, initial PSAD <0.10, initial %freePSA, initial PIRADS score, negative intervening biopsy, PSAD increase of at least 0.05. On multivariate analysis, initial PSAD remained a statistically significant predictor of Gleason upgrade (p = 0.032).

Conclusion and Implication

There are several clinical, laboratory, and imaging related risk factors that seem able to predict Gleason upgrade in patients on AS. Of these factors, PSAD, particularly at a cutoff of 0.1 ng/ml/cc, was an independent predictor of upgrade. Given the abundance of risk factors not only at time of diagnosis, but also upon repeat biopsies and office visits, development of a nomogram to quantify the risk of Gleason upgrade on AS seems prudent.



POSTER PRESENTERS

FELLOW

CARDIOLOGY

TAVR Operator Radiation Exposure (TAVORE)
Sunny Goel, MD

EMERGENCY MEDICINE

Experience Intubating Adults Correlates with Improved Performance in Pediatric Intubations AnneMarie Cardell, MD

Emergency Medicine Physician Bedside Echocardiographic Identification of Left Ventricular Diastolic Dysfunction Alyssa Nguyen-Phuoc, MD

The Impact of Video Otoscopy Teaching on Improving the Accuracy of Acute Otitis Media Diagnosis Shamicka North, MBBS

MEDICINE

Electrocardiographic Associations Seen with Obstructive Sleep Apnea Sushilkumar Gupta, MD

Utility of Tumor Genomic Profiling in Guiding Targeted Therapy and Referral for Clinical Trials in Lung Cancer Jiang Yio, MD, MBA

INTERNAL MEDICINE

A Retrospective Chart Analysis of a Community Based Hematology Oncology Practice Looking at NGS Testing of Patients with Colorectal Cancer and How it Affected the Management of Patients by Their Physicians Daniel Benasher, MD

> Etiology of Pulmonary Nodules; How Common is Unsuspected Infection Barbara Alvarez, MD

OBSTETRICS & GYNECOLOGY

Association of Uterine Rupture with Pregestational Diabetes in Women Undergoing Trial of Labor After Cesarean Delivery Rodney A. McLaren Jr., MD

SURGERY

Intraoperative Ketorolac Use Does Not Increase the Risk of Bleeding Complications in Breast Surgery

Mastectomy is No Longer an Indication for Post-Operative Narcotic Prescription at Discharge Thais A. Fortes, MD

NURSE

Assessing the Understandability and Actionability of an Educational Video Designed to Increase Patient Portal Access Among Culturally Diverse Adults
Adalberte Figaro, DNP, RN-BC, CAHIMS

RESIDENT

EMERGENCY MEDICINE

Measuring Optimism Utilizing Life Orientation Test Revised Scores Compared Among Emergency Medicine Residents and Faculty Humaira Ali, DO

Randomized Double Blind Trial Comparing 3 Doses of Ibuprofen for Pain in Adult Emergency Department Patients Cecily Sotomayor, MD

Endotracheal Intubation Skills; Gender Differences in the Correlation Between Self Assessment and External Raters
Tina Nguyen, MD

Traditional Metal Blades Perform Better than Video Laryngoscope Blades in Direct Laryngoscopy Aneri Sakhpara, MD

Examining Rater Bias: Comparing Gender Differences in Faculty
Examiners Assessing Endotracheal Intubation Skills
Samuel Kim, MD

Ketamine's Safety Profile in Patients with Psychostimulant Drug Induced Toxicity Nathanael Marsan, MD

Comparing Oral Ibuprofen and Acetaminophen to Either Alone for Pediatric Emergency Department Patients with Pain Wendy Palacios, MD

MEDICINE

High-Flow Nasal Cannula Oxygen Use in Elderly Patients: A Retrospective Analysis Among MICU Patients Arjun Saradna, MD

Prediction of Heparin-Induced Thrombocytopenia (HIT) by Using Screening Immune Assay or Clinical Diagnostic Criteria

> Resident Attitudes and Practice Towards Ordering Laboratory Tests at a Teaching Hospital Rajat Thawani, MD

OBSTETRICS & GYNECOLOGY

Implicit Bias and Contraceptive Counseling
Jessica Rosenblum, DO

Pelvic Floor Ultrasound: Patterns of Use and Barriers in Modern Urogynecology Dima Ezzedine, MD

ORTHOPEDICS

Effect of Level 1 Trauma Designation on Geriatric Hip Fracture Patients Jordan Pasternack, MD

PHARMACY

Antibiotic Susceptibilities of Organisms Isolated from Urine
Cultures of Patients Diagnosed with a Urinary Tract Infection (UTI)
and Discharged from the Emergency Department (ED)
Patrizia Favale. PharmD

PSYCHIATRY

Role of Molecular Factors in Schizophrenia and Psychotic Spectrum Disorders Benjamin Fey, MD

The Impact of a Resident-Lead School-Based Psychoeducation Program on the Awareness of Mental Health and Mindfullness in Middle-Schoolers Meghaa Bhargava, MD

Improving Quality of Care and Well Being of Chinese Speaking Patients in Acute InPatient Psychiatric Settings Tianxu Xia, MD

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The Impact of Intraoperative Narcotics for Robotic Urologic Surgery Patients on an ERAS Protocol Elliot Dubowitch, MD

Perspective and Practice Patterns on Mediastinal Staging Among Thoracic Surgeons Daniel Kaufman, MD

Device Related Complications During Renal Cryoablation: Lessons from the Manufacturer and the User Facility Device Experience (MAUDE) Database Srinath Kotamarti, MD

Cost Benefit Analysis of CT Scan Versus
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Do We Need Gender Specific Microhematuria Guidelines?

Evaluation of Asymptomatic Microscopic Hematuria: Risk of Malignancy and Estimated Cost Based on Hematuria Risk Index

> Is Use of PSA Density Valid in Prostates That Are Greater Than 100 Grams Daniel E. Rabinowitz, MD

The Meritocracy: A Novel Team-Based Learning Paradigm in General Surgical Training Joshua K. Ramjist, MD, MSc, MBA

Imbalance in Risks and Benefit of Penile Enhancement Procedures Seen in Direct-to-Patient Online Marketing Daniel Tennenbaum, MD

Features of Preoperative Multi-Parametric MRI of the Prostate Predict Adverse Pathologic Outcomes on Radical Prostatectomy Andrew Wood, MD

The Effect of Public Notification on Adverse Event Reporting with Mesh

Alyssa M. Yee, MD

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The Maimonides Research & Development Foundation was established in 1982 to provide seed funding for investigator-initiated research at Maimonides Medical Center, through the generosity of Benjamin & Betty Eisenstadt. The present Foundation's Board of Directors has as an emeritus member their son, Marvin, and is currently chaired by their grandson, Steven Eisenstadt. The Foundation has two competitive grant cycles each year which offer grants up to \$25,000 per grant. Grant proposals are reviewed and scored by a cadre of scholars at Maimonides. Many recipients of research grants from the Foundation have successfully published the results of their studies in peer-reviewed journals. For more information, visit the "Research" section of the Maimonides Intranet under "Departments."

The Maimonides Office of Research Administration provides a range of services and supports for research at the hospital, including technical assistance, education, resources, workshops, regulatory and compliance support, basic science labs, and funding opportunities.

Support

We are grateful to the following groups for their support for tonight's events:

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