

THE Journal

OF THE ARKANSAS MEDICAL SOCIETY

VOL. 116 • NO. 10

APRIL 2020



SCIENTIFIC EDITION

Your job is keeping
your patients healthy.

So who's watching their
**health
information?**

AFMC Security Risk Analysis can help your practice:

- Comply with HIPAA directives
- Protect your patients' health information
- Identify and mitigate security risks/vulnerabilities
- Develop privacy and security policies/procedures
- Provide expertise and guidance for best practices
- Relieve staff burden

Contact us to learn more.

Visit afmc.org/SRA, call 501-212-8733
or email SRA@afmc.org.



Improving health care. Improving lives.



David Wroten
Executive Vice President

Penny Henderson
*Executive Assistant
Journal Advertising*

Nicole Richards
Managing Editor

Laura Haywood
*Membership and Communications
Specialist*

EDITORIAL BOARD

Appathurai Balamurugan, MD, DrPH, MPH
*Family & Preventative Medicine/Public
Health*

Tim Paden, MD
Family Medicine

Sandra Johnson, MD
Dermatology

Issam Makhoul, MD
Oncology

Naveen Patil, MD, MHSA, MA, FIDSA
Internal Medicine/Infectious Disease

Benjamin Tharian, MD, MRCP, FACP, FRACP
Gastroenterologist/Hepatologist

Robert Zimmerman, MD
Urology

Tobias Vancil, MD
Internal Medicine

Darrell Over, MD
Family Medicine

EDITOR EMERITUS
Alfred Kahn Jr., MD (1916-2013)

**ARKANSAS MEDICAL SOCIETY
2019-2020 OFFICERS**

Dennis Yelvington, MD, Stuttgart
President

Lee Archer, MD, Little Rock
Immediate Past President

Chad Rodgers, MD, Little Rock
President Elect

Seth Barnes, MD, Hot Springs
Vice President

George Conner, MD, Forrest City
Secretary

Bradley Bibb, MD, Jonesboro
Treasurer

Danny Wilkerson, MD, Little Rock
Chairman of the Board of Trustees

Commentary 220

Medicare...for All?
Darrell R. Over, MD

Case Study 224

A Rare Case of Temporalis Muscle Abscess Secondary
to Mayfield Clamp Pin Sites
*Jesse J. Xie, MD; Natalie B. Peeples, MD; Charles Ryan Humphries, MS;
Thaddeus Bartter, MD*

AFMC: A Closer Look 226

Update on Arkansas' Ongoing Hepatitis A Outbreak
Jennifer Dillaha, MD; Michael Cima, PhD; Joel Tumilson, MD; Alan May

Case Study 228

Withdrawl-Emergent Dyskinesia Sydenhams Chorea and PANDAS
*Srinivasa Basavayya Gokarakonda, MD; Margaret Danielle Weiss, MD;
Nicole Michelle McBride, MPH*

Derm Dilemma 230

Kyle Sandiford; Logan Rush, MD

Case Study 233

Use of Thalidomide for Gastrointestinal Angiodysplasia
Joseph W. Fong MD; Latha M. Achanta, MD

People and Events 236

Established 1880. Owned and edited by the Arkansas
Medical Society and published under the direction of the
Board of Trustees.

Advertising Information: Penny Henderson,
(501) 224-8967 or penny@arkmed.org.
#10 Corporate Hill Drive, Suite 300,
Little Rock, AR 72205.

Postmaster: Send address changes to:
The Journal of the Arkansas Medical Society,
P.O. Box 55088, Little Rock, AR 72215-5088.

Subscription rate: \$30.00 annually for domestic; \$40.00,
foreign. Single issue \$3.00.

The Journal of the Arkansas Medical Society (ISSN 0004-
1858) is published monthly by the Arkansas Medical Society:

#10 Corporate Hill Drive, Suite 300,
Little Rock, AR 72205
(501) 224-8967

Printed by The Ovid Bell Press Inc., Fulton, Missouri 65251.
Periodicals postage is paid at Little Rock, AR, and at
additional mailing offices.

Articles and advertisements published in The Journal are for
the interest of its readers and do not represent the official
position or endorsement of The Journal or the Arkansas
Medical Society. The Journal reserves the right to make the
final decision on all content and advertisements.

VISIT US ONLINE OR FOLLOW ON SOCIAL MEDIA



ARKMED.org



@ArkMedSoc



@ArkMedSociety



@ArkMedSoc



Medicare ... for All?

Medicare For All” has become one of the most popular topics in American politics. Notably, when I have asked most of my resident physicians (who will be significantly impacted by its mandates), I have discovered a dearth of understanding of this topic. Given the potential ramifications of this program for changing the American health care landscape, I believe a review of its significant provisions is beneficial for all physicians.

