

16th Annual Research Poster Competition



Thursday, May 25, 2017

The New York LaGuardia Airport Marriott

102-05 Ditmars Blvd

East Elmhurst, NY 11369

Presentations & Judging
8:30am – Noon pm

Announcements of winners
2:00 PM

A special thank you to our judges:

Bennett Futterman, M.D.	Vasuvada Kamath, PhD	Laura Nimkoff, M.D.	Nilank Shah, M.D., M.S.
Steve Golinowski, D.O.	Helaine Larsen, D.O.	Maria Plummer, M.D.	Christian Spano, M.D.
Peter Guiney, D.O., FACOFP	To Shan Li, D.O.	Dulaya Santikul, D.O.	Blessit George-Varghese, D.O.
Matthew Hayes, D.O.	Tamie Proscia-Lieto, MD, MBA	Maria Alicia Carrillo-Sepulveda, BSN, PhD.	Ulrick Vieux, D.O.
Christine Hutak, PhD.	Thomas Liu, D.O.		Anuj Vohra, D.O.
Thomas Joyce, D.O.	Dona-Marie McMahon, D.O.		

2017 NYCOME C Member Institutions

Ackerman Academy of Dermatopathology New York, NY	MediSys Health Network: Jamaica Hospital Medical Center Jamaica, NY	Robert Wood Johnson Barnabas Health: Newark Beth Israel Medical Center Newark, NJ
Arkansas Methodist Medical Center Paragould, AR	Nassau University Medical Center East Meadow, NY	Barnabas Health: Saint Barnabas Medical Center Livingston, NJ
Brookhaven Memorial Hospital Medical Center Patchogue, NY	NEA Baptist Memorial Hospital Jonesboro, AR	Sisters of Charity Hospital Buffalo, NY
Catskill Regional Medical Center Harris, NY	New York Institute of Technology College of Osteopathic Medicine Old Westbury, NY Jonesboro, AR	South Nassau Communities Hospital Oceanside, NY
Coney Island Hospital Brooklyn, NY	Nyack Hospital Nyack, NY	St. Barnabas Hospital: Bronx, NY
Eastern Long Island Hospital Greenport, NY	NYU Hospitals Center Brooklyn, NY	St. Bernards Medical Center Jonesboro, AR
Good Samaritan Hospital Medical Center West Islip, NY	Orange Regional Medical Center Middletown, NY	The Institute for Family Health Kingston, NY
Gurwin Jewish Nursing & Rehabilitation Center Commack, NY	Parker Jewish Institute for Healthcare & Rehabilitation New Hyde Park, NY	Touro College of Osteopathic Medicine Harlem, NY Middletown, NY
HackensackUMC Palisades North Bergen, NJ	Peconic Bay Medical Center Riverhead, NY	Trinitas Regional Medical Center Elizabeth, NJ
Maimonides Medical Center Brooklyn, NY	Plainview Hospital Plainview, NY	Wyckoff Heights Medical Center Brooklyn, NY
MediSys Health Network: Flushing Hospital Medical Center Flushing, NY	Robert Wood Johnson Barnabas Health: Jersey City Medical Center Jersey City, NJ	



NYCOMEC
Abstracts:

Case Presentations

Case Presentations

Brookhaven Memorial Hospital Medical Center Patchogue, NY

Family Medicine

1. *GISTs in the setting of Neurofibromatosis*

Kimberly Barnaby PGY2, Joshua Eason PGY1, Carlos Kim PGY1

2. *Thyrotoxic Periodic Paralysis complicated by critical hyperkalemia*

Michael Kirk, DO, Edward Pirolli, DO

3. *A Case of Abdominal Aortic Dissection, Presentation and Risk Factors In A Primary Care Setting*

Lidia Mikolaenko, DO, Nancy Koshy, DO, Richard Liu, DO

4. *Splenic Rupture: A rare complication of colonoscopy*

John P Smith DO, Nehal Shukla DO,

Coney Island Hospital Brooklyn, NY

Emergency Medicine

5. *Post Break-Up Blues!*

Nguyen R¹, Chernova A², & Kucherina A¹

Internal Medicine

6. *Recurrent septicemia with Strep group G in a patient with remote history of oro-pharyngeal cancer*

Eleonora Akker, D.O., FACP, Daniel Refuoa, D.O., David Yulda, M.S. III, NYIT-COM

Pediatrics

7. *Acute Rheumatic Fever in a Developed Country – A Unique Course*

Kimberly Wisecup, DO, Jennifer Pintiliano, MD, FAAP

Case Presentations

Flushing Hospital Medical Center
Flushing, New York

General Surgery

8. *A Rare Case of Malignant Phyllodes Breast Tumor with Abdominal Metastasis*

Cynthia Chen D.O., Ajit Singh D.O., David Fan D.O

9. *A Wolf in Sheep's Clothing: Concomitant Appendicitis with Occult Cecal Adenocarcinoma*

R Haj, M Louis, N Mandava

10. *A Rare Case of a Retroperitoneal, Presacral, Ossified Schwannoma*

Neil Mandava TID, Sanjeev Rajpal TID, Omar Wain DO, **Daniel Kakish DO**, Stephanie Luster DO

11. *A Rare Case of Solitary Perianal Neurofibroma*

Dmitriy Kim, DO (1), Mai Gandhi, DO, Elizabeth George, OMS-3, Maheshwari Nalla, OMS

12. *Idiopathic Infrarenal Aortic Inflammation Status Post Aortic Stent Graft*

Melissa Meghpara, D.O., Manikyam Mutyala, M.D.

13. *Cutaneous calcifications of autoimmune disorders create debilitating wounds. Can we do better?*

Florian Radu, DO, Martine A.Louis, MD, Elizabeth Georges MS, Rachel

Case Presentations

HackensackUMC Palisades

North Bergen, NJ

Family Medicine

14. *A Case Report of a Dieulafoy's Lesion in a Patient with Chronic Renal Failure and H. pylori Infection*

Justin Brackenrich, DO

15. *Early diagnosis and treatment improves prognosis of debilitating autoimmune disease CIDP*

Jennifer Chovitch, DO, OGME-2

16. *A Curious Case of Atypical Granulomatosis with Polyangiitis and a Component of Pauci-Immune Glomerulonephritis*

Bradley Davis, DO, Bankim Shah, MD

17. *Venous Aneurysm: A rare vascular condition with a novel treatment*

Susan Grodman DO, Iyad Baker MD, Aaron Stein, MD, David O'Connor MD

18. *Novel Lipid Therapy: Could PCSK-9 Inhibitors Replace Statins in Secondary Prevention?*

Tu-Anh Nguyen, DO, Touro University - CA

19. *OMT in a Patient with Post-Dural Puncture Headache*

Mark Stephen, D.O.

Case Presentations

Nassau University Medical Center
East Meadow, NY

Cardiology

20. *Assessment of Outcomes in Patients With Pneumonia or Gastrointestinal Bleed With Elevated Serum Troponin Ascribed to Type 2 Myocardial Infarction*

Supreeya Swarup DO, Lena Liu, Roman Zeltser MD, and Amgad N. Makaryus MD

Family Medicine

21. *Traumatic Globe Rupture in a 57-Year Old Male With History of Penetrating Keratoplasty*

Emilia Aponte, DO, Co-Author: Silvia Shin, DO, Sharon Krikhely, DO,

22. *The Resurgence of Syphilis: A Case Report*

Shannon Carroll, Emmanuel Decade, Rebecca Tamarkin

23. *A Painless Herpes Zoster Eruption*

Katelyn Geyer, OGME-2

24. *Neurogenic Shock Secondary to Spinal Cord Contusion Without Initial Radiographic Findings*

Muskan Ghotra OGME I, Anahita Ahuja OGME I

25. *Tajayasu Arteritis in 47 year old Peruvian Female*

Sarah Javdan, DO, Peter Guiney, DO

Case Presentations

Nassau University Medical Center

East Meadow, NY

(continued)

Family Medicine

26. *Clinical Manifestations and Diagnosis of Pancoast Tumor*

Mi Tu Quan, DO, Htet Htet Linn, MBBS, Priyanka Barua, MBBS, Paresh Sojitra, MD,
Jose Mejia, MD

27. *An Unexpected Case of a Cavernous Angioma of the Lung*

Aliza Raza DO, Tina V. Doshi, DO, Rajendra Jinna, MD, Dr. Thomas Joyce DO

28. *Dizziness Dilemma: A case report*

Segal, Renata & McCall, Courtney, Lin, Shen Han

29. *An Atypical Manifestation of Inverse Psoriasis with Psoriatic Arthritis*

Tiffany Trieu, D.O., Elia Tarascin, D.O.

Orthopedics

30. *Incidence of shoulder stiffness after arthroscopic rotator cuff repair*

Dr. William Schneider, Dr. Robert Trasolini, Dr. Charles Ruotolo,

Case Presentations

Newark Beth Israel Medical Center
Newark, NJ

Pediatrics:

31. *Approach to Management of Asymptomatic Complete AV Block in Childhood*

Manu R. Varma, DO; Sarah C. Studyvin, DO; Jon F. Sicat, DO; Brian K. O'Connor, MD

Orange Regional Medical Center
Middletown, New York

Emergency Medicine

32. *WTF: When Tests Can Fail you*

Zachary Coppola, D.O., Matthew Meigh, D.O.

33. *Lumbar L3-4 and L4-L5 Epidural Abscesses from Peptostreptococcus*

Jonathan Fong DO, Rose Anna Roantree DO, Norman Ng OMS-III

34. *An Acute Aortic Dissection Doesn't Care It Was Normal Yesterday*

Michael Langowski D.O.

35. *Large Mandibular Cyst Causing Dysphagia*

Mathew Lucky, D.O., Rose-Anna Roantree

36. *Aortic Emergencies: Acute Onset of Severe Right Upper Extremity Pain with Motor and Pulse Deficits*

Dr. Nicki Maxwell, DO PGY-1, Dr. Eziuche Nwakanma, MD, Dr. Andrew Rudin, DO PGY-2

Case Presentations

Orange Regional Medical Center
Middletown, NY
(continued)

Family Medicine

37. *First Case of Brucella ovis in Human*

Zagelbaum, Nicole K. OMS-IV, **Sayegh, Ghassan P. PGY-I**, Vernatter, Joshua N. MD

Internal Medicine

38. *Atypical Presentation of Gastric Adenocarcinoma*

Yasmin Leigh, DO; Cristian Castro-Nunez, DO

Psychiatry

39. *Putting Occam to the Test*

Minh-Duc Huynh, DO, PGY-1, Kamalveer Grewal, OMS-III, and Balveen Singh, DO

40. *Delusional Parasitosis: Successful Treatment with Fluphenazine*

Kevin Moore, PGY-1 and Cesar Rojas, MD, Psychiatry, ORMC

41. *Contingent Suicidality in a Patient with Cluster B Traits*

Ryan Omura, D.O.

Plainview Hospital
Plainview, NY

Orthopedic Surgery:

42. *Primary Malignant Melanoma of the Lumbar Spine*

Cristin Mathew DO, Farhan Karim DO, Muzaffar Ali BS, Gus Katsigiorgis DO, Vadim Lerman DO, Karen Avanesov DO

Case Presentations

Southampton Hospital Southampton, NY

Family Medicine/Neuromusculoskeletal Medicine

43. *Osteopathic manipulation of the lymphatic system as an adjunctive therapy for refractory lymphangitis: A case report*

Lauren A. Davis, DO, **Craig Allen Wells, D.O.**

44. *Osteopathic Manipulative Treatment for a Patient with Recurrent Cellulitis*

Ronald Ho, D.O., Lawrence Barnard, D.O.

45. *Plagiocephaly and Opisthotonic Posturing in an Infant with Developmental Delay*

Meaghan C. Nelsen, M.S., D.O., FACOOG, Chris A. Medina, D.O., Larry Barnard, D.O.

46. *It's Not Just Back Pain, An Interesting Case of Chronic Inflammatory Demyelinating Polyneuropathy*

Luther D. Quarles IV DO MS, Jared Segal OMS-IV, Lina M. Rios DO, Xiaoyu Li DO

47. *Case Study on Cutaneous Porphyria*

James C. Sullivan D.O., Jared Dropkin D.O. , Southampton Hospital RPSOM

48. *Upper Respiratory Infection*

Devan Trammel DO PGY2

Internal Medicine

49. *Triple Negative Invasive Lobular Carcinoma of the Breast Presents as Small Bowel Obstruction: A case report and literature review*

Mariya Khokhlova, D.O, Heidi Roppelt, M.D., Sang Pak, M.D., Jingxuan Liu, M.D., Kester Haye, M.D., Bradley Gluck, M.D., Edna Kapenhas, M.D.

Case Presentations

St. Barnabas Hospital

Bronx, NY

OMM/NMM

50. *Osteopathic Manipulative Treatment in Management of Acute Orbital Compartment Syndrome*

Alice I. Chen, DO, OGME-2, Hugh Ettlinger, DO, FAAO

51. *Osteopathic Considerations in the Ventilated Patient: A Case Study*

R. Katrajian, DO^a, H. Ettlinger, DO^b

52. *The use of OMT in the Prevention of Post-Operative Adhesions Formation*

Anna Lobzova, DO, PGY3, Hugh Ettlinger, DO, FAAO

53. *Condylar Compression: A Case of the Infant Who Would Not, Could Not Suck*

Bethany Prater, DO, OGME-III, Hugh Ettlinger, DO, FAAO, Lawrence Barnard, DO

54. *Pushed, Pulled, and Invalidated: A Case Of Infant Somatic Dysfunction*

Jeremy Shugar, M.S., D.O., OGME III, NMM/OMM, Hugh Ettlinger, D.O. FAAO, Lawrence Barnard, D.O.

55. *Discerning What Lies Hidden Below: A Call for Greater Emphasis on the Osteopathic Structural Exam*

Nichole Thorsvik, DO, OGME 2, NMM/OMM

56. *Neonatal Abstinence Syndrome and the Utility of Osteopathic Manipulative Medicine*

V. Tuttle, DO^a, H. Ettlinger, DO, FAAO^b



NYCOMEC

Abstracts:

Experimental

Research

Experimental Research

Brookhaven Memorial Hospital Medical Center

Patchogue, NY

Family Medicine

57. *Missed Office Encounters and Increased Telephone Encounters Relationship to Control of Diabetes*

Allison Mitchell, DO, Irshad Merchand, DO, John Schwartzberg, DO

Coney Island Hospital

Brooklyn, NY

Emergency Medicine

58. *“Study of Home-Based Interventions to Reduce CA-MRSA Recurrence and Household Transmission”*

Nguyen R¹, D’Orazio B³, Hassen G², Hammock R¹, Gladstein S¹, Frisby A¹, Khalida C³, Kost R⁴, Ramachandran J^{2,4}, Pastagia M⁴, Evering T⁴, Pardos de la Gandara M⁴, Coffran C⁴, Correa da Rosa J⁴, Urban T⁵, Barsanti F⁵, Kanahara S⁶, Trezia M¹, Gisler T⁷, de Lencastre H⁴, Coller B⁴, Tobin J^{3,4}

Internal Medicine

59. *Assessment of Provider Knowledge of Cardiovascular Risk after High-Risk Pregnancy.*

Stephen Mularz, D.O., Eleonora Akker DO, Swetha Kadali MD, Daniel Lasser DO, Ashley Christensen DO

Experimental Research

Flushing Hospital Medical Center Queens, NY

General Surgery

60. *Retrospective Review of Gallstone Pancreatitis*

Amanda Doubleday DO, PGY5; Melissa Meghpara DO, PGY2; Martine Louis MD; Sara Jaka MSIII

61. *The Unnecessary: Optimizing Utilization of the Blood Bank for the Surgical Patient*

V. Yoo, D.O., K. Leneweaver, D.O., N. Mandava, M.D., P. Coffey, D.O.

62. *Single Institute Experience with Cholecystostomy Tube Placement in High-Risk Patients with Acute Cholecystitis: Utilization, Outcome and Definitive Surgery.*

Omar Wain DO¹; Melissa Meghpara DO¹; David Fan DO¹; Ji Yoo MSIV¹; Robert Solomon MD²; Neil Mandava MD¹

Good Samaritan Hospital Medical Center West Islip, NY

Emergency Medicine

63. *The Health of Healthcare: Emergency Department Physician Well-Being*

Martin Gagne, D.O.⁽¹⁾, Adam Schwartz, D.O.⁽¹⁾, Steven Zimmerman, M.D.⁽²⁾

64. *Perception of EMS Towards the Use of Warning Lights and Sirens*

Michael Slisz DO, Steven Sattler DO

65. *The Effect of the Affordable Care Act on the Insurance Status of Patients Presenting to a Suburban Emergency Department an Expanded Perspective.*

Joe Sorber, DO, Danielle Turrin, DO, Adam Schwartz, DO, Eric Decena, MD

66. *Does the ED Observation Unit Decrease Return Rates for Cellulitis Patients?*

Joanna Marino, D.O., Robert Bramante, M.D., Radhika Malhotra, M.D.

Experimental Research

Jamaica Hospital Medical Center Queens, NY

Family Medicine

67. *Beliefs Associated with Restraint Use in an Inpatient Setting*

Preethi Kumar, D.O. Raphael Bergman, M.D. Gina Basello, D.O. Alan Roth, D.O.

68. *Effects of Racial Discrimination on Sleep Quality*

Dr Elizabeth Brondolo, Dr Alan Roth, Dr Gina Basello, Dr Tabia Collins Mitchell, **Dr Grace Komolafe**, Dr Yogaalakshmi Sundararajan

69. *Physicians' Religious Commitment as a Predictor of Engaging in Discussions About Spiritual Needs During Advance Care Planning*

Amelia MacIntyre DO, Ambika Nath DO, Marina Bissada DO, Swathi Raman MPH, Elizabeth Brondolo PhD, Gina Basello DO, Alan Roth DO

Nassau University Medical Center East Meadow, NY

Internal Medicine

70. *Utility of Telemetry Heart Rhythm Monitoring in Patients Presenting with Cerebrovascular Accident and Transient Ischemic Attack*

Taner Aydin^a, **Goustina Adly DO^b**, David Bass DO^c, Kyla D'Angelo DO^b, Roman Zeltser MD^{a,c}, Amgad N. Makaryus MD^{a,c}

Orthopedics

71. *Novel Spiked-Washer Repair Is Biomechanically Superior To Suture And Bone Tunnels For Arcuate Fracture Repair*

Tyler Enders, DO, Saman Vojdani, MD, Laviel Fernandez, BS, Jian Jiao, MS, Steven Ortiz, MD, Liangjun Lin, PhD, Yi-Xian Qin, PhD, David E. Komatsu, PhD, James Penna, MD, Charles J. Ruotolo, MD

Experimental Research

Orange Regional Medical Center

Middletown, NY

Traditional Rotating Internship

72. *Feel the Rumble: A Study of OMT and Postoperative Ileus*

Jake Corman, DO, MS, Gabriel Froula, DO, Martin Torrents, DO, MPH, Carlo Fernandes, DO, Nima Rejali OMSIII, Norman Ng OMSIII, Daniel Halvorsen OMSIII

73. *Hypoglycemia incidence in patients with DKA/HHNKS managed with Insulin Infusion Protocol as compared to computer based algorithm (Glucomander™).*

Sayegh, Ghassan P. DO, Khan, Ibtesam DO, Gilani, Aamir MD

Plainview Hospital

Plainview, NY

Orthopedics

74. *A single-provider technique for the reduction of humeral shaft fractures*

Cristin J Mathew, DO, Matthew H Martell, DO, Muzaffar Ali BS, Gus Katsigiorgis, DO;

St. Barnabas Hospital

Bronx, NY

75. *Rates of Skin Graft or Skin Flap Failure in Patients who have Received Osteopathic Manipulative Treatment: A Retrospective Study*

Z. Long, DO^a; V. Tuttle, DO^b; J. McKinney, DO^c; P. Andolina, DO^d; H. Ettlinger, DO, FAAO^e; A. Kells, MD,

Clinical Case Study | Pages 19 -74

Authors: Kimberly Barnaby PGY2, Joshua Eason PGY1, Carlos Kim PGY1
Brookhaven Memorial Hospital Medical Center, Family Medicine

Introduction:

Neurofibromatosis type 1 (NF1) is an AD disease with an incidence of 1 in 3,000 births, nearly half occurring sporadically. The pathogenesis is thought to be due to a mutation in the NF1 tumor suppressor gene found on chromosome 17. This mutation leads to gene inactivation, resulting in tumor development, of varying malignant potential. Neurofibromas can manifest at both the superficial dermal layer as well as mucosal involvement of deeper viscera. Expectantly, this condition is also connected with several other tumor variants, including but not limited to pheochromocytoma, glioma, neuroma and gastrointestinal stromal tumor (GIST). This case study will focus on one of the less than 25% of individuals with NF1 with acquired GIST.

Case:

A 49 year old caucasian male with past medical history NF1 presented to the hospital with complaint of bloody stool and rectal bleeding which started overnight. The patient also reported lower abdominal discomfort, nausea and emesis. The patient received a full GI and cardiac work up and was found to have what appeared to be a Meckle's diverticulum on imaging. He was started on IVF, sandostatin and protonix drips and transfused for severe blood loss anemia. Once hemodynamically stable endoscopy revealed two AVMs. Incidentally, during this procedure two distinct gastrointestinal stromal tumors were observed and later resected, measuring 3.7 and 2.4 cm grossly, with low cellular atypia and mitotic activity. This being a notable characteristic of NF1 related GIST. In this case surgical resection and biopsy superseded conservative/pharmacological management.