Medicare as we know it now was established in 1965, primarily as universal health care for people over 65 years age. In 1972, Medicare coverage was extended to persons with disabilities. Medicare For All is not Medicare as we currently understand the program. Currently, there are two competing models of the Medicare For All program in the 116th Congress, House Resolution 1384 and Senate Bill 1129.

Both HR 1384 and SB 1120 establish a national health insurance program that is administered by the Department of Health and Human Services (HHS). Both programs provide insurance for all U.S. residents; specify automatic enrollment of individuals upon birth or residency in the U.S.; and cover comprehensive health care including hospital services, prescription drugs, mental health and substance abuse treatment, dental and vision services, abortion, and home and community long-term care. Senate Bill 1129 specifies that state Medicaid programs must cover certain institutional long-term care services. Both bills prohibit cost-sharing (e.g., deductibles, coinsurance, and copayments and other charges for covered services) but SB 1129 allows co-payments for prescription drugs up to \$200 annually for households with incomes >200% of the federal poverty limit. Both bills mandate that private health insurers and employers may only offer coverage that is supplemental to, and not duplicative of, benefits provided under the Medicare For All program. Under each bill, all health insurance exchanges and certain specified federal health programs terminate upon Medicare For All program implementation – the exception being coverage provided through the Department of Veterans Affairs or the Indian Health Service. HR 1384

calls for transitioning to Medicare For All over a two-year period: individuals <18 years age or >55 years age or already enrolled in Medicare may enroll in the program starting one year after its enactment, and other individuals may also buy into the program at this time. Senate Bill 1129 calls for transitioning to Medicare For All over a four-year period: individuals <18 years age are eligible for benefits one year after enactment, while other individuals (depending on age) may buy into a transitional plan or an expanded Medicare program during the transition period. Both HR 1384 and SB 1129 state that all licensed health care providers are eligible to participate, and both establish provisions for payments and costs. Each bill specifies that the HHS will negotiate prices for prescription drugs and establish a formulary. HR 1384 provides for individual health care provider reimbursement on a fee-for-service basis (value-based payment is prohibited) and implements a global operating budget for hospitals and other institutions. Senate Bill 1129 maintains the current Medicare methods for payment. Neither bill specifies the payment rates to health care providers or hospitals that will be applied. Neither bill includes financing mechanisms for implementation.

In a 2017 New York Times article (updated online in 2019), writers Haeyoun Park and Margot Sanger-Katz summarized the various constituencies impacted by enactment of a Medicare For All insurance model:

- 156 million people with employer insurance plans would have new taxes (but no premiums).
- 73 million people with Medicaid would have increased choices, but possibly higher taxes.
- 61 million people with current Medicare insurance would have more generous coverage.
- 28 million un-insured people would have access to health care.
- 21 million people who self-pay for health insurance would have new taxes but less out-of-pocket spending.

- 9 million veterans will keep their Veteran Health Administration insurance intact.
- 2 million Native Americans will keep their Indian Health Service insurance intact.
- Doctors and hospitals would probably face pay cuts (but no more unpaid claims).
- Pharmaceutical companies would likely see smaller profits.
- Private health insurance companies would, for the most part, be eliminated.

Both versions of the Medicare for All plans summarized above have some real advantages over the status quo. However, as currently conceptualized, the challenges facing each version of the plan are immense and neither adequately addresses the economic and administrative realities that dominate U.S. health care. Writing in Health Affairs, Frakt and Oberlander quote an Urban Institute study that estimates that Medicare For All as currently proposed would increase federal spending by \$34 trillion over the next 10 years. Even considering that a portion of this rise would be counterbalanced by lower private sector spending, net national annual health care spending would be increased 20% from about \$3.5 trillion to \$4.2 trillion.

• For Further Reading:

- Frakt AB, Oberlander J. Challenges to Medicare For All remain daunting. *Health Aff* 2020(Jan);39(1):142-145.
- Johnson M, Kishore S, Barwick DM. Medicare For All: an analysis of key policy issues. *Health Aff* 2020(Jan);39(1):133-141.
- Pope C. Medicare For All? Lessons from abroad for comprehensive health care reform. Manhattan Institute Report. November 2019. <https://www.manhattan-institute.org/using-lessons-from-international-health-care-medicare-for-all>. Accessed January 20, 2020.



AMS
Benefits, Inc.

exclusive insurance coverage for Arkansas physicians

COMPREHENSIVE INSURANCE

CUSTOM MADE FOR YOU

COVERAGE INCLUDES

Group Health
Individual Health
Group Disability
Individual Disability
Health Savings Account Plans
Business Overhead
Life Insurance
Dental Insurance
Vision Insurance

AMS Benefits was created by the Arkansas Medical Society to delivery quality insurance coverage to Arkansas physicians, their families, and their staff. We understand your busy schedule and will work to give you the protection you need to focus on your patients.

Alanna Scheffer, AMS Plan Administrator

amsbenf@arkmed.org

ARKMED.org/resources/AMSBenefits

501-224-8967

Agency NPN# 1650351

NPN# 1653222

AR License #100112594





2020 AND BEYOND: MIPS AND APMS

Join AMS and SVMIC's Medical Practice Services Assistant Vice President, Jackie Boswell, MBA, FACMPE, for a **one-hour webinar** that will highlight the 2020 reporting and participation requirements for Medicare's Merit Based Incentive Payment System (MIPS) and defines the optional participation in the Alternative Payment Model (APM) pathway. Some objectives for this program include:

- Describe changes to MIPS for the 2020 Performance Year.
- Outline the necessary requirements to avoid a negative payment adjustment and discuss the options available to achieve incentives.
- Discuss APMs available for participation.

Multiple individuals from the same facility may participate in the webinar using the same telephone line.

THURSDAY, APRIL 9
12 - 1 P.M.

presented by



SVMIC™

Webinar Registration Fee

\$139 for AMS member
physician or staff

\$239 for non-members

**Visit ARKMED.org or call 501-224-8967
to register for the webinar.**

THE PURCHASING POWER OF MANY



SAVES YOU MONEY!



WITH NO COST OR OBLIGATION TO YOU

- **GOT 2 MINUTES?** You can join Buygility on our website from your smartphone!
- ⇒ Go to www.buygility.com
- 🖱️ Click **JOIN NOW**
- 📄 Enter your contact information
- That's it!

Group Purchasing Made Easy!
FAST and FREE to JOIN and Use

buygility.com
501-400-6765
contact@buygility.com



A Rare Case of Temporalis Muscle Abscess Secondary to Mayfield Clamp Pin Sites in a Post-Operative Neurosurgery Patient

Abstract

Introduction: Neurosurgical interventions are becoming more and more common in the U.S.

Based on a study between 2006 and 2013, there were 94,621 neurosurgical surgeries performed.¹ As with any invasive procedure, post-operative complications are a major concern. Uncommonly, the head-clamp device used to secure the head of the patient for surgery is a contributor of such complications and can easily be missed.²

Summary: Here we describe the case of a 50-year-old man who was two weeks post-op from a C5-C7 resection of an intradural mass when he presented with high-grade fevers that persisted despite broad spectrum IV antibiotics. The source of his fevers was found to be temporalis muscle abscesses at the sites of his Mayfield head clamps.

Conclusion: Abscess from head-securing surgical clamps is a rare complication, but should remain in the differential of a febrile post-op neurosurgery patient. This complication will require a more aggressive antibiotic course or drainage to resolve, and could easily be missed in patients with numerous comorbidities.

Case

A 50-year-old African American male who was recently found to have an intradural mass with subsequent resection and C5-C7 laminectomy presented to emergency department (ED) two weeks after his surgery with dysuria and fever of 101 degrees Fahrenheit. Initial workup showed 40 WBC, 3+ leukocyte esterase, 1+ bacteria on

urinalysis, and urine culture grew pan-sensitive *Klebsiella*. He was given one dose of ceftriaxone, started on cephalexin for outpatient therapy, and