Discussion: NF1 is a relatively common genetic disorder causing a variety of somatic effects, including an increased risk of soft tissue tumors such as GISTs. Interestingly the GISTs which these patients develop varies from those which develop sporadically. Tumors may arise in different locations, in larger numbers and pathologically are distinct from those of sporadic mutations leading to greater mortality. These distinctions require adjusting management and recognition that outcomes are often poorer for these patients. As such it is important as a primary care provider to maintain a low index of suspicion for malignancy in NF1 patients. Early diagnosis and the recognition of the need for adjusting treatment strategies may improve patient outcomes in NF1 patients found to have GISTs.

Authors: Michael Kirk, DO, Edward Pirollo, DO

Brookhaven Memorial Hospital Medical Center, Department of Family Medicine, 100 Hospital Road, Patchogue, New York 11772

Introduction: Thyrotoxic Periodic Paralysis is a complication of hyperthyroidism. High levels of thyroid hormone force potassium intracellularly, causing abrupt onset weakness, flaccid paralysis, cardiac arrhythmias, and even loss of respiratory drive. Management includes differentiating the syndrome from other paralytic etiologies and treating the underlying thyroid disorder. Our study presents a patient with typical TPP symptoms initially misdiagnosed, causing delayed treatment. Once the true etiology was discovered, the patient recovered quickly. This case highlights a less common cause of sudden onset paralysis, and the importance of searching for an underlying cause of abnormal lab values.

Case Description: A healthy 29 year old male who recently returned from a vacation involving much outdoor activity awoke one night with profound lower extremity weakness. When it did not improve, he was taken to the ED, where he presented with sinus tachycardia, generalized upper and lower extremity flaccid paralysis, and vomiting. When started on IV potassium replacement, he developed rebound hyperkalemia. Further testing revealed a hyperthyroid state, and a presumptive diagnosis of TPP was made. A nonselective beta blocker was started and his potassium supplementation was switched to low dose oral replacement. Once discharged, he followed up with an endocrinologist for definitive treatment of his hyperthyroidism.

Discussion: Thyrotoxic periodic paralysis, while uncommon, is a dramatic complication of hyperthyroidism, linked with increased activity of the Na⁺/K⁺-ATPase enzyme. This activity results in increased intracellular potassium, leading to muscle cell hyperpolarization and disruption of electric activity through the neuromuscular junction. Identification of TPP depends on lab testing and clinical suspicion. Treatment is critical especially during acute attacks as fatal cardiac arrhythmias may occur, and utilizes non-selective beta blockers aimed at the underlying thyroid disorder. Definitive treatment and prevention of further attacks is dependent on antithyroid medications. This case serves as a classic example of the symptoms of TPP and the challenges associated with its diagnosis and management.

Title: "A Case of Abdominal Aortic Dissection, Presentation and Risk Factors In A Primary Care Setting"

Authors: Lidia Mikolaenko, DO, Nancy Koshy, DO, Richard Liu, DO , Brookhaven Memorial Hospital Medical Center

Introduction: Aortic Dissection is a rare and life threatening phenomenon commonly affecting those with hypertension, certain genetic syndromes, aortic disease, including preexisting thoracic/abdominal aortic aneurysm, inflammatory conditions, and aortic instrumentation or trauma. Patients present with symptoms such as acute thoracic pain, pulse deficit, heart murmur, focal neurologic deficit, hypotension, and syncope. Aortic dissection can be life threatening and patients are at high risk for acute aortic regurgitation, cardiac tamponade, and myocardial infarction (MI). Surgical management is often necessary to close the defect. Pharmacologic therapy is required to maintain the patient once the defect is closed.

Case Description: This is a case study of an 82 year old male with a history of arthritis, who presented after exercising with acute diaphoresis, left sided extremity numbness, and lightheadedness. He was found to be acutely hypotensive and bradycardic in the ER. CT chest/abdomen/thorax showed a type 1 aortic dissection which involved the entire thoracic and abdominal aorta.

Discussion: The purpose of this case presentation is to elucidate the common causes and risk factors of this life-threatening condition and to discuss management as well as prevention in a primary care setting. Over 90 percent of patients with aortic dissections present with chest or back pain. While there are no current screening guidelines for aortic dissection, several modalities can aid a physician in diagnosis. ECG is warranted in most patients with chest pain. If the coronary arteries are affected, ECG will result in ST changes of myocardial ischemia. In patients with aortic dissections, 10-20% may have a normal chest x ray, which suggests that a normal chest x ray cannot exclude the diagnosis. However, certain characteristics like mediastinal widening may be present in more than half of patients with dissections. Detailed history on genetic propensity toward aortic disease, patients with cocaine abuse, and patients with syncopal episodes in conjunction with chest pain may aid in diagnosis. Furthermore, treating hypertension and atherosclerosis decreases risk factors.

Title: Splenic Rupture: A rare complication of colonoscopy

Authors: John P Smith DO, Nehal Shukla DO, Brookhaven Memorial Hospital, Family Medicine Department, 100 Hospital Road Suite 203 Patchogue, New York 11772

Introduction: Colonoscopy is the gold standard for colon cancer screening in the United States. It is also used for diagnosis and treatment of colorectal disease. It is not without its own risk profile. Major complications are estimated at 2.8/1000. Majority of complications take place when polypectomy is preformed. One very rare complication of colonoscopy is splenic rupture.

Case description: A 67-year-old Caucasian Female, with a medical history significant for recently diagnosed lung mass and presented to the ED with abdominal pain, one day after screening colonoscopy. This abdominal pain intensified in the late afternoon prompting presentation to the ED. The patient reported no flatus or bowel movement since the procedure. ROS was neg with the exception of left upper quadrant pain. Noted on physical exam: left upper quadrant tenderness, out of proportion. Laboratory findings revealed a white count, 13.2, hemoglobin and hematocrit, 10.8/31.9 and platelet count, 370. Chemistry profile and coagulation profile were unremarkable. Three hours later repeat blood count revealed, white count, 8.0, hemoglobin and hematocrit, 7.6/22.4 with platelet count of 303. CT of the abdomen and pelvis revealed a ruptured spleen with hemoperitoneum estimated at 2 L. The patient was taken to the operating room for exploratory laparotomy with splenectomy and was transfused multiple units of PRBC's. From the OR the patient was taken to the ICU in stable yet guarded condition.

Discussion: This case illustrates a rare complication of colonoscopy. For primary care and emergency physicians, this case elucidates the need for complete evaluation when a patient presents with abdominal pain s/p colonoscopy. Spleen injury grading scale is used when assessing splenic injury for treatment. Also, post procedure prophylaxis guidelines should be followed in cases of splenectomy. Although few complications of colonoscopy are life threatening, they must remain high in the differential when a patient presents for evaluation and treatment for abdominal pain after recent colonoscopy.

Title: “Post Break-Up Blues!”

Authors: Nguyen R¹, Chernova A², & Kucherina A¹

Coney Island Hospital - ¹Department of Emergency Medicine, ²Department of Surgery

Introduction: Arterial occlusion is a rare finding in young healthy individuals with no known prior medical history or significant risk factors. Immediate assessment, proper evaluation, and the timely initiation of pharmacologic therapy in the Emergency Department (ED) are critical in salvaging the affected limb prior to definitive treatment. Approximately 20% of thromboemboli occur in the upper extremities and despite medical advancements, rates of limb loss and in-hospital mortality are 30% and 20%, respectively.

Case Description: An otherwise healthy 29 year old man presented to the ED for complaints of 10 days of worsening left arm pain associated with intermittent cyanosis, numbness, and tingling that began 6 months ago. Symptoms appeared the day after he woke up next to his ex-girlfriend squeezing his left wrist which she later admitted to doing every night for 1 week. The pain initially started at the fingertips and radiated proximally to the left shoulder. Symptoms worsened 2 days ago while at a ski resort in upstate New York and resolved with drinking alcohol and rest. Cyanosis and pain episodes had gotten progressively worse with routine daily activities. On physical exam, the skin was cold with evidence of distal limb cyanosis in flexion and an absent radial pulse. The patient was intolerable to the capillary refill exam with limited range of motion secondary to pain from the shoulder to the distal phalanges. Cyanosis was present and reproducible with limb elevation, whereas limb erythrosis was observed with arm drop. Limb motor, sensory, and reflexes were intact. An emergency arterial doppler showed severe occlusion of the left brachial, ulnar, and radial arteries. Heparin therapy was initiated in the ED after a STAT consultation with Vascular Surgery. Symptoms attenuated prior to the patient being transferred to the operating room (OR) for an angiogram with open thrombectomies. In the OR, the patient was found to have a large organized thrombus from the mid-brachial artery to the bifurcation with triphasic vasospasms. Thrombi were sent for pathology and the patient was admitted to the surgical floor. Cardiac, hypercoagulation, and autoimmune studies were unremarkable and the patient was transferred for definitive treatment of Thoracic Outlet Syndrome associated with anomalous of the left first rib which caused left subclavian and aortic arch aneurysms.

Case Pearls: This case illustrates the potential for severe vascular thrombosis presenting as acute on chronic limb ischemia in the setting of no prior past medical history or significant risk factors. A thorough history and physical exam, together with the basic knowledge of ischemic limb classification, are paramount in guiding decision making for imaging and further workup in the ED. In addition to fully accessing the 6 P’s; pain, paresthesia, pallor, poikilothermia, pulselessness, and paralysis, Emergency Physicians should also determine whether the limb is viable, marginally-threatened, immediately-threatened, or nonviable, according to the Rutherford Classification prior to Vascular Consult placement. When done diligently, these step-wise critical actions will allow for sufficient timing to define the severity and extent of the etiology and can ultimately be limb and lifesaving.

Title: Recurrent septicemia with Strep group G in a patient with remote history of oro-pharyngeal cancer

Authors: Eleonora Akker, DO, FACP, Daniel Refoua, DO, David Yulda, MS III, NYIT-COM

Introduction: According to the literature there are about 10000 of new cases of oropharyngeal cancers every year which include 4000 new cases of tonsillar carcinoma. 83% of patients treated with radiation therapy for head and neck cancer develop oral mucosal inflammation, including 29% developing severe oral mucositis with underlying bacterial infections.

Case Description: We present a case of a 50 year old nonsmoker, nondrinker male with stage II tonsillar squamous cell cancer, s/p bilateral tonsillectomy followed by chemotherapy with Cisplatin and radiation (3.5cm moderately differentiated, with perineural invasion & carcinoma on the margins). One year after completion of his treatment patient experienced episodes of dysphagia, odynophagia, neck swelling, fever, chills and difficulty breathing. He was found to have bacterial septicemia with Strep group G and was given total of 6 weeks IV Ceftriaxone daily. One month after completion of IV antibiotics and complete recovery, he had returned to the ER with similar complaints, with blood cultures again growing strep group G in 4/4 bottles. Gallium scan showed high uptake in anterior neck, TEE negative for any valvular vegetations. Pt was given Ceftriaxone BID for eight weeks during the second episode of bacteremia. Pt was continuously followed up in Medicine clinic during and after completion of IV antibiotics. Patient continues to be asymptomatic three months after completion of treatment, repeat gallium scan is negative. Multiple repeat blood cultures were negative for any organisms.

Even though there are promising treatment options such as antioxidants, antiseptic mouth rinses, antiulcer agents like sucralfate or prostaglandins for mucositis caused by chemo and radiation therapy, literature lacks prophylactic and treatment protocols of bacterial septicemia cause by normal oral flora in immunocompromised patient. It seems that these patients require a much longer antibiotic course and bacteremia can be remote in time, like in our patient who developed it almost 1,5 years since completion of cancer treatment and no cancer recurrence.

Title: Acute Rheumatic Fever in a Developed Country – A Unique Course
Kimberly Wisecup, DO, Jennifer Pintiliano, MD, FAAP

Introduction:

A 12 year old healthy female presents to the PICU with chest pain and difficulty breathing, an elevated D-dimer, a CXR showing pulmonary effusion and fluid overload, in the setting of fever, tachycardia and hypotension. Is the patient in shock- septic or cardiac? Why is the d-dimer elevated with chest pain- do they have a pulmonary embolism? What caused the fluid overload?

Case Description:

A 12 year old female presented to Emergency Department with chief complaints of chest pain, swelling of hands, feet and face, in the setting of a recent streptococcal throat infection that was partially treated. Initial labs showed an extremely elevated D-dimer and spiral CT of chest was negative for pulmonary embolism.

At time of presentation to the ED the patient was febrile, hypotensive and tachycardic and was given multiple fluid boluses by EMT and ED personnel following the shock protocol for presumed septic shock. Upon arrival to the Pediatric ICU the patient presented with persistent hypotension, difficulty breathing with crackles heard on lung exam and bedside chest x-ray showed pulmonary edema.

The differential diagnosis in this patient was large. The patient was in shock which was presumed to be septic in etiology. Due to a varied differential and large amounts of fluids given, in the setting of unknown pancarditis, the patient developed congestive heart failure. Further history, physical examination, laboratory studies and imaging showed the patient had two major and three minor JONES criteria and was diagnosed with ARF with heart failure secondary to fluid overload.

Discussion:

This presentation of ARF is unique as the patient was born in the United States, had routine medical care and was otherwise healthy. In developing countries rheumatic heart disease is the most common cause of cardiac mortality in children. In the U.S. and other industrialized parts of the world, since the advent of penicillin, rheumatic heart disease has nearly disappeared.

This case was unique for a variety of reasons. ARF is diagnosed using the Jones criteria. The patient discussed here had two major criteria and three minor criteria clearly meeting the measures for diagnosis of ARF, however, these symptoms weren't straightforward, are present in many other disease processes and can easily be mistaken for different symptoms if a good patient history is not established. The typical timing of initial infection with group A streptococcus (GAS) to the onset of Jones criteria is two to three weeks. In this patient the time of initial throat infection to presentation was significantly shorter than the usual course. The management was complicated in this adolescent patient as it was found that she was hiding medications under her hospital bed mattress. Patient education and support were critical for this individual.

This case demonstrates the importance of recognition of clinical symptoms of less common diseases as well as the significance of patient education in an adolescent patient and recognition of different types of shock.

TITLE: A Rare Case of Malignant Phyllodes Breast Tumor with Abdominal Metastasis

AUTHORS: Cynthia Chen D.O., Ajit Singh D.O., David Fan D.O.
Department of Surgery, Flushing Hospital Medical Center

INTRODUCTION:

Phyllodes tumors (PT) are rare breast neoplasms arising from mesenchymal tissue that account for approximately 1% of all breast cancers. While the behavior of benign PTs is similar to that of fibroadenomas, malignant PTs carry a high risk of recurrence and metastasis – often to the lungs, bones, liver and brain. In rare cases of distant metastasis, prognosis tends to be poor. Surgical resection remains the mainstay of treatment, and the roles of postoperative radiation and chemotherapy remain under dispute. We present a case illustrating the unpredictable and aggressive nature of malignant PT.

CASE DESCRIPTION:

Our patient is a 57 year-old female admitted to the hospital with a 1-month history of left-sided chest pain and difficulty breathing. Per history, she was status post a Modified Radical Mastectomy with adjuvant chemotherapy for a right-sided PT with high grade sarcomatous elements in 2012. On this admission, CT Chest revealed a large left lower lung lobe mass, two small right upper lobe nodules and a large left-sided pleural effusion. Subsequent thoracentesis was negative for malignant cells. As the possibility of metastatic disease or a new primary cancer came to question, CT of the abdomen and pelvis demonstrated a 2.9 x 2.9 x 2.9 cm peritoneal mass lateral to the ascending colon. Percutaneous IR-guided biopsy of this mass yielded pathology consistent with high grade, focally necrotic leiomyosarcoma, likely related to the patient's known history of PT with sarcomatous elements.

DISCUSSION:

PTs are classified on the basis of histological grade as benign, borderline or malignant. With increasing tumor grade, studies have shown that risk of metastasis also increases. Reports have demonstrated local recurrence rates ranging from 12% to 30%, with 10% of patients developing distant metastasis. Our case presents an unusual location of distant metastasis and demonstrates the high recurrence rate of malignant PT despite aggressive surgical management and chemotherapy, emphasizing the importance of and need for dedicated surveillance for these rare malignant tumors.

Title: A Wolf in Sheep's Clothing: Concomitant Appendicitis with Occult Cecal Adenocarcinoma

Authors: R Haj, M Louis, N Mandava

Abstract: The rare but clinically significant finding of a mass on routine appendectomy is problematic and concerning. The rate of adenocarcinoma found concomitantly with appendicitis is only approximately 1-2%.^{1,4} However, given the increased risk of colon cancer with the elderly, occult carcinoma may be more frequently encountered with an aging population. Despite advances in imaging, local inflammation, collections, and rarity masses may be missed or misinterpreted. In the age of minimally invasive surgery, the lack of tactile exploration of the cecum adds further difficulty for identification of small masses and only 6% of suspicious masses encountered on appendectomy are found to be cancer.² The presence of adenocarcinoma in the cecum significantly alters surgical intervention as conversion to a right hemicolectomy is the preferred treatment modality. At least two cases in the literature have noted suspected seeding due to occult carcinoma of the cecum not appreciated during appendectomy.³ Here we report an 89-year-old female patient with appendicitis and small bowel obstruction later found to be the presenting symptoms of adenocarcinoma of the cecum.

Title: A Rare Case of a Retroperitoneal, Presacral, Ossified Schwannoma

Authors: Neil Mandava TID, Sanjeev Rajpal TID, Omar Wain DO, Daniel Kakish DO, Stephanie Luster DO

Introduction: Schwannomas are often benign slow growing tumors which originate from schwann cells in the peripheral nerve sheath. They affect females more than males. Due to the tumor's slow growing nature, patients are typically asymptomatic unless the tumor exhibits mass effect on surrounding structures. Schwannomas are generally diagnosed incidentally on imaging. Treatment of choice is wide excision as it has a significantly lower recurrence rate compared to local excision.

Case Description

53 year old female presented to her Ob/Gyn for routine follow up; patient had no complaints. Physical exam findings led to a diagnosis of right ovarian cyst and fibroids. She was taken to the operating room for D&C and diagnostic laparoscopy for further evaluation. During diagnostic laparoscopy, an estimated 5-6cm mass, solid in nature, near the right ureter and iliac vessels was incidentally encountered. An intraoperative phone consult to general surgery was obtained with the recommendation to terminate procedure, with subsequent follow up for further workup of the mass. Upon the patient's visit to the general surgeon's office, her only complaint was some abdominal pressure, and reported no pain. TIRI of the abdomen and pelvis revealed a solid mass in the pelvic cavity measuring 4.4 x 3.9 x 5cm and lying to the right of the midline. Patient was taken to the OR for diagnostic laparoscopy for resection of retroperitoneal mass. Patient required one blood transfusion post-operatively and had a relatively uneventful hospital course. Remainder of post-op office visits indicated a successful recovery.

Discussion:

The patient's schwannoma was removed with wide excision, consistent with current recommendations. Due to the slow growing nature of schwannomas, patients are typically asymptomatic, making time of development difficult to assess. Complete removal should be the mainstay of treatment. Operative approach for removal should be based on clinical suspicion for malignancy. If highly suspicious, an open approach would be more appropriate. A laparoscopic approach is sufficient if the mass is confirmed as benign or has low suspicion of malignancy.

Title: A Rare Case of Solitary Perianal Neurofibroma

Authors: Dmitriy Kim, DO (1), Mai Gandhi, DO, Flushing Hospital Medical Center, Dept of Surgery
Elizabeth George, OMS-3, Maheshwari Nalla, OMS-3, NYIT College of Osteopathic Medicine

Introduction: Perianal Neurofibroma is extremely rare presentation of neurofibromatosis. Neurofibromas are benign nerve sheath tumors commonly associated with Neurofibromatosis Type 1. However in the absence of NF-1 it is referred to as solitary neurofibromas. Gastrointestinal involvement is seen in up to 25% of patients with NF, especially located in stomach and duodenum. Involvement of colon/rectum is extremely rare with only three case reports published in world literature.

Case description: A 50 year old hispanic female presented to the hospital with a perianal mass and pain for one year, that worsened for the last week. Pt reported no personal or family history of neurofibromatosis. Her medical history was significant for DM type 2, HTN, and Uterine fibroids. Physical exam was remarkable for 2 cm perianal subcutaneous mobile firm mass at 5 o'clock, with no bleeding or discharge. The rest of exam was negative. Pt was taken to OR with preop diagnosis of perirectal abscess for incision and drainage. But during procedure an incidental subcutaneous tan-purple, rubbery, fibrous tissue was found, measuring 5x3.3x1.4cm which was excised and sent to pathology. Pathology report came back as anal neurofibroma. Pt did well post op and was sent home same day and on follow-up visit in 2 weeks did not report any more symptoms.

Conclusion: In a patient presenting with perianal mass, it is important to consider the possibility of a neurofibroma. Although extremely rare, solitary Perirectal Neurofibroma may be the presenting symptom of Neurofibromatosis Type 1, which has malignant potential. Surgical intervention in such cases can be both diagnostic and curative.

Title – Idiopathic Infrarenal Aortic Inflammation Status Post Aortic Stent Graft

Authors – Melissa Meghpara, D.O., Manikyam Mutyala, M.D.

Introduction – Utilization of endovascular aortic repair (EVAR) for abdominal aortic aneurysm (AAA) is an effective and less invasive treatment alternative to open repair. However, complications after EVAR can still occur with the most common complication being an endoleak. It is important to recognize non-endoleak complications including access artery injury, contrast nephropathy, ischemia, limb occlusion, and infection. A less reported complication after EVAR is inflammation of the stented area causing aortitis and ureteral obstruction. There are few case reports regarding this and no cases reported after 18 months.

Case description – A 70-year-old female complained of right flank pain for five to six months. Her past medical history was significant for EVAR eight years prior. During initial workup, a 3.1 cm right-sided retroperitoneal mass causing right ureteral narrowing and hydronephrosis was found. A right ureteral stent was placed, but the patient continued to have pain. A CT angiogram ruled out endoleak and revealed an “area of the anterior wall of the right common iliac artery that was not well defined with mild adjacent fat stranding.” There was also “haziness of the fat adjacent to the aorta and left common iliac artery.” She was diagnosed and treated for idiopathic retroperitoneal fibrosis, however, the patient continued to have abdominal pain.

Patient was seen by vascular surgery and on physical, the abdominal aorta was firm and very tender to palpation. Labs demonstrated elevated CRP and gallium scintigraphy showed abnormal concentration of gallium along the aorta and upper iliacs suggesting an inflammatory process. The patient was started on prednisone 25mg orally and pain has since resolved.

Discussion – EVAR provides an equally effective and less invasive method to treating AAAs, but short and long-term complications should not be overlooked. Inflammation after EVAR is important to recognize due to renal injury that associated with periaortic inflammation. This case is unique in that complications occurred eight years after EVAR. Prompt evaluation and treatment should include medical, urological, and surgical approach, with steroids and ureteral stenting being mainstay treatments.

Title: Cutaneous calcifications of autoimmune disorders create debilitating wounds. Can we do better?

Authors: Florian Radu, DO, Martine A.Louis, MD, Elizabeth Georges MS, Rachel

Hypothesis: Cutaneous calcinosis occurs in patients with autoimmune connective disorders such as CREST syndrome, scleroderma, systemic sclerosis. The loss of skin integrity secondary to the trauma by the calcium deposits, creates chronic painful wounds with delayed healing, adding a significant burden to these already debilitating conditions. These atypical wounds represent a small percentage of out-patient wound care clinics, but do require a multidisciplinary approach, with the wound center providers working hand- in- hand with the primary care physician. The goal of this study is to examine a patient with progressive systemic dermatologic manifestations and understand progression of cutaneous calcinosis.

Research Design: This study is a retrospective case report using electronic medical records

Methods and Materials: Electronic medical systems using EPIC were employed, as well as photo documentation from wound care visits with patient's permission.

Results: We describe a case of a patient with scleroderma, who, as her autoimmune disease worsened, developed in a span of four years, unusual recurrent bilateral extremities wounds involving her fingers, elbows, and legs, despite medical and surgical treatment.

Conclusion: Wound care of patients with systemic calcinosis syndromes remains a prevalent challenge, and requires both medical and surgical specialists for early recognition, progression and control of disease burden. Case studies can help identify in prevention and treatment of early disease manifestation.

Title: A Case Report of a Dieulafoy's Lesion in a Patient with Chronic Renal Failure and *H. pylori* Infection

Author: Justin Brackenrich, DO , Department of Family Medicine
Hackensack University Medical Center-Palisades, North Bergen, NJ

Introduction:

Dieulafoy's lesion is an uncommon cause of acute gastrointestinal (GI) bleeding. It is described as a tortuous arteriole within the submucosa that protrudes through a small mucosal defect causing bleeds. The etiology of this lesion is not clearly understood. Studies with chronic kidney disease (CKD) patients have shown that they have a predisposition to GI bleeds. There have only been a few retrospective studies associating CKD with Dieulafoy lesions. There have also been no reported cases of Dieulafoy lesions associated with *H. pylori* infection until now. This report presents an unusual case of Dieulafoy's lesion in a patient with CKD along with *H. pylori* infection.

Case Description:

58-year-old male, from Guatemala with an unknown past medical history and who had never seen a doctor, presented to the ED with a complaint of dizziness for five days. He admitted to black stools over the past couple month as well. In the ED, the patient's vitals were within normal limits except for elevated blood pressure. On physical exam, he was alert and oriented, displayed global pallor and his rectal exam was stool guaiac positive for blood. His hemoglobin was found to be 4.6 mg/dL and his creatinine was 10.52, rechecked twice. Following admission to the PCU, the patient had multiple blood transfusions to stabilize the hemoglobin. Kidney ultrasound showed bilateral echogenic kidneys with scarring, suggesting a chronic renal failure picture. Following the day of admission, the patient underwent EGD for suspected upper GI bleed which revealed gastritis and an actively oozing Dieulafoy's lesion at the GE junction, which required epinephrine injection and clipping. He also had biopsy proven *H. pylori* infection. The patient's hemoglobin stabilized after clipping. The patient was also started on dialysis and was referred and placed on a kidney transplant list.

Discussion:

What is unique about this case is that it is the first reported case of a Dieulafoy's lesion in the presence of *H. pylori* infection. It also raises questions related to prevention and follow-up care in patients with both CKD and GI bleeds. Previous small trials have shown that low dose PPI therapy in patients on dialysis may prevent upper GI bleeds; this is not the case for CKD patients not on dialysis. However, recent studies have found that long-term PPI use can worsen renal function. As CKD is a risk factor for GI re-bleeding, further research should be done to look at how low-dose PPI use in patients with CKD on dialysis with a history of GI bleed may be beneficial. More prospective studies are also necessary to determine appropriate follow up intervals with these patients. This case reinforces that CKD patients who previously had an upper GI bleed should be closely monitored. It also emphasizes the need of studies to assess *H. pylori* as an etiological agent in Dieulafoy's lesions.

Title: Early Diagnosis and Treatment Improves Prognosis of Debilitating Autoimmune Disease CIDP

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Introduction: There have been limited studies published on a rare and chronic form of Gullain Barre Syndrome (GBS) known as Inflammatory Demyelinating Polyneuropathy (CIDP). It is a progressive autoimmune disease with relapsing courses, which involves both the sensory and motor peripheral nerves. Clinically, it presents with diffuse hyporeflexia or areflexia and symmetric proximal-distal muscles weakness. Occurs in adults ages 40-60, prevalence ranges from 1-7.7/100,000 adults with incidence ranging from 0.15- 1.6/100,000 adults. Treatment includes IVIG, corticosteroids and plasmapheresis.

Case Report: The patient is a 74 y/o F with a PMH of HTN, HLD, GERD, renal carcinoma, who was diagnosed with CIDP in 2010. Patient first presented in 2010 complaining of intermittent episodes of chronic weakness, numbness, tingling and burning in her legs. Symptoms first started in the left lower extremity and then affected the right lower extremity. Symptoms arose suddenly and progressively worsened. Patient denied any viral illnesses or trauma. Physical exam was benign, except for 1+ symmetric reflexes and decreased strength 3/5 in the lower extremities. EMG studies showed chronic neuropathic changes and demyelination. Patient was immediately started on cyclical IVIG at 1mg/kg split over 2 days every 6 months. Patient's symptoms stabilized and the occurrence of number of episodes substantially declined. In 2013, patient reported being symptom free for 11 months. However, in January 2014, patient reported recurrent worsening weakness. She then received accelerated 1-day course of 2g/kg IVIG treatment. However, she did not like the way she felt on the accelerated protocol. She then had a 4-day cycle of IVIG in May 2014. She showed clinical improvement of weakness, but persistent sensory symptoms especially at night. Since then, patient has been getting preemptive cyclical IVIG infusions at 1g/kg split over 2 days every 3 months. Patient came in for follow up in June 2016, where a trial of dose lowering from 1g/kg to 0.8g/kg was initiated, but symptoms remitted and dose was increased back to 1g/kg. Currently, patient's symptoms have been stable and repeat EMG did not show further progression.

Discussion: Due to its heterogeneous clinical presentation, rare occurrence, limited diagnostic criteria and clinical trials, CIDP is often misdiagnosed and undertreated. This case illustrates the clinical utility of properly diagnosing CIDP. It raises awareness and highlights the importance of early diagnosis and treatment of CIDP, which results in positive outcomes, preventing further progression and improving functional recovery. As well avoiding complications such as respiratory failure, quadriplegia and autonomic dysfunction. Further research on this topic is recommended.

Title: *A Curious Case of Atypical Granulomatosis with Polyangitis and a Component of Pauci-Immune Glomerulonephritis*

Authors: Bradley Davis, Department of Family Medicine; Bankim Shah, M.D., Department of Internal Medicine
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Introduction: Granulomatosis with polyangitis, a form of anti-neutrophil cytoplasmic autoantibody (ANCA)-associated vasculitis, may be associated with pauci-immune glomerulonephritis. This is a form of necrotizing glomerulonephritis with little or no immune complex deposition that leads to a sudden, precipitous loss of renal function. Symptoms are often nonspecific or vague initially, as evidenced by the patient subsequently described.

Case Description: This patient, a 65-year-old female with a history of hypertension, controlled diabetes mellitus type 2, and hyperlipidemia presented with complaints of dyspnea, weakness, fatigue, and significant neuropathy. Upon presentation, the patient reported that in the preceding months she had been evaluated extensively for similar complaints with essentially negative results. Records indicated the subtle changes in renal function and peripheral neuropathy were thought to be secondary to diabetes, so no further workup was initiated. However, weakness and neurologic symptoms persisted and became associated with dyspnea, so she returned for reevaluation. A computed tomography (CT) scan was performed due to the patient's dyspnea that showed a lung abscess, a loculated pleural effusion, and necrotizing pneumonia. These findings were further evaluated with bronchoscopy and CT-guided biopsy that yielded no infectious etiology to explain the CT findings. Given the significant history of peripheral neuropathy, an unremarkable neurologic workup, and a biopsy negative for infectious etiology, additional serologic testing was performed and found to be myeloperoxidase (MPO)-ANCA positive. The patient then had a renal biopsy that demonstrated pauci-immune glomerulonephritis and ANCA-associated vasculitis, so she was treated with a total of four infusions of rituximab and was continued on high-dose steroids. The patient reported significant resolution of her symptoms when she presented for follow up as an outpatient.

Discussion: This case study has several implications and suggests the decision to initiate an early, more extensive workup should be made when the disease presentation is not entirely consistent with the attributed etiology. In this instance, it was thought the patient's weakness and peripheral neuropathy were due to diabetes mellitus. Further investigation revealed well-controlled diabetes of short duration with a hemoglobin A1c at target, which is inconsistent with findings of declining renal function and debilitating peripheral neuropathy. In addition, the patient's presentation would lead a clinician to entertain a form of granulomatosis with polyangitis (GPA). The discrepancy, however, is in the negative biopsy results of the lung lesion and the positivity of MPO. Typical histopathologic changes and positivity of proteinase 3 (PR3)-ANCA are the hallmark to diagnosis of 90% of cases of GPA. Moreover, recent studies suggest that a distinction between MPA and GPA is not as important as positivity for PR3 and MPO. The rationale behind this is the locations of the body affected are highly correlated with which of the two markers is positive and can be used to predict disease relapse, an important factor in determining duration of treatment.

Title: Venous Aneurysm: A rare vascular condition with a novel treatment

Authors: Susan Grodman DO, Iyad Baker MD, Aaron Stein, MD, David O'Connor MD

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Introduction:

Venous aneurysms are exceedingly rare and only case reports of this condition have been described in scientific literature. The clinical presentation of this vascular disorder varies and is often misdiagnosed. However, if untreated, fatal complications such as rupture, compression of neighboring organs, pulmonary embolism, and other thromboembolic episodes may occur, thus early detection is crucial. Herein lies a unique case of a patient who is a Jehovah's witness, presenting with inferior vena cava (IVC) aneurysm. The patient was rapidly and correctly diagnosed and because it was crucial to minimize blood loss, a novel approach was employed, which led to the patient's survival. While surgical interventions such as resection with end-end anastomosis, tangential excision with lateral venorrhaphy, and resection with interposition graft have been the most successful approaches thus far, they were contraindicated for this patient. This case was the first time venoplasty was performed successfully to treat this condition.

Case Presentation:

A 52 year old female with a past medical history of hypertension, left popliteal vein thrombosis, and Protein C and S deficiency presented to the Emergency Department with the complaint of an enlarged cord-like structure appearing in her abdomen, with associated severe abdominal and groin pain, and swelling of her legs. Three days prior to admission, the patient was on a 6 -hour flight. She had stopped taking her warfarin ten years prior. On physical examination, abdominal wall collateralization with phlebitis was apparent: a warm, tender, large palpable cord like structure in her left lower quadrant, 2-3 cm wide extending downward to the groin was seen as well as trace edema in her bilateral lower extremities. Anticoagulation with heparin was initiated. Her CT scan showed a mass present within the pericaval region. Retroperitoneal tumor was part of our differential at this point. However, MRI and a vascular duplex study confirmed a vascular structure consistent with possible venous aneurysm. For further delineation, a venogram was performed, which showed a 4cm aneurysm of the infrarenal vena cava below an area of stenosis as well as hypertrophy of the azygos and hemiazygos veins. A balloon venoplasty was subsequently performed to relieve the stenosis. The patient tolerated the successful procedure and is currently on life-long warfarin therapy.

Discussion:

The pathogenesis of IVC aneurysms is unknown. Clinical presentation varies; some are asymptomatic, and others present with signs of venous hypertension (such as lower extremity swelling), abdominal, or lower back pain. Others may initially present with an episode of deep vein thrombosis or pulmonary embolism. IVC aneurysm should be considered in the differential diagnosis of retroperitoneal tumors. We can now consider venoplasty as another treatment option for IVC aneurysms as re-

Title: Novel Lipid Therapy: Could PCSK-9 Inhibitors Replace Statins in Secondary Prevention?

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Introduction:

It has been shown that in patients with a recent stroke, atorvastatin 80 mg per day reduced the overall incidence of strokes and of cardiovascular events. Lipid-lowering by other means had no significant impact on stroke incidence, suggesting pleotropic effects of statins including a possible role in plaque stabilization, reducing inflammation, and slowing carotid arterial disease progression. However, some patients cannot tolerate statin due to side effects such as myalgia, leaving them at risk for CV events. For these patients who are intolerant of high-intensity statins, current recommendations are to prescribe moderate or low-intensity statins before trying other classes of drugs. A newer class of LDL-lowering drug called PCSK-9 inhibitors is being studied for their cardiovascular outcomes.

Case description:

A 73 year-old man with a PMH of paroxysmal atrial fibrillation, hypertension, anxiety, and previous CVA 1 year prior presented after he fell out of bed at home and called EMS. Additional history obtained from patient's wife revealed that he had been more forgetful during the past week, with accompanying symptoms of cough, rhinorrhea, fatigue, and heart palpitations. He denied slurred speech, which was the presenting symptom of his previous stroke 1 year ago. His wife reports that the patient stopped taking his simvastatin 20 mg a few months ago due to pain in his legs, but is mostly compliant with other home meds including Amlodipine, Pradaxa, and Paxil. Initial CT in the ED was negative for acute intracranial abnormality. Patient was admitted for hypertensive urgency. Given patient's cardiovascular history and history of CVA, Pradaxa was continued, and statin was restarted. Patient was noted to have an acute change in mental status on day 2 of admission, and subsequent MRI showed an evolving infarct within the right thalamus without evidence of hemorrhagic transformation. At this time, patient's statin was changed to atorvastatin 80 mg.

Discussion:

In the case presented here, the patient's stroke risk was increased when he decided to stop taking his simvastatin 20 mg due to myalgias. What options do these then patients have? The new PCSK-9 inhibitors are proven to reduce LDL levels, but only recent studies have investigated their role in reducing cardiovascular events. In the SPIRE-2 trial, a significant reduction of the primary end-point of CV events - including stroke, of bococizumab was observed in high-risk patients but not in low-risk patients. In a post hoc analysis of the ODYSSEY trial, alirocumab added to statin therapy showed a reduction in rate of CV events. The recent FOURIER trial provides evidence that PCSK-9 inhibition offered a 15% risk reduction in CV events. However, in this trial, patients with clinically evident atherosclerotic disease were given PCSK-9 inhibitors in addition to statins, not as monotherapy. Although these findings are promising, further studies are necessary to evaluate long-term health outcomes and create guidelines for PCSK-9 inhibitors as monotherapy for LDL lowering and secondary prevention of cardiovascular events in the setting of statin intolerance.

Title: OMT in a patient with Post-dural puncture headache

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Introduction:

Post-dural Puncture Headache is a type of headache that results from the cerebrospinal fluid leakage through dura mater. This is a possible complication of epidural anesthesia. It is proposed that the leakage of CSF causes a pressure difference and traction on pain-sensitive structures. The treatment for a persistent PDPH for more than 1 day is an epidural blood patch. There is a possibility of persistent headaches despite multiple epidural blood patches. Osteopathic Manipulative treatment targeted at reducing tension in the suboccipital muscles could be a beneficial adjunct treatment modality for PDPH.

Case Description:

A 38-year-old female 2 days after having a C-section developed palpitations and a 10/10 fronto-parietal and suboccipital headache. The patient stated that lying down flat and supine improved her headache. She also had back pain at the location where the epidural was given. She had persistent pain despite oral analgesics and bed rest. OMT, Suboccipital release was performed twice, and improved her tachycardia temporarily and relieved her headache. Due to persistent pain the next day, an epidural blood patch was done by anesthesia. The patient's headaches resolved and was discharged the same day.

Discussion:

Title: Assessment of Outcomes in Patients With Pneumonia or Gastrointestinal Bleed With Elevated Serum Troponin Ascribed to Type 2 Myocardial Infarction

Authors: Supreeya Swarup DO, Lena Liu, Roman Zeltser MD, and Amgad N. Makaryus MD
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Background:

Type 2 Myocardial Infarction (T2MI) is frequently encountered in the clinical setting; however, limited studies have been conducted addressing its epidemiology, prognosis, treatment, and prevention. We examined the relationship between T2MI and inpatient outcomes including inpatient mortality and results of inpatient cardiovascular (CV) tests, as well as the downstream consequences including results of downstream CV testing and readmission with acute coronary syndrome.

Methods:

A retrospective cohort study was undertaken where data was collected via the hospital EMR. Of 445 patients admitted with a discharge diagnosis of pneumonia or gastrointestinal bleed between January 2013 and December 2015, 99 patients had positive troponins (T2MI patients; $Tn > 0.015$), and 118 patients had negative troponins (non-T2MI patients; $Tn < 0.015$). Statistical analysis was performed using IBM SPSS. Pearson χ^2 significance (2-sided) and t-test significance (2-tailed) were calculated to compare the two groups.

Results:

T2MI patients were older than non-T2MI patients, age of 71.9 versus 59.5 ($p < 0.01$). T2MI patients had an increased number of cardiovascular disease (CVD) risk factors 2.02 CVD risk factors compared to 1.67 risk factors in non-T2MI patients ($p < 0.05$). T2MI patients had an increased number of previously diagnosed cardiovascular diseases, having a mean of 1.49 compared to the mean of 0.58 in non-T2MI patients ($p < 0.01$). Inpatient death was increased by 3-fold in T2MI patients (10.10%) compared to non-T2MI patients (3.39%) ($p < 0.05$). The number of ACS readmissions within 9 months was 0 for each group. For inpatient and downstream EKG, fewer T2MI patients had normal sinus rhythm compared to non-T2MI patients, and more had ST changes when compared to non-T2MI patients ($p < 0.01$). Furthermore, more T2MI patients had at least one severe finding on echocardiogram (40.4%) compared to non-T2MI patients (12.0%) ($p < 0.05$).

Conclusion:

We found that patient age, the number of traditional cardiovascular disease (CVD) risk factors, and the number of underlying CVD events were associated with an increased risk of developing inpatient T2MI. Furthermore, when compared to non-T2MI patients, T2MI patients had a 3-fold increased risk of inpatient mortality during the admission. However, developing T2MI at the index admission did not translate to downstream readmission with acute coronary syndrome in our patient population. Future studies need to be conducted to further understand the implication of developing T2MI to future CV health in order to better serve this specific patient population.

Title: Traumatic Globe Rupture in a 57-Year Old Male With History of Penetrating Keratoplasty

Authors: Emilia Aponte, DO, Resident, Department of Family Medicine, NuHealth, East Meadow, NY; Co-Author: Silvia Shin, DO, Resident, Department of Family Medicine, Sharon Krikhely, DO, Department of Family Medicine, AOBFP certified, Elmont Health Center, 161 Hempstead Turnpike, Elmont NY 11003

ABSTRACT: Globe rupture occurs when the integrity of the outer membranes of the eye is disrupted. Eyes with a history of penetrating keratoplasty (PKP), or corneal transplant, have a lifetime-increased risk of globe rupture as per the *American Journal of Ophthalmology*. This case is about a 57-year old white male with a history of right corneal transplant 40 years prior, who presented to the emergency department complaining of complete loss of vision from his right eye after being punched by his wife 2 hours prior. The patient suffered a puncture wound to the right globe when his wife punched him and simultaneously poked him with her long artificial nails. The patient felt immediate sharp pain to the eye with sudden loss of vision and was only able to see dark shadows. During his entire course in the emergency department, the patient felt no pain nor required any pain medications. His right globe was completely distorted in shape, indented and introverted. He felt pain only with palpation of the eye itself and all extra ocular muscles were intact. The patient had no red reflex or visible optic disc on exam. CT of the orbits showed complete globe rupture of the right eye. The patient received antibiotics while in the ED and was taken for surgical repair of the right globe 8 hours later. Trauma to the eye represents approximately 3% of all ED visits in the United States. Although uncommon, globe rupture can occur in blunt trauma, such as sports injuries or car accidents, as well as penetrating trauma, the most common including gunshots, BB gun pellets, and knife stab-bings.