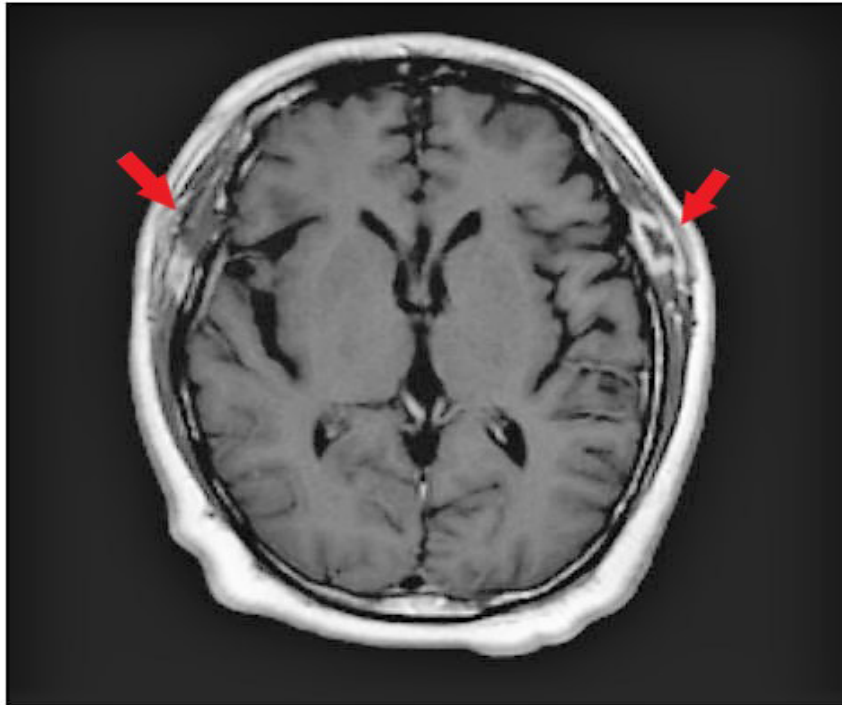


Figure 1: Bilateral temporalis muscle inflammation and abnormal enhancement with central fluid concerning for abscess (left greater than right).

discharged from ED back to physical rehabilitation facility.

At the rehab facility, patient was noted to have recurrent febrile episodes and was eventually switched to ciprofloxacin. Despite appropriate antibiotic therapy and resolution of dysuria, he continued to have fevers up to 103 F and returned to the ED three days after initial evaluation. At that time, the patient's only complaint was bilateral jaw pain. Vital signs showed fever of 104 F and briefly hypotensive to 90s/60s, which normalized with half a liter of normal saline. His surgical site was healing well without erythema, edema, induration, or drainage. There was no tenderness

to palpation at the surgical site or costovertebral angle tenderness. Due to concern of perinephric abscess following his urinary tract infection, sepsis protocol was activated on arrival and the patient was started on vancomycin and cefepime. Computed tomography (CT) of abdomen/pelvis revealed bladder wall thickening consistent with cystitis but no fluid collections. CT neck revealed post-operative changes but no acute findings concerning for infection. The patient continued to complain of bilateral jaw pain, and magnetic resonance imaging (MRI) brain was ordered and revealed bilateral temporalis muscle fluid collections with abnormal enhancement and central fluid collections consistent with abscesses (left greater than right). Due to his recent

surgery and location of the abscesses, they were determined to be secondary to surgical head clamps. Blood and urine cultures from admission showed no growth. Given that he had already received multiple days of antibiotics and improving clinically on broad spectrum antibiotics, wound cultures were not obtained, as they were unlikely to yield positive growth and unlikely to change therapy. Patient subsequently improved with a two-week course of vancomycin and cefepime therapy.

Discussion

Mayfield clamps are a three-prong positioning

system commonly utilized in neurosurgery to stabilize the head.³ Literature discussing the complications from these clamps is exceptionally rare.² The few complications that are documented are quite severe, such as skull fracture, epidural hematoma, and air embolus, with the caveat that many lesser injuries likely go unnoticed or unreported.^{3,4} Patients with these complications often have a number of comorbidities at time of presentation, which elevates the difficulty of making an accurate diagnosis. Another factor that often delays early diagnosis is that it is not uncommon for patients to have post-operative fever. In this particular patient, it was nearly four days before the diagnosis of TM abscess was made. Ultimately, a long course of intravenous antibiotic therapy led to resolution of infection.

Abscess from head-securing surgical clamps is a rare complication and requires a high level of sus-

picion, but should remain in the differential of a febrile post-op neurosurgery patient. Best method of diagnosis is with imaging such as CT or MRI. Ideally, blood and abscess cultures should also be obtained. Often, as in this case, the yield is low given that patients are typically already on antibiotic therapy. Head-clamp-related abscesses requires a more aggressive antibiotic course or drainage to resolve and could easily go overlooked in a patient with other potential sources of infection. This is the first reported case of temporalis muscle abscess from such clamps.

References

1. Cote DJ, Karhade AV, Burke WT, Larsen AM, Smith TR. Risk factors for post-operative respiratory failure among 94,621 neurosurgical patients from 2006 to 2013: a NSQIP analysis. *Acta Neurochir.* 2016 Sep; 158(9): 1639-45.
2. Khandelwal A, Gupta S, Prabhakar H, Burman

S. Venous air embolism following application of Mayfield head clamp: A word of caution. *Indian J Anaesth.* 2018 Dec; 62(12): 1002-3.

3. Integra Neurosciences. Mayfield surgical devices skull clamps and headrest systems. *Mayfield Surgical Devices Skull Clamps and Headrest Systems.*
4. Beuriat PA, Jacquesson T, Jouanneau E, Berhouma M. Headholders' – complications in neurosurgery: a review of the literature and recommendations for its use. 2016 Dec; 62(6): 289-94.