Title: The Resurgence of Syphilis: A Case Report

Authors: Shannon Carroll, Emmanuel Decade, Rebecca Tamarkin

Abstract

Syphilis is a sexually transmitted infection that can lead to deadly outcomes in both the male and female population if not treated appropriately and in a timely manner. This is a case of a 27 year old caucasian male with no past medical history who presented with a generalized, erythematous, maculopapular rash for the past two weeks. Patient initially presented with prodromal symptoms two weeks prior to rash development. After failure of multiple treatments, screening for sexually transmitted infections was performed, which returned a rapid plasma reagin (RPR) titer of 1:128. The patient was diagnosed with secondary syphilis and immediately treated with three injections of Bicillin (Penicillin G) for three consecutive weeks. This case is important to current medical practice because of the rise of primary and secondary syphilis in the adult male and female population, especially ages 20-29. According to the Centers for Disease Control (CDC), the rate of reported primary and secondary syphilis cases has increased 19% since 2001. Prompt treatment of primary or secondary syphilis can prevent progression tertiary syphilis and the potential development of neurosyphilis, decreased visual acuity, hearing loss, vascular disease leading to thrombosis, ischemia and infarction, ataxia, and paresis.

Title: A Painless Herpes Zoster Eruption**Authors:** Katelyn Geyer, OGME-2, Department of Family Medicine, Nassau University Medical Center, East Meadow NY

Herpes zoster is a latent varicella-zoster virus (VZV) infection, lying dormant within the sensory dorsal root ganglia until it is reactivated, typically leading to a painful vesicular eruption along a unilateral nerve root. The painless presentation of the following rash, along with the overlying impetigo, made for a challenging diagnosis.

The patient is a 68 y.o. female with a history of uncontrolled type 2 diabetes and hypertension. She presented to the family medicine clinic for a painless vesicular rash that developed three days prior. The rash started on the midline of her nose and upper lip, and progressed laterally to the right side of her face, never crossing the midline. She came in the morning of presentation due to yellow purulent drainage from the ruptured vesicles. The rash was encroaching her right eyelid, causing swelling and blurry vision. There was yellow crusted discharge draining from the vesicles, with surrounding erythema. The patient was then brought to the emergency department for further workup and preservation of her eyesight. On admission, she was started on intravenous clindamycin and ceftriaxone for cellulitis and UTI coverage, as well as oral acyclovir. The patient was also evaluated by ophthalmology upon admission, whom ruled out herpetic keratitis. The rash was showing no improvement until the antibiotics were switched to IV vancomycin. Pt was discharged home with a 10 day total course of antivirals and antibiotics. Upon follow-up in the clinic two weeks later, the patient developed postherpetic neuralgia, which quickly required high dose gabapentin and tramadol for breakthrough pain.

This case illustrates the importance of remembering that not all shingles is painful. Recognition of when to act quickly, especially in an atypical presentation, is critical to preservation of organ and quality of life.

Title: Neurogenic Shock Secondary to Spinal Cord Contusion Without Initial Radiographic Findings

Authors: Muskan Ghotra OGME I, Anahita Ahuja OGME I: Nassau University Medical Center

Case Description: 23 year old male with no PMH presented to the hospital with unresponsiveness. As per the family, two days prior to admission, patient was playing football and was hit by the opposing player on the head and shoulder. Patient was able to do routine activities the day after the injury such as working out, but did complain of some neck stiffness. The morning prior to the unresponsiveness, patient woke up at 4 am and was having excruciating neck pain with B/L upper extremity numbness and tingling. EMS was contacted and patient was able to get up from bed to chair, but became unresponsive during the transit. In the ED, patient was intubated, given 4mg of naloxone IV, and C-spine was immobilized. Physical exam was remarkable for GCS score of 10, motor strength of 0/5 in all extremities, absent DTRs throughout without clonus, absent rectal tone, incontinent bowels, positive priapism, but intact sensation and bulbocavernosus reflex. Laboratory findings such as CT head/C-spine/CTA head neck, MRI of head/brain w/o contrast was within normal limits. Patient was admitted to the ICU with initial diagnosis of meningitis vs. transverse myelitis and then spinal shock/contusion with acute respiratory failure secondary to underlying neurological disease. Medical management included initiation of prophylactic antibiotics, mechanical ventilation with CPAP trails, lumbar puncture, use of pressors initially to keep the MAP above 85, repeat MRI on hospital Day 7 which showed subtle enhancement of spinal cord from C1-C4, and tracheostomy on Hospital Day 8. Patient was discharged on Hospital Day 16 to Kessler for acute rehab.

Discussion: This case illustrates that although radiographic findings may show no evidence of any acute injury to the spinal cord initially in neurogenic shock secondary to spinal cord contusion, physical exam and symptoms will say otherwise especially when there is a clear history of injury to the spinal cord. Imaging should be repeated after a week which may or may not reveal findings. Patient should be treated with differential diagnosis of neurogenic shock regardless of imaging.

Title: Takayasu Arteritis in 47 year old Peruvian Female

Authors: Sarah Javdan, DO, Peter Guiney, DO

Takayasu arteritis (TA) is a large vessel chronic inflammatory arteriopathy. The inflammation has a predilection for the aorta and its main branches, with renal artery stenosis seen in 25 to 80 percent of patients. Though pathophysiology of the disease is poorly understood, the initial disease often first develops in the left middle to proximal subclavian artery. Lesions are caused by sustained inflammation causing thickening arterial walls, leading to narrowing, occlusion or dilation of the vessels. These changes in turn lead to the typical TA symptoms of absent pulses, headaches, dizziness and hypertension. Though seen all over the world, TA appears to be more prevalent in Asians. This report is the case of Takayasu arteritis in a 47 year old Peruvian female originally diagnosed with TA at age 9. The patient was managed in Peru for her TA as a child but lost to follow up as an adult when she moved to the United States. Patient records from Peru were unattainable and details of her care are unknown to patient other than knowledge of one “non-functioning kidney”. Patient presented to clinic with symptoms of acute muscle aches and fatigue. Physical exam was significant for a non-palpable right brachial pulse with a faint right radial pulse. Patient also has blood pressure with systolic consistently in the 180s and difficult to control on blood pressure medication. This poster outlines the diagnosis, treatment and management of Takayasu arteritis in this Peruvian female.

Title: Clinical Manifestations and Diagnosis of Pancoast Tumor**Authors:**

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Abstract:

Pancoast tumors, also known as superior sulcus tumors, are located at the apex of the lung. These lesions may present as shoulder and arm pain in the distribution of the C8, T1, and T2 dermatomes, Horner's syndrome with ipsilateral blepharoptosis, miosis and anhidrosis, and weakness and atrophy of the muscles of the hand. These constellation of symptoms are referred to as Pancoast syndrome, which accounts for less than 5% of all bronchogenic carcinomas. This is a case of a 71 year old Caucasian female with past medical history of hypertension, chronic obstructive pulmonary disease who initially presented to the emergency department with right shoulder pain, hoarseness and occasional cough with blood tinged sputum for 2 weeks. She reported weight loss of 20 lbs over 6 months and social history was significant for 100 pack years cigarette smoking. Significant findings on physical exam included a pale, cachectic female with anisocoria, decreased breath sounds on right upper lung zone, and mild diffuse bilateral wheezing. CT scan of thorax was significant with finding of a right apical mass with cavitation. The mass encased the right subclavian artery, the right innominate artery, and junction of the left brachiocephalic and right internal jugular veins with compression and thrombosis of superior vena cava secondary to the mass effect. The mass also involved the right first rib, proximal right clavicle, and multiple metastatic lesions were seen throughout the lungs. The presence of the right apical lung mass with involvement of first rib and invasion of surrounding structures confirmed the diagnosis of Pancoast tumor. CT guided biopsy of right apical lung mass was consistent with squamous cell carcinoma. Emergency radiotherapy was started for treating SVC syndrome. As per patient's desire, radiation therapy was stopped after 4 rounds and she was discharged home with home hospice. Although preoperative chemotherapy (cisplatin-etoposide) and radiotherapy, followed by surgical resection, is considered a standard of care for superior sulcus cancers, treatment is rigorous and relapse limits long-term survival. This case is important because prognosis depends on prompt diagnosis, especially recognition of associated risk factors as well as signs and symptoms.

Title: An Unexpected Case of a Cavernous Angioma of the Lung

Authors: Aliza Raza DO, Tina V. Doshi, DO, Rajendra Jinna, MD, Dr. Thomas Joyce DO

Introduction: Pulmonary arteriovenous malformations (PAVM) are abnormal communications between the pulmonary arteries and veins. PAVM are uncommon but 75% have symptoms that can be attributable to underlying hereditary hemorrhagic telangiectasia (HHT). We report an unexpected case of a pulmonary arteriovenous malformations (PAVM) cavernous angioma in an asymptomatic teenager.

New studies have been conducted on use of propranolol as first line treatment for those infantile hemangiomas that inv treatment. There is increasing evidence that propranolol is safer and possibly more successful in treating infantile haema compared to systemic steroids.

Case Summary: A 13 year old female with no past medical history presented for her annual well visit. History v nificant only for recent emigration from Columbia in 2009. Routine labs and immunizations were done. PPD showed a tive result and further imaging was undertaken. Chest xray showed a 6.2cm x 1.7cm pleural based lesion.

Further imaging, including CT thorax and MRI with gadolinium, found a lobulated well-defined lesion measur 2.1x4.6x4.5 cm with focal extension into the adjacent chest well. Patient underwent a VATS procedure with pathology ing a cavernous hemangioma. Patient post-operative course was uneventful and showed no signs of complications. Pat tinues to be asymptomatic with no signs of associated diseases.

Discussion:

This case shows that it is important to consider a pulmonary arteriovenous malformation in an asymptomatic patient w

New treatments using Propranolol have shown some promising results in several studies. It acts on the beta ad receptors to decrease the release of blood vessel growth-signalling molecules (vascular endothelial growth factor and b broblast growth factor) and by triggering programmed cell death. Also, Propranolol can be started and effective if start the growth phase, even over the age of 12 months. It may increase the rate at which the haemangioma decreases in size

Title: Dizziness Dilemma: A case report

Authors: Segal, Renata & McCall, Courtney, Attending: Lin, Shen Han

The daily clinical picture of a patient presenting with dizziness, lightheadedness, unsteady gait is a difficulty physicians continuously face¹. Some patients present with distinct symptoms allowing the physician to correlate the symptoms with either peripheral or central cause. Others may not be able to explain their symptoms as well, and that is when the physician has to rule out causes one by one.

In this case we have a 58 y/o Spanish speaking male with a past medical history of hypertension, diabetes mellitus, gastritis, and vertigo, presenting to Nassau University Medical Center with symptoms of dizziness for about a week. He had unsteady gait, dizziness for 6 days worse with head movements and walking. He felt slight relief with lying down with eyes closed. Medications provided no relief. The patient admitted to subjective fevers prior to admission and he was ill-appearing when in the ED. Vital signs and physical exam were within normal limits. The workup began with labs: CBC, CMP, ESR, CRP, lipid screen, hepatitis panel, hemoglobin A1c. CT and CTA of the head, a Neurology consult an ENT consult. Neurology recommended a lumbar puncture and MRI of the head. ENT recommended transfer to NSLIJ for labyrinthitis and potentially a labyrinthectomy.

The most significant results were elevated protein and glucose in the CSF, elevated ESR of 29, indication of previous Hepatitis A infection, hemoglobin A1c of 9.2. Viral meningitis was suspected briefly only because the patient was ill-appearing and said he had fevers previously with the dizziness. However, he showed no other signs of meningeal irritation. All imaging studies came back within normal limits. ENT recommended a labyrinthectomy. Unfortunately, NUMC does not have the resources for the ENT doctors to perform the procedure and the patient could not afford to go North Shore LIJ because he was uninsured and undocumented.

Labyrinthitis is a common diagnosis with little assurance for the patient. The cause of labyrinthitis is unclear thus there is no general method in diagnosing or treating. Previous workup in medicine has failed to adequately diagnose and treat labyrinthitis. Treatment has included symptomatic treatment, steroids, antibiotics, physical rehabilitation and more. It was difficult to determine the patient's cause for dizziness. Dizziness is continuously misdiagnosed and can take months to receive a diagnosis¹. The patient was given follow up appointments to ENT after discharge. ENT referred the patient to PM&R for physical rehabilitation, which he continues to this day.

Title: An Atypical Manifestation of Inverse Psoriasis with Psoriatic Arthritis

Authors: Tiffany Trieu, D.O., Elia Tarascin, D.O.

Intro: Psoriasis is a chronic skin disorder affecting 2-3% of the population. Plaque psoriasis is the most common type. Inverse psoriasis is an atypical form that mainly affects the intertriginous folds of the groin, armpits, and genitals. We describe a case of a persistent rash undiagnosed for a while until it was discovered the patient had inverse psoriasis with psoriatic arthritis.

Case: A 55 year-old Hispanic female developed a rash on the right calf with dark brown discoloration and hypopigmented spots, along with mild induration. The rash spread over months to the creases of the groin, buttocks, and infra-mammary folds while becoming itchy. All the lesions were darkly hyperpigmented and some had slight silvery scale. It did not respond to topical antifungals and a course of oral terbinafine was ineffective as well. She was tried on various creams including hydrocortisone, triamcinolone and clotrimazole/betamethasone with temporary improvements but recurrence was frequent after the course ended. Over 12 months various diagnoses were considered including venous stasis, tinea, candida and acanthosis nigricans. She exhibited a depressed mood and frustration with her persistent symptoms. She also complained of hand and wrist pain. On exam she was noted have nail pitting, and puffy hands and wrists with decreased range of motion. She was eventually referred to dermatology and rheumatology. The rheumatology consultant suspected psoriatic arthritis and she was started on methotrexate 10mg weekly titrated up to 20mg over 6 months. She was doing very well 1 year after starting MTX with near resolution of her symptoms.

Discussion: Inverse or intertriginous psoriasis is commonly mistaken for fungal dermatosis such as candidal intertrigo. When there is no response to treatment with antifungals, alternative diagnoses should be considered. This uncommon form of psoriasis may be seen in 3-7% of psoriasis patients. While absent in our patient, a family history of psoriasis should raise suspicion. As with chronic plaque psoriasis, a sudden onset of inverse psoriasis may indicate a recent HIV infection. Psoriasis can be associated with increased risk of cardiovascular disease, diabetes and depression. Our patient was regularly screening and assessed for these. As there are effective treatments available, a high index of suspicion and rapid referral to the correct consultants will

Title: Incidence of shoulder stiffness after arthroscopic rotator cuff repair

Authors: Dr. Charles Ruotolo, Dr. Robert Trasolini, **Dr. William Schneider**

Abstract

The purpose of this study was to determine the incidence of clinically significant postoperative stiffness after arthroscopic rotator cuff repair and when it first appears. The study also sought to determine clinical and surgical factors that may be associated with increased rates of postoperative stiffness. A retrospective review of consecutive series of arthroscopic rotator cuff repairs was conducted. During a 5 year time period, the senior author (C.J.R.) performed 156 arthroscopic rotator cuff repairs. Operative indications, operative technique, and post-operative rehabilitation protocol were unchanged throughout the time period. Demographic data, comorbid medical conditions, description of rotator cuff tear, and concomitant surgical procedures were evaluated on their correlation in stiffness. All office visits were reviewed to determine the pre- and postoperative motion, pain scores and functional strength. Patient were followed up at 1 week, 3 weeks, 6-8 weeks, 3 months and about 6 months and 1 year postoperatively.

Rotator cuff repairs have evolved over the last two decades. A procedure once performed open, progressed to a mini-open repair, and now is almost exclusively performed arthroscopically. With the increasing size of our aging population and increasing sports activity of said population the incidence of rotator cuff injury has increased exponentially. The purpose of this study is two-fold, (1) report the incidence of shoulder stiffness after arthroscopic rotator cuff repair, and (2) report the timing and course of this complication.

Although the pathophysiology of stiffness after rotator cuff repair is not well understood, authors believe it is due to a combination of postsurgical adhesion to the surrounding soft tissues and capsular contraction. Known Risk factors associated with the development of post-operative stiffness are Worker's Compensation insurance, history of calcific tendonitis or adhesive capsulitis, partial articular-sided tendon avulsion, full thickness tears, and having a concomitant labral repair at time of rotator cuff repair. All concomitant labral repairs were excluded from our dataset as when performed independently labral repair will result in stiffness.

The incidence of stiffness as a complication of arthroscopic rotator cuff repair ranges from 10% to 39% in reported studies. It is difficult to differentiate true post-operative stiffness from normal post-operative changes, therefore a timeline to define when stiffness appears has not been reported

Title: Approach to management of asymptomatic complete AV block in childhood

Authors: Manu R. Varma, DO; Sarah C. Studyvin, DO; Jon F. Sicat, DO; Brian K. O'Connor, MD

Introduction:

Complete AV block in patients with structurally normal hearts can often present beyond the newborn period. We present the case of a 12 year old child with incidentally diagnosed complete AV block and the sequence of her management.

Case report description:

A 12 year old girl with no significant medical history presented to an outside emergency department and was incidentally noted to have EKG-confirmed complete AV block with a slow ventricular escape and abnormal repolarization pattern with QT prolongation. The patient was otherwise hemodynamically stable and was transferred for diagnostic assessment and therapy.

Upon arrival, she was well-appearing with no signs of hypoperfusion, BP 131/74, and HR 41. She denied any history of syncope, chest pain, shortness of breath, or family history of cardiac disease (syncope, myocardial infarctions, stroke, or sudden death). Initially, she was monitored on telemetry with isoproterenol drip at bedside but not administered.

Echocardiogram confirmed normal indices of LV systolic performance with evidence of overt chamber enlargement. Tissue Doppler interrogation suggested diastolic dysfunction. She underwent temporary venous lead placement due to nocturnal escape rates < 28 beats per minute with pauses > 5 sec. VVI pacing was initiated at a rate of 45. Monitoring was continued in the PICU, and diagnostic workup began.

Rheumatologic workup was negative for anti-dsDNA, SSA, SSB, anti-Smith and RNP, RF, and ANA with ESR, CRP, C3, C4, and CH50 within normal limits. Infectious disease history was negative for fevers, target-like rashes, or history of tick exposure. Skin lesions of suppurative hidradenitis were cultured, and blood cultures, Lyme titers, streptococcal studies, EBV, and mycoplasma titers were sent. She was placed on clindamycin for suppurative hidradenitis and ceftriaxone for possible Lyme disease. Infectious disease workup was negative, and antibiotics were discontinued prior to discharge.

Over the next three days on telemetry monitoring, she remained entirely in a paced rhythm. It was decided to implant a dual chamber permanent pacemaker with a lower rate limit of 60.

Discussion and Implications to clinical practice:

Complete AV block in childhood is often asymptomatic at presentation. Our patient represents a unique manifestation of the subset of patients with AV block who ultimately require permanent pacing. Even in this setting, it is important to assess the underlying rhythm, rule out acute reversible causes, and evaluate the patient tangentially.

We know that the AV node is primarily innervated by the left vagus nerve with input from sympathetic efferents. Although our patient demonstrated no identifiable neurologic pathology, we know that there is a connection between cardiovascular health and cognitive function through mechanisms that are incompletely understood. She should be regularly assessed for neurologic implications of her disease. Additionally, she should be routinely evaluated for dysfunction at

Authors: Zachary Collola, D.O., Matthew Meigh, Do>o

Introduction: Ischemic stroke is one of the leading causes of death in the United States. Most commonly, ischemic stroke is due to thrombosis or embolism causing decreased blood flow to an intracranial artery. Rapid and accurate diagnosis is important due to time-based treatment, and potential side effects of thrombolytic therapy. Initiation of thrombolytic therapy in a misdiagnosis can prove fatal.

Case Description: A 53-year-old female presented to our ED with sudden onset of severe headache with associated slurring of speech and confusion approximately 90 minutes prior arrival. On arrival, she was noted to be hypertensive, bradycardic, and mildly tachypneic, with a room air pulse ox of 90% which improved with supplemental oxygen. On neurologic exam, the patient had a left cranial nerve III palsy with bilateral vertical nystagmus and mild dysarthria. She was scored a 5 on the NIH Stroke Scale. A “code neuro” was called for immediate non-contrast head CT and neurology consult. The head CT was negative for acute pathology. As the ED workup continued, a 12-lead ECG was performed, which demonstrated new significant ST elevations in V2-V4. The patient was still chest pain free. A “code STEMI” was called for immediate cardiology consultation. Agreement was reached between consultants that the ECG findings were likely not cardiac in origin. Subsequently, chest X-ray showed a new widened mediastinum. Due to the nature of the patient’s symptoms with an unremarkable head CT, abnormal ECG, and abnormal mediastinum on X-ray, differential diagnosis now included aortic dissection versus ischemic stroke. Further testing including a CTA and MRI/MRA was needed. Substantial consideration was given to contrast utilization and to further delay in treatment of potential ischemic disease. Agreement was reached that CTA should be performed first to rule out large vessel dissection, which it did. Next, stat MRI/MRA without contrast, however, the patient’s respiratory status continued to worsen and prophylactic intubation was needed prior to MRI. The MRI was interpreted as acute infarct in the bilateral cerebellar hemispheres, right occipital lobe, and right basal ganglia. During admission, patient was noted to have a patent foramen ovale on transthoracic echocardiogram without mural thrombus, and no source of emboli was found with further studies. The patient was noted to have developed decerebrate posturing without evidence of seizure activity. The decision was made to withdraw care, and the patient died on day 3 of admission.

Discussion: This case illustrates the diagnostic dilemma commonly faced in the ED. Atypical presentation of common disease processes requires diligence and close follow-up in order to make the correct diagnosis, especially in a busy clinical environment. While diagnostic tests often aid our decision making process, they can sometimes confound the clinical picture. This can be alleviated by knowledge of pathophysiology and appropriate utilization of consultants. Mobilization of multiple resources is needed to make a rapid and accurate diagnosis. This is especially important when therapy for one diagnosis can be potentially fatal if initiated in the wrong setting.

Title: Lumbar L3-4 and L4-L5 Epidural Abscesses from Peptostreptococcus

Authors: Jonathan Fong DO, Rose Anna Roantree DO, Norman Ng OMS-III

Background:

Spinal epidural abscess are an uncommon, but serious disease that requires a high amount of clinical gestalt to diagnose. Unfortunately most cases are missed upon first presentation so clinicians needs to have a heightened awareness about the risk factors involved with epidural abscesses. This patient's only risk factor was being a diabetic [3]. The abscesses developed to the point where it was causing neurological issues that could only be found on a thorough neurological examination.

Case Presentation:

75 year old man presenting with low back pain for the past 4-5 weeks along with intermittent urinary incontinence. The pain was a stabbing sensation, non-radiating, not relieved with anything, and worst with movement. He was seen one other time in the ED and once more in an urgent care facility. He sought evaluation because he was having trouble walking. He denied fever, trauma, prior chronic back pain, or prior back surgeries.

PMH: CAD, DM, COPD, depression, and OSA

PSH: Appendectomy and inguinal hernia repair

PSH: Former smoker, quit years ago, social ETOH, denies IVDA

He was afebrile, hemodynamically stable, had a normal rectal tone, and minimal tenderness upon his lumbar spine. Neuro exam was positive for BLE motor strength 2/5.

He had a CT L spine done in triage that showed air in the thecal sac. Combining that with his HPI and PE prompted me to order an MRI.

Laboratory work had a slightly elevated WBC of 13, anion gap of 23, and glucose of 391.

MRI of the L spine w/ and w/o contrast showed epidural abscess at L3-4 and L4-5 with mass effect, and tethering of the cauda equina

Neurosurgery was contacted, he had a laminectomy L2-5 done later that day, anaerobic cultures grew Peptostreptococcus, he stayed in the hospital for 2 weeks receiving IV antibiotics, and was able to be discharged to subacute rehab.

Literature Review:

From my literary search there has only been one case of peptostreptococcus micros causing a lumbar abscess and diskitis that was paraspinal. Peptostreptococcus micros has caused cervical epidural abscesses though there has not been any cases to my knowledge of a lumbar epidural abscess caused by peptostreptococcus micros. Peptostreptococcus micros is an anaerobic bacteria that is part of the upper GI flora known for causing

Title: An Acute Aortic Dissection Doesn't Care It Was Normal Yesterday

Author: Michael Langowski D.O.

Introduction- Acute aortic dissection is a diagnosis that cannot be missed. The mortality and mortality rates are extremely high, with many patients dying before they reach the ER. Many aortic dissections are missed on initial presentation. The typical symptoms of tearing chest pain radiating to the back is not always present and may be missed among the numerous chest pain complaints seen daily in an ED. Clinicians typically rely on CTA (computer tomography angiography), which is sensitive and specific for aortic dissection. However this test carries with it radiation exposure, kidney injury due to a large contrast load, and monetary cost. A patient with recent normal CTA imaging could be considered at lower risk.

Case Description- A 77 year old male with a history of asthma, hypertension, and chronic back pain presented to the Emergency Department (ED) for sudden severe chest pain that radiated to the back and hypertension of 193/95. He was given 324mg of aspirin and sublingual nitroglycerin without pain relief by EMS. On exam he had equal, strong pulses in all extremities. Two months earlier the patient was admitted for a cardiac rule out due to similar chest pain. At that time, he underwent a CTA of the chest, abdomen, and pelvis that was completely normal. A new CTA was ordered and it revealed an aortic dissection of the descending aorta, from the left subclavian to the aortic bifurcation with areas of thrombosis in the false lumen.

The patient's blood pressure was emergently controlled with labetalol, esmolol, and nitroprusside. He was admitted to the ICU and managed nonoperatively initially. On day three he began having pain again and a repeat CTA shows an expanding dissection with retroperitoneal leakage. The patient was sent to another facility for an emergent Thoracic Aortic Vascular Repair (TEVAR). The patient survived to discharge home.

Discussion- Clinicians should not be deterred from ordering a repeat CTA when considering a possible aortic dissection. A large acute aortic aneurysm can develop rapidly from no clinically appreciable damage. This

TITLE: Large Mandibular Cyst Causing Dysphagia

Author: Mathew Lucky, D.O.; Rose-Anna Roanntree, D.O.

SUMMARY - In this case, an 82M with history of multiple dental infections over four months presents to ED with worsening throat pain, dysphagia and foreign body sensation and was found to have large radiolucent lesion on CT. Surgical resection and pathology report demonstrate findings consistent with benign cystic lesion of right mandible. Patient's symptoms largely alleviated after resection.

BACKGROUND – Dental related ED visits have been increasing in the US over the recent past. While most of these visits are related to dental caries, the long-term sequelae from dental caries will be seen in the ED as well. These include dental abscesses and dental cysts which are important to diagnose as patient's will likely require tooth removal and/or surgical resection in addition to antibiotics.

CASE PRESENTATION - Patient is an 82 yo M with significant PMH of GERD and who presents with complaints of worsening right sided throat pain, dysphagia and foreign body sensation for the past 2-3 weeks. Patient reports history of multiple dental issues since January 2017. He has had dental caries, a root canal, and right upper molar extraction. Patient has been on several courses of antibiotics for presumed dental abscess and pharyngitis. He has had multiple courses of amoxicillin, 1 week of clindamycin, and is currently on azithromycin. In ED, patient exhibited edema and erythema of posterior pharynx and uvula as well as tenderness to right sternocleidomastoid region.

INVESTIGATIONS – Initial lab work performed: CBC, BMP, blood culture x2. Labs WNL. CT soft tissue neck with contrast performed showed 2.4 x 2.9 cm radiolucent lesion with impacted tooth at inferior aspect of lesion. Radiologist read lesion as residual abscess versus dental tumor

OUTCOME AND FOLLOW UP – Patient admitted for dysphagia and evaluation of lesion. Two days after admission, patient underwent surgery and was found to have cystic lesion in right mandibular ramus measuring 6 x 3 cm. Lesion encompassed crown of impacted tooth #32 as well as the underlying nerves and medial soft tissue. Tissue samples were sent to pathology and described as acute on chronically inflamed squamous mucosa and underlying fibrous tissue exhibiting acute and chronic inflammation, granulation tissue and hemorrhage. Bone showed reactive changes. No evidence of malignancy.

Patient spent five additional days in the hospital following the resection. He continued to complain of dysphagia and right sided facial pain, but was discharged with minimal symptoms.

DISCUSSION – The most common odontogenic cyst is the periapical cyst which is formed after tooth infection leads to pulp necrosis and subsequent periapical inflammation. This can form a granuloma which later

Title: Aortic Emergencies: Acute Onset of Severe Right Upper Extremity Pain with Motor and Pulse Deficits

Authors: Dr. Nicki Maxwell, DO PGY-1, Dr. Eziuche Nwakanma, MD, Dr. Andrew Rudin, DO PGY-2

Summary:

A 66 year old male with past medical history significant for hypertension and smoking presented to an ED with acute onset of severe chest, right upper extremity pain with pulse and motor deficits. Imaging revealed multi-vessel vascular occlusion secondary to an ascending thoracic aneurysm as well as abdominal aortic aneurysm.

Background:

Aortic emergencies are relatively rare when compared to other causes of chest pain and neurological emergencies and are often fatal if not suspected early in the initial assessment of a patient to ensure rapid and appropriate treatment. An aortic dissection is the result of violation of intima allowing blood to dissect between the intima and adventitial layer forming a false lumen. Aortic dissections have a bimodal age distribution. The first peak affects younger patients with predisposing connective tissue disorders (Marfan's syndrome, Ehler's Danlos syndrome, or bicuspid aortic valve); the second age group which accounts for the vast majority are older than 50 years old with chronic hypertension. The most common presenting symptom is acute onset of chest pain, commonly described as ripping. CTA is the imaging modality of choice to detect an acute dissection. Tight blood control (SBP 100-120 mmHg) is the goal of the initial treatment. Blood pressure control is achieved by using negative inotropic agents followed by vasodilators. Definitive treatment depends on location dissection.

Case Presentation:

A 66 year old male is brought in by ambulance after a sudden onset of chest pain that woke him up from sleeping. He then began to have severe right upper extremity pain, described as burning and paralysis. Prior to arrival he took 325 mg of aspirin. Patient reports a past medical history of hypertension and is a current every-day smoker. Physical exam reveals a distressed, diaphoretic male with no palpable pulse in the right upper extremity with cool skin. The remainder of physical exam was normal. Patient was taken to CT scan given strong suspicion for dissection. Vitals were stable on initially exam. Pertinent labs included a WBC of 20.4, and high sensitivity troponin I 0.09 (normal <0.03).

CT CTA Chest/Abdomen/Pelvis revealed ascending thoracic aortic aneurysm extending superiorly into the right brachiocephalic artery and the right common carotid artery and a distal abdominal aortic aneurysm superior to the aortic bifurcation that measured 5.5 x 5 cm. CT of brain showed no acute abnormalities. Patient required stat flight transfer to WCMC for endovascular repair.

Discussion:

This patient presentation of an ascending aortic aneurysm is somewhat similar to the classically described presentation of acute chest pain although the significant upper extremity paralysis secondary to complete occlusion of the right brachiocephalic artery was somewhat atypical. Despite the false lumen extending into the right common carotid it did not extend completely to the cerebral vascular which would have likely resulted in

Title: First Case of *Brucella ovis* in Human

Authors: Zagelbaum, Nicole K. OMS-IV, Sayegh, Ghassan P. PGY-I, Vernatter, Joshua N. MD

INTRODUCTION: Brucellosis is a zoonotic infection that was first identified in 1887. Several species have been identified. *Brucella ovis* (*B. ovis*) is known to infect sheep, with prevalence in endemic areas estimated to be as high as 43.7%. *B. ovis* has been associated with sheep epididymitis and orchitis. Brucellosis may be identified in humans through direct culture of blood, cerebral spinal fluid (CSF), bone marrow and wounds, or through serologic assays. To date, no human infection with *B. ovis* has been identified. Here, we present the first case of *B. ovis* infection documented in a human.

CASE REPORT: Our patient is a 42 year old male with past medical history of recurrent sinus infections, who presented to our hospital with 1 day of dizziness with palpitations. He was found to have second-degree heart block, and was presumptively diagnosed with Lyme carditis based on ELISA and Western blot showing several reactive bands. He completed 21 day treatment with ceftriaxone followed by doxycycline. 2 months later, the patient developed worsening fatigue, malaise and diplopia. He underwent a lumbar puncture with CSF analysis demonstrating 56 mg/dL glucose, 24 mg/dL protein 5 red blood cells/mL, and 4 white blood cells/mL. Culture grew *Brucella* species, and was sent to the NYS lab for confirmation, where real-time PCR assays suggested *B. ovis*. The isolate was sent to the Centers for Disease Control (CDC), where conventional PCR was performed, and *B. ovis* was detected. He was subsequently started on combination antimicrobial therapy with ceftriaxone, doxycycline, and rifampin.

DISCUSSION: The reason that *B. ovis* has not previously been associated with disease in humans remains unclear. Genomic analysis has identified an increase in unstable elements including pseudogenes and transposable elements when compared to the known zoonotic *Brucella* species. In addition, several important segments required for essential functions are absent, including lipopolysaccharide biosynthesis, urease function and uptake of nutrients. *Brucella* may be transmitted through environmental, occupational and foodborne exposure, and human-to-human transmission is rare. The role of blood-sucking insects as vectors has been hypothesized. It remains unknown how the patient we present was exposed to *B. ovis*. In addition, as genomic sequencing is a relatively new technique, it may also be possible that *B. ovis* has previously infected humans but was mistaken for another *Brucella* species. Additional study using genomic sequencing techniques may be needed to identify more human cases, characterize their features, and evaluate the response of *B. ovis* to antibiotic treatment.

Title: Atypical Presentation of Gastric Adenocarcinoma

Authors: Yasmin Leigh, DO; Cristian Castro-Nunez, DO

Introduction:

Gastric Adenocarcinoma accounts for >90% of gastric cancer in the United States with commonly associated risk factors that include H. Pylori infection, Pernicious anemia, cigarette smoking, etc. Gastric adenocarcinoma is often subdivided into two types with the intestinal type having a better prognosis in comparison to the Diffuse type. The diffuse type, which has a worse prognosis, is the most common subtype in the US and is often seen in younger patients. The most common clinical symptom is weight loss with associated abdominal pain, dysphagia, decreased appetite, nausea, and vomiting. Most patients often have advance disease at the time of presentation and chemotherapy and/or chemoradiation are preferable treatment options in addition to surgical resection in applicable patients.

Materials and Methods:

Epic electronic medical record to conduct a retrospective and prospective analysis of medical record which will be used to discuss the case of atypical gastric adenocarcinoma presentation.

Case:

A 38 year old female presented to her primary care physician with complaints of intermittent fever and chills, cervical, lumbar, & thoracic pain, and galactorrhea for 3 weeks in duration. The patient has previously presented to the hospital for similar musculoskeletal complaints, but the galactorrhea was new in onset. Recent mammogram and pelvic ultrasound prior to admission were reported as normal, but prior CT of the abdomen/pelvis revealed a 3cm adenaxal mass which progressed to 5.2cm approximately 1 year later. Upon hospital presentation, physical examination was positive for tenderness to superficial and deep palpation of the sternum, cervical & lumbar spine, and milky discharge of the breast bilaterally. CT of the brain did not reveal any evidence of intracranial mass, hemorrhage, or infarct but CTA of the chest showed evidence of a lytic, mildly expansile lesion at the manubrial-sternal junction. Multiple lytic lesions were also identified within the spine and the overall appearance was suspicious for bone metastases. Further confirmation was made with NM whole body bone scan showing diffuse metastatic bone disease in the thoracic and lumbosacral spine, as well in multiple ribs, both humeral heads, the sternum, the pelvis, both proximal femora, and the proximal right humeral shaft with the largest lesion located in the right ilium. Pathology of the sternal and right iliac lesions showed evidence of gastric metastatic adenocarcinoma and the clinical diagnosis was subsequently made. The patient was seen and examined by Oncology, Radiation Oncology, and Gastroenterology who agreed to start the patient on a course of radiation as well as palliative chemotherapy regimen with Paclitaxel and Ramucirumab, but patient was given a poor prognosis due to advancement of disease.

Conclusion:

This case illustrates how gastric adenocarcinoma can manifest atypically and depicts the advancement of the disease process at the time of presentation.

Title: Putting Occam to the Test

Authors: Minh-Duc Huynh, DO, PGY-1, Kamalveer Grewal, OMS-III, and Balveen Singh, DO

During evaluation of psychiatric patients, physicians often try to encompass the entirety of symptoms into a single diagnosis. This approach led the treatment team astray; until an additional diagnosis was made for this patient. Following appropriate medication readjustment, we were delighted to see significant improvement in his mental health. Collateral information from the patient's mother justified the treatment revision, as she stated his condition had improved beyond baseline. In this case study, we wish to present a patient with history of schizophrenia, in which the diagnosis of obsessive compulsive disorder was misconstrued within the patient's psychotic symptoms.

26 yo AA male presented with complaints of hearing and seeing snakes, feeling rats scratching under his scalp, and agitation with sleep disturbance. He is treated outpatient with monthly Risperidone injection. For several days since admission, the patient did not interact with peers and did not participate in any group activities. Rather, he preferred to remain isolated in his room.

Patient later stated that he does not leave his room because people get spit on his face. He also reported he has not showered because the shower is not clean. He was on Haloperidol and Risperidone injection for psychosis, Topiramate for agitation, and Trazodone for sleep. While auditory and visual hallucinations improved, his isolative behavior and preoccupation with cleanliness remained unaltered. Subsequently, medication readjustments were made, including Citalopram and discontinuing Topiramate.

On day 8, we setup a meeting with the patient's mother to learn about his baseline level of functioning. Collectively, we agreed that he showed significant improvement in thought process and psychotic symptoms. We further discussed his paranoia with germs and hypervigilance with peers. Mother reported that at baseline, patient bleaches his bathroom regularly and is very isolative as he spends most of his time playing video games in his room alone. His behavior truly seems to be obsessions and compulsions - as opposed to previously assumed to be part of his psychosis.

Clomipramine was started with plans to titrate up to treat OCD while tapering off Citalopram and Haloperidol dose was increased. Over the next 2 days, he showed substantial improvement in OCD symptoms. His paranoia about germs was reduced as he felt comfortable showering, something he was not able to do thus far. Additionally, he was seen walking in the hallway several times. He seemed proud that he accomplished the goal of walking to the social worker's office to say hello.

The continuity of care in the inpatient setting allowed the treatment team to closely monitor his symptom. In this case study, we formed a new diagnosis, which may have gone undiagnosed in the outpatient setting. The prevalence of schizophrenia approaches 1% internationally. Lifetime prevalence of OCD in USA is 2.3%. Independently, the prevalence of either diagnosis is exceedingly low; however, OCD is more common in individuals with schizophrenia. Approximately 12% of schizophrenics have comorbid OCD. We initially attributed the OCD-like behavior as part of his psychosis. With further investigation, an independent diagnosis of

Title: Delusional Parasitosis: Successful Treatment With Fluphenazine

Authors: Kevin Moore, PGY-1 and Cesar Rojas, MD, Psychiatry, ORMC

BACKGROUND: A 36 year-old Hispanic male with a history of schizoaffective disorder, bipolar disorder, cannabis use disorder and multiple previous psychiatric hospitalizations presented complaining of “tapeworms in my brain and body.” In the ER, he made several unsuccessful attempts to demonstrate bugs and worms on his skin, in his saliva and in his feces. Physical exam revealed multiple areas of excoriation but no evidence of worms or insects. In the behavioral health unit, he was severely distressed and uncooperative with interview, stating, “This isn’t a mental problem, it’s a medical problem. I need a vaccination!” He admitted regular use of marijuana and K2, and that he had recently been smoking K2 more frequently. Patient’s home medications included Fluphenazine 5mg PO QD and Lamictal 25mg PO QD.

INVESTIGATIONS: Vital signs showed tachycardia, but no fever. Lab results showed leukocytosis, but no eosinophilia. Urine toxicology was positive for cannabinoids.

DIAGNOSIS: Delusional parasitosis involves a fixed, false belief that one is infested with parasites. It is usually associated with formication, which often leads to excoriation and ulceration. Other causes of formication include diabetic neuropathy, herpes zoster, amphetamine use, and withdrawal from alcohol, cocaine or benzodiazepines. Treatment of delusional parasitosis presents a challenge to the physician-patient relationship, as most of these patients are unwilling to accept the possibility of a psychiatric etiology of their symptoms.

TREATMENT: Current treatment of choice for delusional parasitosis are antipsychotics. No single antipsychotic has demonstrated a clear advantage in terms of effectiveness, so the agent should be chosen in an individualized manner. As the patient was already taking fluphenazine at home, he was willing to continue this medication. His dose was titrated from 2.5mg BID to 5mg BID and 10 mg QHS. He was also started on fluphenazine decanoate 25mg IM Q21 days. Psychotherapy was also provided.

OUTCOME AND FOLLOW-UP: The patient became gradually less distressed, more sociable with peers, and on hospital day 4 stated. “I’m OK, I think they’re dead.” On day 6 pt stated “everything is getting better” and made no further mention of bugs or worms. He was counseled regarding risks of K2 use and urged to enter substance abuse treatment, which he declined. Four months after discharge, the patient reports his symptoms completely resolved and have not recurred. He has been compliant with medications and is no longer using K2. However, he still attributes the episode to real parasites: “I really had them!”

DISCUSSION: Delusional Parasitosis is associated with schizophrenia, bipolar disorder, depression, anxiety, obsessional traits as well as substance abuse. Two ironies of the condition and it’s treatment: 1) Some parasitic diseases may in fact cause delusions, and 2) phenothiazine antipsychotics are derived from an organic compound used in the past as an antiparasitic. Fluphenazine belongs the phenothiazines class of antipsychotics, which are derived from the organic compound phenothiazine, which was used in the mid 20th century as an

Title: Contingent Suicidality in a Patient with Cluster B Traits

Author: Ryan Omura, D.O.

Summary: The patient is a 39 year old white female with history of borderline and antisocial personality disorder who presented to the ED after cutting both wrists longitudinally. The patient was scheduled to appear in court for a drug-related probation violation the day of her suicide attempt. The patient was medically and psychiatrically stabilized at Orange Regional Medical Center but remained suicidal contingent on discharge to jail.

Background: Malingering is the conscious fabrication of symptoms in order to obtain secondary gains. Malingering is not considered a mental illness in the DSM-V, but it often coexists with Cluster B Personality Disorders. It is often difficult to determine if malingering is a comorbidity or the core issue that needs to be addressed.

Case Report: The patient is a 39 year old white female with past psychiatric history of multiple suicide attempts, opiate use disorder, antisocial and borderline personality disorder, and major depressive disorder who presented to the ED by EMS after the patient was discovered at home by a friend with deep, vertical lacerations to both wrists. The patient required a massive blood transfusion protocol and was intubated in the ED. After 6 day in the ICU, the patient was transferred to the behavioral health unit at ORMC. The patient displayed stable behavior on the BHU and was no longer reporting suicidal ideation. The patient was social with peers, active in group activities, and not showing signs of psychosis. The patient was scheduled to appear in court for a probation violation on the day of her suicide attempt. The patient's attorney informed her she might have to go to jail, which she stated would never happen because "I would kill myself before that". The treatment team suspected the patient was malingering but still considered her high risk due to her history of impulsive and self-destructive behavior. The treatment team contacted the patient's probation officer to discuss discharge to a drug rehab facility (probation violation was drug related). The probation officer reported a past history of malingering by the patient and rejected the suggestion of drug rehab. The patient reported suicidal ideation contingent on whether or not she was going to jail. The treatment team called Orange County Jail to arrange suicide watch for the patient. The patient was calm and cooperative when she was discharged into the sheriff department's custody.

Discussion: The clinical scenario above was difficult to manage due to the patient's multiple comorbidities and history of serious suicide attempts. Borderline personality disorder patients are often in a state of chronic suicidality with widely fluctuating moods and impulsive behavior that makes it difficult to predict future behavior. There is also a correlation between antisocial personality disorder and BPD, and in this patient's case there was as strong suspicion of malingering. The treatment team decided that the patient's contingent suicidal ideation based on an external reward (avoiding jail) was a protective factor and further hospitalization wasn't going to improve her clinical presentation.

Title: Primary Malignant Melanoma of the Lumbar Spine

Authors: Cristin Mathew DO, Farhan Karim DO, Muzaffar Ali BS, Gus Katsigiorgis DO, Vadim Lerman DO, Karen Avanesov DO

Abstract

Low back pain (LBP) or Lumbago is a leading cause of disability in the United States. There are several etiologies including but not limited to muscle strains, disc herniation, vertebral instability and fractures. Most serious however are metastatic neoplastic processes, which invade the spine, spinal cord, and nerve roots potentially causing significant neurologic and functional compromise. Primary tumors of the spine are extremely rare, even more rare are primary melanomas of the spine.¹ We present a rare case of a 55-year-old male that was admitted with unrelenting back pain and inability to ambulate. Imaging demonstrated a pathologic L3 vertebral body compression fracture, and biopsy confirmed a unique case of malignant melanoma. Clinical examinations from dermatology, gastroenterology, ophthalmology, and oncology confirmed that there were no other areas of the malignancy resulting in the spinal lesion being the primary source and only location of the tumor.¹ Corpectomy and decompression of the mass demonstrated no extension or involvement of the dura. This presentation is the first reported case of primary malignant melanoma of the vertebral body without extension from the dura. With a multidisciplinary approach the patient improved postoperatively and the malignancy remained localized and continued to manifest as other rare axially located melanomas from dura. Although the

Title: Osteopathic manipulation of the lymphatic system as an adjunctive therapy for refractory lymphangitis: a case report

Author: Lauren A. Davis, DO, Craig Allen Wells, D.O.

Manipulation of the lymphatic system is a vital component of the circulatory model of osteopathic medicine. While adjunctive treatment of lymphangitis with physical therapy, particularly manual lymphatic drainage (MLD), is a well-described intervention in the physical therapy literature, osteopathic manipulative treatment (OMT) as an adjunctive therapy is not as prevalent in the medical literature. The current mainstay of therapy for lymphedema consists of compression, elevation, exercise and the addition of loop diuretics in refractory cases. In this case report, we describe a case of severe lower extremity lymphedema with concurrent cellulitis and lymphangitis in a hospitalized patient in a community hospital where traditional interventions failed to produce diuresis and improve calf circumference in our patient. Addition of osteopathic principles and lymphatic pump techniques to traditional interventions improved diuresis and calf circumference with daily adjunctive OMT with no notable complications. While not described sufficiently to date, OMT in addition to traditional treatments may serve as an appropriate adjunctive therapy for patients with lymphangitis in the setting of cellulitis and should be considered in this patient population.

Title: Osteopathic Manipulative Treatment for a Patient with Recurrent Cellulitis**Case Description****Authors:** Ronald Ho, D.O.; Lawrence Barnard, D.O.

A 49 year old woman active tennis player with past medical history of asthma and International Federation of Gynecology and Obstetrics cervical cancer (FIGO CC) stage III status post hysterectomy, lymphadenectomy, and radiation 17-18 years ago was referred to us by her primary care physician for lymphedema and chronic lymphangitis of the left lower extremity. Her cancer treatment had resulted in intermittent recurrent left lower extremity cellulitis in the same spot. Prior to seeing us she had not had cellulitis for 10 years, but unexpectedly presented with cellulitis four times within two months, the last episode requiring an emergency room visit and IV antibiotics.

On physical exam, her left lower extremity circumference was measured at 60 cm and the right at 55 cm. Measurements were taken 20 cm distal to the lateral greater trochanter. The circumference discrepancy was presumed to be secondary to scar formation in the pelvis as well as lymphatic stagnation that resulted from her cervical cancer treatment. Osteopathic Manipulative Medicine (OMT) was administered seven times over three months, and directed towards reported key lesions. Serial lower extremity measurements and signs/symptoms of recurrent cellulitis were used as treatment outcomes. Her results are summarized in **Table 1**. Lower extremity circumference significantly reduced after treatment with no signs of recurrent cellulitis during her therapy. To date, treatments for acquired lymphedema status post lymphadenectomy include surgery. Osteopathic Manipulative Medicine may offer an alternative non-surgical approach.

Title: Plagiocephaly and Opisthotonic Posturing in an Infant with Developmental Delay

Authors: Meaghan C. Nelsen, M.S., D.O., FACOOG, Chris A. Medina, D.O., Larry Barnard, D.O.

Roughly one quarter of infants sleeping supine will develop some degree of plagiocephaly, or the unilateral flattening of the skull resulting in a diagonal asymmetry across the head. More infrequent causes of plagiocephaly include intrauterine malpositioning, prematurity, or muscular torticollis. Unrestricted mobility of the cranial bones and membranes is essential to the normal development of the Primary Respiratory Mechanism. An infant with plagiocephaly following a traumatic birth may suffer from developmental delay or behavioral disorders secondary to intracranial membranous strains as well as central nervous system irritation or compression. While research shows that developmental delays are more common amongst plagiocephalic infants, a causative relationship is not shown. The standard treatment involves cranial remolding orthosis (helmets) between 3 and 18 months of age in cases where conservative repositioning measures have failed. This treatment modality is still controversial. Opisthotonic posturing is characterized by generalized extension of the trunk and lower limbs with hypertonicity. Opisthotonus is more pronounced in infants and results from irritation of the corticospinal pyramidal tracts leading to spasm of the axial muscles along the spinal column.

A 6 month old female infant presented for NMM (neuromusculoskeletal medicine) evaluation due to plagiocephaly and opisthotonus since birth. The infant was previously examined and cleared by her general pediatrician despite a delayed milestones. Birth history was obtained. An uncomplicated pregnancy requiring induction of labor at 41 weeks gestation was reported. Cervidil cervical ripening was followed by Pitocin augmentation. A prolonged active phase and second stage of labor ultimately resulted in cesarean delivery. Intrapartum maternal pyrexia was treated with empiric antibiotics for presumed chorioamnionitis. Neonatal workup was negative for sepsis. Abnormal posture, tone, and head shape (cone-head lateral to the midline) were noted by the parents since birth. Our initial osteopathic structural examination noted diminished rate and amplitude of the Primary Respiratory Mechanism, a left lateral strain, bossing of the right inferior parietal bone, bilateral condylar compression, a Core-Link strain, an interosseous strain of the Atlas, a lordotic curve in the thoracic spine, a pelvic torsion, bilateral retracted scapulae (right more severe than left), bilateral upper extremities extended at the elbow, and bilateral upper rib restrictions. Gentle weekly treatments have improved the rate and amplitude of the Primary Respiratory Mechanism, reduced hypertonia and the core-link strain, normalized spinal curvature, and allowed the patient to meet previously-delayed milestones of infancy and continue to thrive.

We postulate that prolonged asynclitic presentation during the active phase of the first stage of labor lead to a prolonged and unsuccessful second stage of labor requiring surgical intervention. We further theorize that continued force of contractions during labor while in an asynclitic position resulted in the aforementioned unique combination of somatic dysfunctions and developmental delay. This case illustrates the importance of NMM evaluation of the newborn as well as the potential sequelae in the absence of such. Moreover, we maintain that treatment visits for manipulation in lieu of the standard helmet therapy with or without adjunctive physical therapy produced an optimal result in a more timely and cost-effective manner.

Title: It's Not Just Back Pain, An Interesting Case of Chronic Inflammatory Demyelinating Polyneuropathy

Authors: Luther D. Quarles IV DO MS, Jared Segal OMS-IV, Lina M. Rios DO, Xiaoyu Li DO

Abstract:

This case of a 26-year-old African American female presented to Southampton Hospital emergency department, with a chief complaint of back pain. Chief complaint was accompanied by a myriad of symptoms that included bilateral upper and lower extremities weakness, numbness, as well as neuropathy of lower extremities bilaterally, that's been worsening over the last 2 weeks. The patient was an active duty military personnel, involved in a car accident in 2011, found to have T11 Burst fracture, treated with posterior segmental decompression and fusion T10-12 vertebral segments. In 2014, the patient subsequently had surgical hardware removed. Post surgery patient noticed gradual increase in back pain, progressive weakness of lower extremities with burning like neuropathic pain in the calves and plantar aspect of her feet, difficulty ambulation since 2014. While hospitalized at Southampton Hospital, the patient was diagnosed with Chronic Inflammatory Demyelinating Polyneuropathy, which was determined to be the cause of her symptoms. The patient underwent IV steroid infusions, osteopathic manipulative medicine and physical therapy that alleviated her symptoms.

Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) presenting as back pain is an atypical clinical manifestation from the classic presentation of the disease. CIDP has been compared to Acute Inflammatory Demyelinating Polyneuropathy (AIDP), a natural example of which is Guillain-Barre Syndrome (GBS). However, AIDP and CIDP have differing temporal elements to them that can help a clinician distinguish between the two entities. While AIDP is a monophasic disorder that reaches its peak within three to four weeks and tends to have an easily identifiable onset, CIDP is typically progressive and may have relapses for greater than eight weeks' duration. Features that are more favorable of CIDP are: sensory deficits such as sensory ataxia and impaired vibration and pinprick sensation, and progression past eight weeks' duration. Also, sensory deficits in a stocking glove distribution may occur as well as diminished or absent deep tendon reflexes. The classic form of CIDP is symmetric motor weakness of both proximal and distal muscles, a pattern, which is a hallmark of, acquired demyelinating polyneuropathies. Chronic Inflammatory Demyelinating Polyneuropathy is a rare disorder. The estimated prevalence in populations from the UK, Australia, Italy, Japan, and the US is 0.8 to 8.9 per 100,000. The aim of this article is to: review the case in question, examine the diagnosis and treatment options, review existing literature and further educate the medical community on the rare disease of Chronic Inflammatory Demyelinating Polyneuropathy.

Title: Case Study on Cutaneous Porphyr ia

Authors: James C. Sullivan D.O., Jared Dropkin D.O. , Southampton Hospital RPSOM

35 year old female that presents with rash present for greater than 1 year. Located on forearms, chest. No palliative factors. Worse in summer. Not improved by steroids or moisturizers. Occasionally blisters. Worse in the summer months:

Porphyria is a disease with an extremely broad range of symptoms that stems from a structural defect in the porphyrin ring that causes faulty metallo- proteins to deposit themselves throughout the body. Although cutaneous porphyrias are more common among the types of manifestations, the incidence is still approximately 1 in 100,000; making it somewhat rare to encounter and diagnose in a clinical setting. The less severe manifestations that usually evade detection until later in life result from having only 1 faulty allele. Of course that statement in and of itself is a simplification there are often multiple genes involved in protein manufacture; multiple places for defects to occur. But I digress, as with all genetic defects that affect protein structure, they are dominant in their expression.

With the cutaneous porphyrias the dermal manifestations (photodermatitis) are caused by oxidation of the deposited porphyrin rings in the dermis. Although the dermal manifestations are often what draw the most attention, but they are far from the most concerning. In a primary care setting the management of these disorders involves close co-management with hematology, avoiding medications that tax liver function, and nutrient supplementation to optimize the patient's condition and monitor for signs of system dysfunction due to deposition of Porphyrins.

This case study discusses the presentation and diagnosis of one such case, and discusses the different types of cutaneous porphyria. We discuss pathophysiology and testing to identify the different types as well as management considerations, with regard to monitoring and extending the state of wellness in patients with such affliction.

Title: Upper respiratory infection

Author: Devan Trammel DO

Introduction:

Upper respiratory tract infections represent the most common acute illness evaluated in the outpatient setting. Upper respiratory tract infection (URI) is a nonspecific term used to describe acute infections involving the nose, paranasal sinuses, pharynx, larynx, trachea, and bronchi. Adults develop an average of 2 to 4 colds annually. URIs range from the common cold to life-threatening illnesses such as epiglottitis. URIs are the most common infectious illness in the general population and are the leading cause of missed days at work or school. They represent the most frequent acute diagnosis in the office setting. The constellation of diagnoses that fall under the category of URI accumulate to a total of 39 million office visits annually and the estimated economic impact of non-influenza-related URIs is \$40 billion annually.

Case description:

57 year old female presents to her primary care office with 4 days of nasal congestion, sore throat, cough, subjective fever and malaise. She has taken mucinex and robitussin without any change in her symptoms. She has stayed home from work the past few days and been unable to get out of bed. She denies headache, chills, shortness of breath, chest pain, abdominal pain, nausea, vomiting or diarrhea. Upon presentation she was afebrile, with trace pharyngeal erythema and edematous nasal mucosa. The remainder of her exam was normal and a rapid strep test was negative.

Discussion:

In most cases they are a benign self-limited syndrome representing a group of diseases caused by members of several families of viruses or bacteria. Generally these pathogens can cause Nasopharyngitis, group A strep pharyngitis to Epiglottitis and Laryngotracheitis and laryngotracheobronchitis; all generalized as Upper respiratory tract infections. The average duration of illness for adults is 6.6 days and the mainstay of treatment is supportive care.

Title: Triple Negative Invasive Lobular Carcinoma of the Breast Presents as Small Bowel Obstruction: A case report and literature review

Authors: Mariya Khokhlova, D.O, Heidi Roppelt, M.D., Sang Pak, M.D., Jingxuan Liu, M.D., Kester Haye, M.D., Bradley Gluck, M.D., Edna Kapenhas, M.D.

ABSTRACT:

Metastasis from breast carcinoma to the gastrointestinal tract (GIT) is very uncommon. To date, only a few cases have been described worldwide. Of those which do metastasize to the GIT, only estrogen receptor (ER), progesterone receptor (PR) and HER2-neu receptor positive cancers have been reported and none have been mentioned in the U.S. We report a case of a 70-year-old white female with a history of triple negative lobular carcinoma eight years earlier, who presented with a solitary jejunal mass causing obstruction.

Title: Osteopathic Manipulative Treatment in Management of Acute Orbital Compartment Syndrome

Authors: Alice I. Chen, DO, OGME-2 and Hugh Ettlinger, DO, FAAO

Introduction: Acute orbital compartment syndrome (AOCS) is an ophthalmologic emergency and a complication of orbital trauma. Progressive visual impairment is caused by increased intra-orbital pressure impairing perfusion of relevant neurovascular and neurosensory structures. Untreated, irreversible vision loss can occur in as little as 90 minutes. Currently, surgical decompression within two hours of trauma is generally recommended. While surgical decompression protects the globe, it has little impact on reducing the retro-orbital bleeding and swelling that causes the compartment syndrome. Orbital drainage and osteopathic manipulative treatment (OMT) are not currently considered in the management of any type of orbital trauma. This case report discusses how OMT promotes orbital drainage in a patient with AOCS.

Case Description: A 50-year-old male presented after blunt trauma to bilateral orbits with a left AOCS and left eye vision loss. Surgical decompression was performed 6 hours after presentation, after which the Osteopathic Manipulative Medicine team was consulted. Osteopathic structural examination (OSE) revealed severe somatic dysfunctions (SD) along the venous drainage pathway of the left orbit. Notable findings included a left lateral strain of the sphenobasilar symphysis, an internally rotated left temporal bone, and an extended occiput. OMT provided were based on the principles of balanced membranous tension, balanced ligamentous tension and myofascial release. Goals of treatment were to reduce traumatic strains and somatic dysfunction severity, promote drainage of the eye and head, and palliate pain.

Results: Improvement in SDs correlated with bilateral return of extra-ocular and eyelid motion, return of pupil reactivity, return of visual acuity, and improvement in associated peri-orbital soft tissue edema. The patient was discharged on hospital day three with intact vision bilaterally.

Discussion: Functional orbital drainage plays a critical role in the healing process of orbit pathology. SDs result in mechanical obstructions of drainage pathways, interfering with healing and predisposing to complications. Early intervention with OMT may expedite recovery and reduce risk of complications in patients presenting with AOCS. Conclusions of causation are limited due to sample size and documented variability in the natural progression of AOCS. However, the impressive response and recovery in this patient warrants further study to corroborate OSE findings in patients with AOCS and to determine correlation between OMT and patient outcomes.

Title: Osteopathic Considerations in the Ventilated Patient: A Case Study

Authors: R. Katrajian, DO^a, H. Ettlinger, DO^b

Long-term ventilator dependence occurs when intubated patients fail trials of weaning and cannot be extubated. This is in part due to an imbalance between the functional capacity of the diaphragm, which weakens and atrophies due to disuse, and an increased workload on the respiratory system from increased airway and chest wall resistance.

A 58 year old male presented with dyspnea and was subsequently intubated for acute hypoxic respiratory failure secondary to congestive heart failure. Over the course of several weeks, he failed many attempts to wean and could not be extubated. An Osteopathic Manipulative Medicine (OMM) consult was placed to facilitate management. Findings included severe somatic dysfunction of the diaphragm, ribcage, thoracic and lumbar spines, reducing the compliance and excursion of the thorax and impairing the function of the diaphragm. The patient began to tolerate weaning trials almost immediately, and was successfully extubated following discharge.

OMM may assist weaning in several important ways. Treatment of the spine and rib cage will improve the compliance of the thorax, reducing the load on a compromised diaphragm and the work of breathing. Treatment of the diaphragm and its attachments will improve its function directly. In this case there was a linear relationship between the Osteopathic treatment, the improvement in the Somatic dysfunction, and the patient's respiratory function and tolerance to weaning trials. More evidence is needed to evaluate the efficacy of OMT in the extubation of ventilated patients.

Title: The use of OMT in the prevention of post-operative adhesions formation

Authors: Anna Lobzova, DO, PGY3, NMM/OMM
Hugh Ettlinger, DO, FAAO, Program Director and Physician Mentor

Background

Adhesion formation is a common sequelae of an abdominal surgery resulting in many complications including small bowel obstruction (SBO) and chronic abdominal/pelvic pain. The amount and duration of inflammation after peritoneal injury, oxidative stress, inflammatory exudate clearance, and impaired fibrinolysis all play a role in adhesion formation. While the surgical approach and medications can influence the degree of injury and amount of inflammation, peritoneal exudate clearance is largely dependent on mechanical factors, which can be facilitated with appropriate OMT.

Case Description

57-year-old female readmitted with SBO 3 days after total abdominal hysterectomy. She underwent exploratory laparotomy with lysis of adhesions, and abdominal washout. She was treated with OMT postoperatively six times with focus on restrictions in the key areas of peritoneal drainage, including the diaphragm, lower rib cage and thoracic inlet. Improvement in somatic dysfunctions correlated to the postoperative recovery, improvement of pain, and return of normal bowel function.

Discussion

Osteopathic Manipulative Medicine can offer a valuable approach to the prevention of post surgical adhesions by aiding in timely and adequate peritoneal cellular exudate clearance. Restoration of motion at the thorax, diaphragm, and thoracic inlet facilitates central, diaphragmatic and visceral paths of peritoneal exudate clearance, enhances blood circulation and reduces tissue ischemia. Finally, local mechanical forces through mechanotransduction also influence process of fibrosis. Reduction of tissue tension at the surgical site may also contribute to the prevention of excessive fibrosis. Further study is needed to assess the benefits of OMT in the prevention of postoperative adhesions.

Title: Condylar Compression: A Case of the Infant Who Would Not, Could Not Suck

Authors: Bethany Prater, DO, OGME-III; Hugh Ettlinger, DO, FAAO; Lawrence Barnard, DO

Introduction:

Infant feeding difficulties are a common complaint from parents. Feeding is a complex process which requires muscular/neurologic coordination for sucking and swallowing along with the integration of breathing and esophageal function. Somatic dysfunction, produced by the forces of labor/delivery, may adversely affect feeding in the neonatal period. This case describes a newborn with severe somatic dysfunction at birth and feeding difficulties, which improved after Osteopathic Manipulative Treatment.

Case Description:

One day old Female born full-term via vaginal delivery, seen at St. Barnabas Hospital Nursery, with parental complaints of difficulty feeding and misshapen head. Osteopathic examination of the cranium revealed compression of the sphenobasilar synchondrosis, lateral strain, bilateral condylar compression, and a membranous strain. The patient showed significant improvement in coordination of suck after the initial osteopathic treatment.

Discussion:

Sucking and swallowing is an involved series of motor/sensory actions involving the lips, tongue, mandible, palates, pharynx, larynx and esophagus requiring the involvement of at least 26 muscle pairs, 5 cranial nerves, and cervical/thoracic spinal nerves. Each of these structures can be affected by somatic dysfunction from forces of labor/delivery. The severe cranial somatic dysfunction in the cranial base in this case likely produced entrapment neuropathy of CN 12 affecting the strength and coordination of suck, as well as CN 10 and 11 affecting swallow. Only Osteopathic physicians are trained to recognize and treat these dysfunctions, preventing immediate and long term impediments to growth and development.

Title: Pushed, Pulled, and Invalidated: A Case Of Infant Somatic Dysfunction

Authors: Jeremy Shugar, M.S., D.O., OGME III, NMM/OMM
Hugh Ettliger, D.O. FAAO, Program Director
Lawrence Barnard, D.O., Attending

Introduction:

Birth trauma, as regularly diagnosed and treated by osteopathic physicians, is not routinely appreciated by traditional obstetric or pediatric care. We will examine a case of infant somatic dysfunction with clinical consequences following a traumatic labor where maternal concern went unchecked by her pediatrician.

Case Description:

A 6 month old male, baby B of a fraternal twin birth, was evaluated for abnormal left arm carriage and dexterity, and difficulty crawling. Birth history included protracted and augmented labor, traumatic intrapartum repositioning with face presentation, and at postpartum follow up, pediatric dismissal of maternal concern. Osteopathic structural exam was notable for an abducted and internally rotated left humerus, and pronated left radio-ulnar joint with reduced range motion. Significant somatic dysfunction was also found in the cranium, cervical, and thoracic spines. Osteopathic manipulative treatment included balanced ligamentous and membranous tension, and facilitated positional and myofascial release. Successive improvement followed each of three treatments, with improved dexterity and crawling, and reduction of somatic dysfunction severity. Maternal concern was also validated and addressed. History, findings, and treatment course likely represent reflex muscle spasm with functional thoracic outlet syndrome secondary to labor forces and suggest somatic dysfunction as causative.

Discussion:

This case highlights the importance of the osteopathic approach which appreciates gestational and intrapartum mechanisms of trauma and their role in newborn function and development. Osteopathic manipulative treatment is important in the diagnosis and management of otherwise unrecognized, clinically relevant birth related traumas.

Title: Discerning What Lies Hidden Below: A Call for Greater Emphasis on the Osteopathic Structural Exam

Author: Nichole Thorsvik, DO

Introduction: This case report describes the medical management of a patient with a history of rheumatoid arthritis, interstitial lung disease and peptic ulcer disease (PUD) who presented to the emergency department (ED) multiple times with the complaint of worsening mid back pain. She was repeatedly discharged home with non-steroidal anti-inflammatory drugs (NSAID). Ultimately, she returned to the ED with a perforated gastric ulcer requiring emergent surgical intervention. On post-operative Osteopathic Manipulative Medicine consult, she was found to have findings consistent with a viscerosomatic reflex in the location of her back pain.

Methods: A thorough osteopathic structural exam (OSE) was performed with emphasis on detecting underlying viscerosomatic reflexes.

Results: The OSE revealed both acute and chronic reflex somatic dysfunction of the thoracic vertebral segments 5-9 (T5-9) on the left. The patient confirmed this was the location of her initial back pain. T5-9 corresponds to the innervation of the stomach, suggesting that exacerbation of her PUD was the underlying cause of her initial back pain.

Discussion: The patient's complaint of back pain was considered musculoskeletal in nature during repeated medical visits despite a lack of documented musculoskeletal and/or OSE findings. We hypothesize that

Title: Neonatal abstinence syndrome and the utility of osteopathic manipulative medicine.

Authors: Victoria Tuttle, DO OMGE2; H. Ettlenger, DO, FAAO^b

Intrauterine drug exposure is a rapidly growing problem in the United States. Between 2001 and 2009 there was a threefold increase in the number of babies born to women who used drugs during pregnancy. Neonatal abstinence syndrome (NAS) is a withdrawal syndrome experienced by these babies. NAS consists of a constellation of symptoms including irritability, diarrhea, hypertonia, yawning, sneezing and tachypnea. Approximately 90% of neonates exposed to opiates in utero experience symptoms. NAS is treated symptomatically at St. Barnabas Hospital by tapering morphine based on a clinical scoring system, with an average time between dose adjustments of forty-eight hours. We identified three neonates born at St. Barnabas Hospital who were exposed to opiates in utero and exhibited NAS symptoms. The osteopathic structural exam showed consistent findings in all of the babies including severe fascial strain in the thoracic and lumbar areas, rib and diaphragm exhalation dysfunctions as well as significant cranial findings. We theorize these dysfunctions adversely affected autonomic balance and function, respiratory/circulatory function, and central nervous system irritability, contributing to NAS symptoms. All three neonates received OMT prior to neonatal intensive care unit admission and were followed through their hospital course. When OMT was performed, the NAS score and any morphine dosing changes were tracked for temporal correlation. The dose of morphine was adjusted within twenty-four hours after OMT in ten of the thirteen treatments given during the NAS treatment period. These cases suggest a role for OMT in neonates with NAS, and that further study is warranted.

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Title: Missed Office Encounters and Increased Telephone Encounters Relationship to Control of Diabetes

Authors: Allison Mitchell, DO, Irshad Merkand, DO, John Schwartzberg, DO

Abstract:

Diabetes management at Brookhaven Family Medicine is challenging as we do not dismiss patients for non-compliance and we have many non-compliant patients. It is our goal to provide patients with compassionate and convenient care however we must consider that an overextension of compassion and convenient care could be enabling patients and reinforcing non-compliant behaviors.

The objective of the research was to study the practice population for modifiable patients behaviors and descriptors that have a relationship to poorly controlled diabetes management so that interventions and support to improve management can occur with hast and efficiency.

The Hypothesis was twofold:

A: Patients who have first recorded A1C $> 8\%$ will have an increased average BMI, increased annual mean number of telephone encounters, increased annual mean number of missed encounters and a decreased annual mean number of office visits when compared to patients whose first recorded A1C was $< 8\%$.

B: Patients whose A1C consistently stayed above 9, and never came below 9, will have an increased mean number of days between recorded A1C values, increased average BMI, increased annual mean number of telephone encounters, increased annual mean number of missed encounters and a decreased annual mean number of office visits when compared to patients whose recorded A1C stayed below 7.

By the end of the study, it was evident that the patients in this population had no significant correlation between patient A1C improvement and number of telephone encounters or missed office encounters. However, there was a slight improvement in A1C on average in patients who followed up within 6 months or less when compared to those who took longer than 6 months to follow up.

Title: “Study of Home-Based Interventions to Reduce CA-MRSA Recurrence and Household Transmission”

Authors: Nguyen R, D’Orazio B, Hassen G, Hammock R, Gladstein S, Frisby A, Khalida C, Kost R, Ramachandran J, Pastagia M, Evering T, Pardos de la Gandara M, Coffran C, Correa da Rosa J, Urban T⁵, Barsanti F, Kanahara S, Trezia M, Gisler T, de Lencastre H, Coller B, Tobin J

Introduction/Objectives: Community-Associated Methicillin-Resistant *Staphylococcus aureus* (CA-MRSA) skin and soft tissue infections (SSTI) carry recurrence rates in the primary care setting ranging from 16% to 43%. These infections present significant challenges to Emergency Medicine clinicians, Primary Care clinicians, and their patients and household members. The objective of this comparative effectiveness study is to develop and evaluate a home-based intervention implemented by Community Health Workers (CHWs) or “promotoras” to reduce recurrence of CA-MRSA in patients presenting to the ED and other primary care settings.

Methods & Study Population: In partnership with three Community Health Centers and three community based ED’s in the New York Metropolitan area, this study will recruit patients (n=278) and their household members with confirmed MRSA or Methicillin-Sensitive *Staphylococcus aureus* (MSSA) SSTI. Participants will be randomized to receive either a CHW/Promotora-delivered decolonization-decontamination intervention (based on the REDUCE MRSA trial) or usual care. The highly engaged stakeholder team finalized the intervention protocol, developed and implemented CHW and clinician training, and developed an online health portal application for data management and exchange.

Results/Anticipated Results: We collected 923 isolates (240 wound culture isolates and 683 surveillance isolates; nares, axilla, and groin) from 237 individuals. MRSA and MSSA were found in 19% and 21.1% of wound cultures, respectively. MRSA positive wound cultures (59.5%) had one or more MRSA positive surveillance culture. MSSA positive wound culture (67.8%) had one or more MSSA surveillance culture. Of those with MRSA and MSSA infections, 70% of subjects were male, with an average age of 37.9±15.9 SD. The most frequent sites of wound infection were lower extremity (20%), axilla (18%), buttock (17%), and abdomen/torso (12%). There was no association between the location and type of infection ($p > 0.05$). The most common surfaces contaminated with MRSA were the kitchen floor (14.05%) and the bedroom floor (14%) and these locations were also the most common surfaces contaminated with MSSA, 10.2% and 9.1%, respectively. There was an average number of 3.2±1.6 SD co-residents per household, and 36.5% of household members were colonized with either MRSA or MSSA. There was no correlation between household density

Title: Assessment of Provider Knowledge of Cardiovascular Risk after High-Risk Pregnancy.

Authors: Mularz, Stephen; Akker, E; Kadali, S.; Lasser, D.

According to the literature, women experiencing complications during pregnancy such as gestational diabetes (GDM), pregnancy-induced hypertension (PIH), pre-eclampsia or eclampsia are at greater risk of developing diabetes and/or cardiovascular diseases (CVD) such as HTN, CAD, and stroke later in life. Since delivery is one of the few times in women's life that makes them seek medical attention, become more conscientious about their health and more willing to take care of themselves, it's important to educate them and provide long-term care if they experienced high-risk pregnancy. This approach may result in decreased morbidity and mortality rate of CVD. Recent guidelines ask for counseling during postpartum period and the need for long-term follow up of these women to prevent cardiovascular complications in the future.

The aim of the study was to estimate the degree of awareness and knowledge of current guidelines among physicians.

We conducted a survey with questions related to CVD risk in women who experienced high-risk pregnancy. The questionnaire was distributed to the groups of Internal Medicine and OB/GYN attendings, as well as medical residents, PA's, NP's at Coney Island Hospital (CIH) in Brooklyn, NY.

The average score of correct answers for both internal medicine (IM) attendings and OB/GYN attendings was 58%. The average score for male OB/GYN attendings was 62% correct vs. female OB/GYN attendings at 58%. The average score for male IM attendings was 63% correct and for female IM attendings it was 56%. The overall average score for male attendings from both disciplines (63%) was higher compared to that of the female attendings (57%).

Resident survey showed that overall residents as a group have limited knowledge about CVD risk after a high-risk pregnancy. Interns performed slightly better than seniors in terms of the knowledge of CVD risk. Male residents answered 49.1% of questions correctly, whereas female residents had 52.6% rate of correct responses.

Both IM and OB/GYN attending physicians have a relatively limited amount of knowledge about CVD risk in women who experienced high-risk pregnancies. The average score for male attendings was higher than that of female attendings in both IM and OB/GYN practice at Coney Island Hospital.

Among residents at CIH, the general knowledge of CVD risk after a high-risk pregnancy seems poor and indicates an area for improvement in medical education.

Title: Retrospective Review of Gallstone Pancreatitis

Authors: Amanda Doubleday DO, PGY5; Melissa Meghpara DO, PGY2; Martine Louis MD; Sara Jaka MSIII

Hypothesis: Gallstone pancreatitis is the most common cause of acute pancreatitis in the Western world, accounting for approximately 40% of cases of acute pancreatitis in the United States¹. Given the risk of acute pancreatitis due to cholelithiasis, it is necessary to identify patients who will benefit from cholecystectomy. The current recommended standard of care is to perform cholecystectomy on the same admission of the gallstone pancreatitis once resolved, a benefit to the patient in efforts to prevent future episodes and lower health care costs. This study aims to evaluate the incidence of gallstone pancreatitis at our institution, to identify those patients who failed to undergo early surgery and why, and indication for readmission. We hypothesize that the failure rate of early cholecystectomy is overestimated at FHMC and that those who did not have cholecystectomy on admission were lost to follow up with associated higher morbidity and health care costs.

Research design: Retrospective chart review

Methods and materials: A retrospective chart review of patients at Flushing Hospital Medical Center diagnosed with gallstone pancreatitis from 2012-2017. Information regarding patient demographics, signs, symptoms, lab results, imaging findings and disposition was collected.

Results: There were a total of forty patients with an admitting diagnosis of gallstone pancreatitis at FHMC from 2012-2017. Twelve patients were discharged without cholecystectomy on the same admission of gallstone pancreatitis, one deceased. Reasons for this included surgeon preference as patient clinically and biochemically improved, hyperkalemia, patient financial restrictions, patient leaving against medical advice, and patient demise. Of these twelve patients, 4 were lost to follow up and the remaining 8 patients underwent cholecystectomy, half of which were readmitted with surgery while half underwent ambulatory surgery. Six patients underwent 7 readmissions for biliary related issues including retained common bile duct stone, gastritis, alcoholic pancreatitis, and recurrent acute cholecystitis.

Conclusion: Gallstone pancreatitis is a surgical problem that all general surgeons must be educated on and prepared to manage. Early cholecystectomy remains the recommended standard of care, however, thirty percent of these patients were treated with algorithms that deviated from the current recommendations for various reasons. The authors did find that only ten percent of these patients were truly lost to follow up while twenty percent of patients eventually underwent the appropriate procedure but not without associated morbidity and costs.

Title: The Unnecessary: Optimizing Utilization of the Blood Bank for the Surgical Patient

Authors: V. Yoo, D.O., K. Leneweaver, D.O., N. Mandava, M.D.

Background:

The creation of a Maximum Surgical Blood Ordering Schedule (MSBOS) has led to a decrease in RBC unit expiration, reduction in institution and actual costs, and a reduction in blood over-ordering.

Objective:

The objective of this study is to identify “The Unnecessary” in the FHMC MSBOS and to propose an updated Optimal Surgical Blood Ordering Schedule (OSBOS).

Methods:

This Quality Improvement project was a retrospective EMR chart review from 1/1/13 to 12/31/15 at Flushing Hospital Medical Center (a general community hospital); as such, no IRB approval was needed. Of a total of 27,115 surgical patients, 611 were transfused. The 611 patients were further examined: Patient Factors, Procedure Details, and Blood Bank Utilization. We focused on the following procedures: thyroidectomy (184), mastectomy (184), bariatric (46), colectomy (110), amputation (94), appendectomy (504), and cholecystectomy (1144). We calculated the following for each procedure: S:T ratio, C:T ratio, %T, and TI. S:T is the ratio of patients type and screened/patients transfused. C:T is the ratio of units crossmatched/units transfused. %T (transfusion probability) is the patients transfused/pts crossmatched x100.

Results:

Gross over-utilization of the Blood Bank was identified. The thyroidectomy, mastectomy, bariatric, colectomy, and amputation cases had a %T of 0%. None of the 618 patients were transfused. Appendectomy %T was 0.6%, S:T was 166:1; cholecystectomy %T was 0.4%, and S:T was 228:1.

Conclusions:

The FHMC MSBOS has led to unnecessary blood testing, wastage of blood products, unnecessary allocation of hospital resources, and unnecessary patient pain. Theoretical 3-year savings were calculated: The OSBOS update for appendectomy, cholecystectomy, thyroidectomy, and bariatric cases (now no T/S needed) had a potential savings of \$187,800. We propose an evidence-based update (OSBOS) to our blood ordering schedule with the goal of optimizing usage of the Blood Bank. This may even be applicable to similar community hospitals in the area.

Title: Single institute experience with Cholecystostomy tube placement in High-Risk Patients with acute cholecystitis: utilization, outcome and definitive surgery.

Authors: Omar Wain DO; Melissa Meghpara DO; David Fan DO; Ji Yoo MSIV; Robert Solomon MD; Neil Mandava MD

Background:

Percutaneous cholecystostomy tube (PCT) is a procedure performed in place of surgical cholecystectomy only on select cases of cholecystitis, in which patients may be poor surgical candidates due to their pre-existing or co-existing comorbidities and critical conditions.

Objective:

The objective of this study is to do an in depth analysis of utilization of PCT in our institute with clinical outcomes for patients and eventual definitive surgery.

Methods:

In this retrospective clinical study with institutional review board (IRB) approval, we accessed EMR charts of 73 patients who were unfit to undergo surgery at the time of diagnosis of acute cholecystitis and had PCT placed in our institute by the interventional radiology department. The data collected spans over 3 years (December 2012-December 2015) for patients diagnosed with acute cholecystitis unable to undergo surgery at time of diagnosis. For the analysis, charts were examined for: Patient Factors, IR Procedure Details (including type of catheter used, approach to placement, bile cultures, any immediate complications), clinical condition following PCT, delayed complication associated with PCT within 30 days of placement, duration of PCT in place before removal and/or cholecystectomy, and finally number of patients who were operated on and their surgical outcome.

Results:

Significant clinical improvements were seen within 3 days following PCT placement in high risk patients with acute cholecystitis. There were no immediate complications identified and major complication within 30-day was identified to be tube dislodgement in 12% of the patients. Majority of bile cultures were found to have no growth however; *E.coli*, *Enterobacter*, *Klebsiella*, *Streptococcus*, and *Yeast* were organisms in positive cultures. Out of the 73 patients 43.84% (n=32) underwent cholecystectomy, of whom; 65.63% (n=21) were laparoscopic, 25% (n=8) were converted to open and 9.37% (n=3) underwent open cholecystectomy.

Conclusions:

PCT is an effective initial treatment in patients with acute cholecystitis not amenable to cholecystectomy and in some patients it may be the definitive treatment.

Title: The Health of Healthcare: Emergency Department Physician Well- Being

Authors: Martin Gagne, D.O.⁽¹⁾, Adam Schwartz, D.O. , Steven Zimmerman, M.D.
Emergency Medicine Residency Program

Background:

Physician health and wellbeing is an important issue that ultimately affects job performance.

Objective:

The purpose of this study is to compare the current self-reported physical and mental health of emergency physicians (EPs) with that of the general population.

Methods:

Questions selected from a national survey conducted by the Center for Disease Control about public health trends were distributed to EPs via social media. Responses were compared between EPs and the general population.

Results:

Our results demonstrated that EPs suffer less from chronic diseases, especially those related to the cardiopulmonary system; however, they suffer from a higher incidence of musculoskeletal pain and infectious disease complaints. Emergency Physicians also exhibit higher rates of mental health symptoms, sleep-related complications, and alcohol consumption.

Conclusions:

It is generally accepted that emergency medicine is associated with one of the highest burnout rates of any specialty. Although this is multifactorial, many potential components have been elucidated in this study. Awareness, education, and advocacy may help improve physician health and ultimately job performance.

Title: Perception of EMS Towards the Use of Warning Lights and Sirens

Authors: Michael Slisz DO, Steven Sattler DO
Emergency Medicine Residency Program
Good Samaritan Hospital Medical Center, West Islip, NY

Introduction:

The use of warning lights and siren during transports to the emergency department by emergency medical providers remains controversial. Previous studies have shown that there are no clear benefits to patient outcomes with the use of warning lights and sirens for non-emergent responses and they increase the risk of emergency medical services (EMS) being involved with motor vehicle collisions. We sought to determine the usage of warning lights and sirens in the patient transports of local EMS providers. We also sought to determine if previous motor vehicle collisions while in an ambulance would decrease the use of warning lights and sirens for local EMS providers.

Methods:

The surveys was distributed to and collected from various agencies EMS providers at the completion of the transfer of their patient to the care of a suburban academic emergency department (ED) with approximately 90,000 visits per year during a continuous 9-day period.

Results:

The majority of respondents indicated that the use of warning lights and sirens was perceived to decrease transport times to the ED and improved patient outcomes. Providers that were in 2 or more motor vehicle collisions while in an ambulance were less likely to use warning lights and sirens in their patient transports.

Conclusion:

Local EMS providers felt that warning lights and sirens decreased the amount of time to the hospital and improved patient outcomes. EMS providers who were in 2 or more previous motor vehicle collisions while in an ambulance were less likely to use warning lights and sirens in their patient transports.

Title: The Effect of the Affordable Care Act on the Insurance Status of Patients Presenting to a Suburban Emergency Department an Expanded Perspective.

Authors: Joe Sorber, DO, Danielle Turrin, DO, Adam Schwartz, DO, Eric Decena, MD

Introduction/Background

The ACA was signed into law on March 30th, 2010, by President Barack Obama.¹The idea behind the act was that increasing insurance coverage would improve quality of life and reduce medical bankruptcy. The main purposes of the law was to increase insurance coverage amongst United States citizens.²After the institution of the ACA, our community hospital ED has seen a statistically significant decrease in the percentage of patients who are self-pay as shown in our initial study, “The Effect of the Affordable Care Act on the Insurance Status of Patients Presenting to a Suburban Emergency Department.”³

In this study we will attempt to address the limitations from the initial study. First, we were only able to examine payer status during one year prior to and one year after the initial implementation of the ACA. Thus, the difference between the proportion of uninsured patients in 2013 and 2014, may fall within normal limits when examined more broadly and may not be truly significant. Second, there were significant difficulties for patients in the early stages of the implementation of the ACA. We intend look to expand the data set and project out up to 48 months both before and after the institution of the ACA to assess the inter-annual variation that occurred in the data prior to the ACA and to determine whether the number of self-pay/uninsured patients continues to decrease as we suspect that it will.

Hypothesis

Our hypothesis is that the percentage of insured patients will increase as a result of the implementation of the ACA. This increase will be reflected in the ED payer mixes, as evidenced by a decrease in the number of self-pay and/or uninsured patients and an increase in Medicaid patients over the 24 months after the implementation of the ACA.

Methods and Study Design

This study is a descriptive, retrospective review of patients seen in the ED of a single, suburban, academic medical center with an annual census of approximately 90,000 patients. The study includes all patients who presented to the ED from January 1, 2012, (two years prior to the implementation of the ACA Insurance Marketplace) through December 31, 2015 (two years after the implementation of the ACA Marketplace). All payer data has been previously collected by the ED registration office and organized on Excel spreadsheets. This data does not include personal medical information. It has been previously sorted by calendar year, by ED admits vs. treat and release, and by payer status. No private health information was recorded or reported in the study. We are interested in determining whether there is a significant difference in the percent of self-paying patients and Medicaid patients when the data set is expanded out for a total of 24 months. To test the hypothesis, we apply a one-tailed, 2-sample test for equality of proportions. Statistical analyses will be completed using R version 3.1.2 (R Core Team 2014).

Title: Does the ED Observation Unit Decrease Return Rates for Cellulitis Patients

Authors: Joanna Marino D.O., Robert Bramante M.D., Radhika Malhotra M.D.

Hypothesis:

Cellulitis is a common complaint in the emergency department, with no definitive guidelines to direct outpatient versus inpatient treatment. Observation units (OU) are emerging as a bridge between treat and release patients, and inpatient hospital admission. It is believed that a brief stay in the observation unit to provide IV antibiotics decreases recidivism rates to the ED for patients diagnosed with cellulitis.

Methods:

A retrospective chart review was performed on a cohort of adults age 18 or older, seen in the emergency department for cellulitis from June 2016 to November 2016. The first visit for each patient with this particular diagnosis was considered the index visit. All ED visits within 30 days after the index visit were recorded. Two sets of patients were extracted from the data: patients treated in the ED for cellulitis and discharged home and patients admitted to the OU for parenteral antibiotics.

Results:

A total of 579 encounters were included in this study. Sixty-nine patients were sent to the OU from the ED for IV antibiotic therapy, and 508 patients were discharged. Eight patients (11.6%) initially sent to the OU returned within 30 days. Of the 508 patients initially discharged, 99 patients (19.5%) had return visits to the ED.

Conclusions:

The study found that 19.5% of patients initially discharged returned for a follow up visit to the emergency department, while 11.6% of those patients who received IV antibiotics in the observation unit returned to the emergency department for further evaluation. Patients who completed a brief stay in the observation unit to

Title: Beliefs associated with restraint use in an inpatient setting

Authors: Preethi Kumar, D.O. Raphael Bergman, M.D. Gina Basello, D.O. Alan Roth, D.O.

Hypothesis: Mechanical restraints are commonly used in a range of different healthcare settings and in the management of a variety of patients. The restraints are any device that limit a patient's freedom of movement or ability to access their own body. Physicians institute them to prevent violence to staff or the patient themselves, disruption of medical therapy, and to avoid falls; however there are negative effects of restraint use for patient health and safety. The aim of the study was to identify the different types of beliefs associated with restraint use as a means of protecting patient safety in an inpatient setting.

Research Design: Correlational

Resident and Attending physicians in training programs in Family Medicine and Internal Medicine were asked to complete anonymous surveys about their use of restraints in a general medical inpatient setting. They were asked to evaluate three case vignettes. Case 1 concerned an elderly patient with dementia who is pulling out an intravenous line; Case 2 concerned a middle aged man with multiple complex conditions who needs a prolonged intravenous IV; and Case 3 concerns a young man who is agitated and withdrawing from alcohol and aspiration pneumonia. Physicians were asked to indicate if they used restraints with patients of their own with similar symptoms. Next, they were asked to identify concerns they may have had about protecting patient and staff safety. Concerns included issues related to nurse safety, interprofessional respect, the opinion of the family, the unpredictability of the situation, concerns related to the potential for sedation with additional medication, and concerns about the patient's feelings of humiliation.

Multivariate repeated measures ANOVA indicated there were significant differences in the types of cases in which physicians reported using restraints (Wilk's Lambda = .76, $F(2,25) = 3.86$, $p < .04$).

Results: Physicians were significantly less likely to put restraints on their own patients similar to Case 1 (an elderly woman with dementia) or Case 2 (a severely medically ill middle aged man) than patients similar to Case 3 (a young man suffering from alcohol withdrawal and medical illness). For all cases, physicians identified concerns about failing to support the nursing staff as one of the top two issues. Repeated measures ANOVA

Title: Effects of racial discrimination on sleep quality

Authors: Dr Elizabeth Brondolo, Dr Alan Roth, Dr Gina Basello, Dr Tabia Collins Mitchell, Dr Grace Komolafe, Dr Yogaalakshmi Sundararajan

Hypothesis: Research has indicated that discrimination is negatively associated with sleep quality (Slopen et al). There is little data on the types of discrimination most closely associated with sleep difficulties or on the underlying mechanism which explains the relationship of discrimination to sleep quality. The aim of the study is to test the hypothesis that experiences of racial discrimination have negative effects on sleep quality and negative schemas about others (i.e., constellations of thoughts and attitudes about others) mediate this relationship.

Research Design: Correlational, observational

Methods and Materials: Participants included 136 students and staff members recruited from campus centers. Questionnaires were provided to participants and assessed lifetime experiences of racial discrimination (assessed with the Brief Perceived Ethnic Discrimination questionnaire (Brief PEDQ-CV; Brondolo et al 2005). The PEDQ-CV has 4 subscales assessing Race-related Social Exclusion, Physical Threat and Harassment, Work/school Discrimination, and Stigmatization. Sleep quality was assessed with three items from the Pittsburgh Sleep Quality Inventory (REF). Factor analysis was used to create two dimensions of negative schemas, with the first reflecting concerns about rejection and invalidation (assessed with the Social Constraints Scale (SCS; Lepore 1996), Stereotype Confirmation Concern Scale (SCCS; Contrada et al. 2001), and Own Group Conformity Pressure Scale (OGCPS; Contrada et. al 2001)). The second dimension reflected the need for hostile vigilance (assessed with the Social Vigilance Questionnaire (SVQ; Ruiz 2015 and subscales from the Cook-Medley Ho)

Results: Sleep problems were common, with 59% of participants reporting they had trouble falling asleep within 30 minutes at least once a week. Multiple regression analyses, controlling for age, gender and race indicate that lifetime discrimination is positively associated with sleep difficulties ($B = .50$, $SE = .14$, $b = .32$, $t = 3.61$, $p < .0004$). Race-related threat was the type of discrimination uniquely associated with sleep difficulties. Process mediation analyses conducted according to methods described by Preacher (2013) indicated that concerns about rejection and invalidation mediate the relationship of discrimination to sleep quality. Discrimination was associated with greater concerns about rejection and invalidation, and these concerns predicted greater sleeping difficulties.

Conclusions:

Racial discrimination can be defined as unjust or prejudicial treatment of people based on their race or ethnicity. Our data suggest that discrimination affects sleep quality both directly and indirectly through negative schemas, including schemas associated with rejection and invalidation. Schemas are more than isolated emo-

Title: Physicians' religious commitment as a predictor of engaging in discussions about spiritual needs during advance care planning

Authors: Amelia MacIntyre DO, Ambika Nath DO, Marina Bissada DO, Swathi Raman MPH, Elizabeth Brondolo PhD, Gina Basello DO, Alan Roth DO

Hypothesis: Does a physician's degree of religious commitment (i.e., commitment to religious beliefs and practice) predict the degree to which the physician will discuss spiritual or religious concerns with their patients in the context of advance care planning?

Background: Previous research has identified topics that patients and providers believe are important for effective advance care planning (ACP). Surveys from patients in the National Inpatient Database found that spiritual needs was ranked second in the National Inpatient Priority Index [1]. However, although 58% of patients thought it appropriate for their physicians to inquire about spiritual needs, only 6% reported that any staff had inquired about them and only 0.9% of the inquiries came from physicians [3]. Predictors of physicians' willingness to engage in these discussions remain unclear [2,3,4].

Research Design: Correlational, Observational

Methods: Participants (n = 217, including 111 women) included 183 Resident Physicians and 34 Attending Physicians from five residency training programs in Family Medicine and Internal Medicine. Participants completed a demographics scale, including a measure of self-reported religious commitment. Participants read two vignettes about patients with either COPD or CHF, one portraying a patient with moderate symptoms (Scenario M), the other a patient with severe symptoms (Scenario H). Participants rated how much of a priority they would place on ensuring communication with the hypothetical patient about each of six issues; one issue addressed spiritual and religious concerns. Providers then indicated the proportion of their own patients with similar symptoms with whom they discussed spiritual or religious concerns.

Results: Physicians' religious commitment was not associated with the degree to which they believed it was important to talk about religious/spiritual concerns with the hypothetical patients (Scenario M: $F(3, 210) = 4.05, p < 0.2589$; Scenario H: $F(3, 210) = 1.93, p < 0.5872$). However, physicians' degree of religious commitment was associated with their reports of discussions about religious/spiritual concerns with their actual patients ($F(3, 210) = 3.93, p < 0.01$). Physicians who reported either no religious commitment (Adjusted mean = 1.68, SE = .21) or very high levels of religious commitment (Adjusted mean = 1.86, SE = .13) were less likely

Title: Utility of Telemetry Heart Rhythm Monitoring in Patients Presenting with Cerebrovascular Accident and Transient Ischemic Attack

Authors: Taner Aydin, Goustina Adly DO, David Bass DO, Kyla D'Angelo DO, Roman Zeltser MD, Amgad N. Makaryus MD

Hypothesis: Non-intensive-care use of cardiac telemetry monitoring is a widely overused diagnostic test. Multiple studies have shown that the majority of inpatient telemetry monitoring could be discontinued or not-initiated safely and would save millions of dollars annually. The use of telemetry to monitor patients for arrhythmias post-stroke may contribute to these costs.

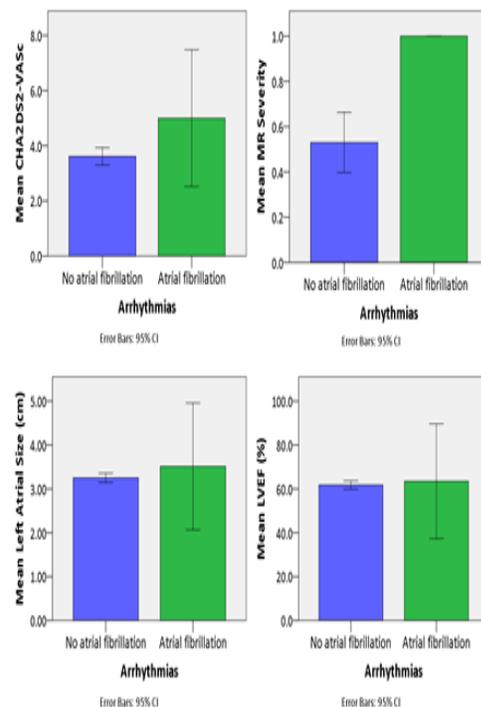
Study Design: We sought to evaluate the effectiveness of telemetry monitoring in patients admitted and discharge with the diagnosis of cerebrovascular accident (CVA) and transient ischemic attack (TIA) while developing new onset atrial fibrillation (AF) in 24-48 hour period of hospitalization. The diagnosis of TIA/CVA was confirmed via imaging or formal diagnosis by neurologist.

Methods: Retrospective analysis to investigate the utility of our current practice of short-term (24-48 hour) telemetry monitoring in diagnosing stroke patients with AF.

Results: Review of 162 patients presenting with CVA or TIA found that only a minority (3.2%) were identified as having AF. Assessing CHA2DS2-VASc score, mitral regurgitation, left atrial size, and ejection fraction, we found that the group of individuals with AF did not significantly differ from those without AF (figure).

Conclusions: Short-term (24-48 hour) telemetry monitoring for patients does not efficiently identify those who may manifest with AF as a possible cause of their CVA/TIA. We explored variables that may be predictive of AF to improve our guidelines and found insignificant differences among patients with and without AF. Further appropriately designed prospective studies are required to determine the most cost-effective strategies and inform clinical practice.

FIGURE: COMPARISON OF AF AND NON-AF POST-CVA/TIA PATIENTS IN REGARDS TO CHADS2-VASC, MEAN LEFT ATRIAL SIZE, MEAN MITRAL REGURGITATION (MR) SEVERITY, AND MEAN LEFT VENTRICULAR EJECTION FRACTION (LVEF).



Title: Novel Spiked-Washer Repair Is Biomechanically Superior To Suture And Bone Tunnels For Arcuate Fracture Repair

Authors: Tyler Enders, DO, Saman Vojdani, MD, Laviel Fernandez, BS, Jian Jiao, MS, Steven Ortiz, MD, Liangjun Lin, PhD, Yi-Xian Qin, PhD, David E. Komatsu, PhD, James Penna, MD, Charles J. Ruotolo, MD

Hypothesis: Fixation of arcuate fractures with a novel repair technique utilizing a spiked-washer repair would yield biomechanically superior results as compared to the only other described repair technique in the literature, a suture and bone tunnels repair.

Research Design: Injuries to the posterolateral corner (PLC) of the knee can lead to chronic degenerative changes, external rotation instability, and varus instability if not repaired adequately. A proximal fibula avulsion fracture referred to as an arcuate fracture, has been described in the literature, but a definitive repair technique has yet to be described. The objective of this study is to present a novel arcuate fracture repair technique, utilizing a spiked-washer with an intramedullary screw, and to compare its biomechanical integrity to a previously described suture and bone tunnel method.

Methods and Materials: Ten fresh-frozen cadaveric knees underwent a proximal fibula osteotomy to simulate a proximal fibula avulsion fracture. The lateral knee capsule and posterior cruciate ligament were also sectioned to create maximal varus instability. Five fibulas were repaired using a novel spiked-washer technique and the other five were repaired using the suture and bone tunnel method. The repaired knees were subjected to a monotonic varus load using a mechanical testing system (MTS) instrument until failure of the repair or associated PLC structures.

Results: Compared to the suture repair group, the spiked-washer repair group demonstrated a 100% increase in stiffness, 100% increase in yield, 110% increase in failure force, and 108% increase in energy to failure.

Conclusion: The spiked washer technique offers superior quasi-static biomechanical performance compared to suture repair with bone tunnels for arcuate fractures of the proximal fibula. Further clinical investigation of this technique is warranted and the results of this testing may lead to improved outcomes and patient satisfaction from proximal fibula avulsion fractures.

Title: Feel the Rumble: A Study of OMT and Postoperative Ileus

Authors: Jake Corman, DO, MS, Gabriel Froula, DO, Martin Torrents, DO, MPH, Carlo Fernandes, DO, Nima Rejali OMSIII, Norman Ng OMSIII, Daniel Halvorsen OMSIII

Hypothesis: Osteopathic manipulative therapy is effective in reducing postop ileus and length of stay

Research design: Randomized single-blind control trial taking place from 1/2016 to 1/2017

Introduction: Development of ileus in the postop period is a roadblock on the path to recovery from surgery for many patients. This temporary bowel dysmotility leads to increased hospital stay, costs, and patient discomfort. OMT has been previously shown to be effective in the treatment and prevention of this complication. It is our intent to apply these previous studies to our patient population to measure their effect and efficacy in our institution.

Materials/methods: Subjects were chosen at random from a pool of those undergoing any type of bowel surgery with an ASA score of 3 or less. In total, 37 subjects were selected for our study. Informed consent was obtained from subjects and they were enrolled into one of three groups: control, touch (correct hand placement with no OMT), and OMT. The OMT treatments we utilized were 5 standardized treatment modalities. Treatment was applied daily and patients were followed during their hospital stay. We recorded return of bowel function defined by first bowel movement or flatus documented in progress notes, postop stay in days, ASA score, and any complications that occurred during their admission.

Results: We noted a positive trend in the OMT group compared to the control group. Overall, the OMT group tended to have shorter postop stay (4.06 days vs 5.25 days control group), earlier return of bowel function (2.81 days vs 3.16 days control group), and lesser rate of complications (31% vs 41% for control).

Conclusion: We observed clinically relevant results in our study. We noted a decreased stay of approximately one day, earlier return of bowel function and a decreased rate of complications. This clinically relevant data could lead to decreased costs and increased patient satisfaction. However, we were unable to

Title:

Hypoglycemia incidence in patients with DKA/HHNKS managed with Insulin Infusion Protocol as compared to computer based algorithm (Glucomander™).

Authors:

Sayegh, Ghassan P. DO, Khan, Ibtesam DO, Gilani, Aamir MD

Introduction:

Hypoglycemia (blood sugar below 70 mg/dL)¹ is a common obstacle during hyperglycemic management. In a multicenter study, the incidence of patients experiencing hypoglycemia was 21.7% for patients treated with insulin infusion². It is associated with increases in mortality, length of stay and early readmissions^{4,5}.

Materials and Methods:

We conducted a retrospective study at Orange Regional Medical Center at Middletown, NY including data from 66 patients. We included 35 patients who were admitted between April-June 2014 and treated with insulin-infusion protocol. We also included 31 patients who were admitted between January-November 2016 and treated with computer-based algorithms (Glucomander™). Hypoglycemia was defined as any blood glucose measure below 70mg/dL. We used a Fischer-Exact test to compare the number of hypoglycemia events for the patients in two groups.

Results:

Patients included in the insulin-infusion group had 28 hypoglycemic events as compared to only 2 reported events in the Glucomander™ group (p-value < 0.05).

Conclusion:

Our research demonstrated that patients being treated for DKA or HHNKS with Glucomander™ had a lower incidence of hypoglycemic events (p-value < 0.05). Computer-based algorithms for the treatment of patients with DKA or HHNKS are associated with reduced incidence of hypoglycemia event and therefore, can reduce rate of associated complications.

Title: A single-provider technique for the reduction of humeral shaft fractures

Authors: Cristin J Mathew, DO, Matthew H Martell, DO, Muzaaffar Ali BS, Gus Katsigiorgis, DO;

Abstract

Fractures of the humeral shaft comprise approximately three percent of all fractures, nearly 66,000 incidences annually.¹ In the elderly population, the mechanism of injury is usually related to a low energy fall from standing height, whereas in younger populations, the injury results from high energy mechanisms. Given the multitude of muscular attachments along the humerus, there are numerous deforming forces that must be overcome during closed reduction in order to achieve and maintain acceptable alignment of the fracture. Depending on the fracture site, the fracture can be displaced in various directions requiring different techniques to achieve an adequate reduction. In addition, the application of a coaptation splint to immobilize humeral shaft fractures can be a daunting task for a single provider. Often reduction and splinting require multiple providers and multiple attempts to attain adequate length, rotation, and alignment. These multiple attempts can also increase the risk of iatrogenic neurovascular injury and patient analgesic requirement. We describe a gentle single-provider technique utilizing traction and ligamentotaxis to achieve closed reduction and coaptation splinting of humeral shaft fractures without the need for multiple assistants and repeated reduction attempts. The humerus can function and heal well with a greater degree of angulation compared to other long bone fractures, however adequate alignment can improve function, cosmesis, and patient satisfaction.

Title: Rates of Skin Graft or Skin Flap Failure in Patients who have Received Osteopathic Manipulative Treatment: A Retrospective Study

Authors: Zachary Long, DO, V. Tuttle, DO; J. McKinney, DO; P. Andolina, DO, ; H. Ettlinger, DO, FAAO; A. Kells, MD, PhD, FACS

Skin grafts and flaps have become common practice in the plastic surgery specialty and have been demonstrated as safe and effective surgical procedures. The most common indications for skin grafts or flaps are a third degree burn, chronic ulcer and trauma. Skin graft or flap failure may occur for a variety of reasons, with incidence reported between 2% and 30%. There are currently no studies on the effect of osteopathic manipulative treatment (OMT) on rates of skin graft or flap failure. A retrospective chart review of electronic medical records for thirty-three patients who underwent a skin graft or flap procedure from January 1, 2010 to December 31, 2015 at St. Barnabas Hospital was conducted. Variables that increased the likelihood of graft or flap failure, such as immunodeficiency, polytrauma, substance abuse as well as flap and graft complications were collected and treatment patients were matched to controls for such variables. Twelve patients received OMT and twenty-one patients did not. There were no reported skin graft or flap failures in the patients who received OMT (p-value = 0.10), as compared to four failures in those who did

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