Don't forget!

With your medical society membership, you have free access to Medici Connect (formerly DocbookMD)

- HIPAA Compliant
- View your medical society directory
- Unlimited secure messaging
- Message colleagues
- Message patients
- eReferrals



medici

connect

To learn more, visit

medici.md/connect-members

EDITORIAL PANEL: Chad T. Rodgers, MD, FAAP | Elena M. Davis, MD, MPH | Shannon Edwards, MD | William L. Mason, MD | J. Gary Wheeler, MD, MPS

Update on Arkansas' Ongoing Hepatitis A Outbreak

JENNIFER DILLAHA, MD; MICHAEL CIMA, PhD, MPH; JOEL TURLISON, MD, DIPLOMATE ABFM; and ALAN MAY

Since 2016, the United States has experienced a multi-state outbreak of hepatitis A among persons using or injecting drugs, the homeless and men who have sex with men (MSM).

Hepatitis A, caused by the hepatitis A virus, infects the liver and generally leads to a self-limited disease. Symptoms include fever, loss of appetite, nausea, vomiting, diarrhea, body aches, jaundice, dark urine, and/or light stools. Symptoms considered more specific to hepatitis, such as jaundice, are not always present. Diagnosis is difficult because of the overlap of hepatitis A's general symptoms with those of other common illnesses, such as viral gastroenteritis.

The virus is transmitted person-to-person through the fecal-oral route. Transmission can occur from close personal contact (household members or sexual contact), contaminated food or water, or blood exposure.^{1,2} Prior to the 1995 advent of the hepatitis A vaccine, which confers greater than 90% immunity with one dose, there were typically 20,000 to 30,000 cases reported per year.^{3,4} After the vaccine was added to the recommended childhood immuni-

zation schedule, the yearly incidence of hepatitis A dropped by 95% from 1995 to 2011. However, a subsequent increase of 140% occurred between 2011 and 2017.⁴

In November 2016, California first identified an outbreak of hepatitis A among the homeless and drug-using populations. Since then, outbreaks have occurred in 29 other states, resulting in nearly 30,000 cases by January 2020; 61% required hospitalization and 302 individuals have died from their infections.⁵

In Arkansas, the first cluster of hepatitis A cases in this outbreak was identified in Clay County during February 2018 and was largely attributable to drug use. Through January 9, 2020, 450 individuals have become infected with hepatitis A, leading to 236 (52%) hospitalizations and three deaths. During this outbreak, 38 counties have reported at least one case. Clay, Greene, Craighead and Poinsett counties have the highest burden of disease. In recent months, sizable numbers of cases have also been observed in Jefferson and Washington counties.

Demographically, this outbreak's cases have occurred more often in men than women (64% vs 36%).

More whites (92%) than any other race have been infected. Patient ages range from 2 to 80 (media 39). **Table 1** shows the risk factors and co-morbidities that have been identified among these cases. Most cases (60%) have reported drug use as a risk factor. Among these persons, 58% reported injecting drugs. A quarter of hepatitis A cases have tested positive for hepatitis C, substantially more than the prevalence in the U.S. general population (estimated at 1.7%).⁶ Other identified risk factors include MSM (2%), homelessness (3%), recent incarceration (5%) and food handlers with 21 cases (5%). Hepatitis A among food handlers potentially exposes restaurant patrons to the virus if proper sanitation and handwashing guidelines are not followed. Public notification and mass vaccination were warranted in response to some food handler cases. Foodborne transmission has not played a significant role in the spread of this outbreak.

Since February 2018, the Arkansas Department of Health (ADH) has continuously monitored and responded to the hepatitis A outbreak. Over 35,000 vaccinations have been given at over 30

TABLE 1. Characteristics, risk factors and co-morbidities of Arkansas hepatitis A outbreak, Dec. 2017–Dec. 2019

CHARACTERISTIC	NUMBER (%)
Drug use	271 (60%)
Self-reported injection drug use	156 (58%)
Hospitalizations	236 (52%)
Co-infected with hepatitis C	112 (25%)
Incarcerated in the past two months	22 (5%)
Food handlers	21 (5%)
Co-infected with hepatitis B	19 (4%)
Homeless individuals	15 (3%)
Men who have sex with men (MSM)	8 (2%)

free clinics to persons at risk for acquiring the virus. Another 15,000 vaccinations have been given as a result of food exposure.

Using a cost estimate from a previous hepatitis A outbreak that includes medical care, public health personnel and lost productivity costs, ADH estimates the cost of this outbreak may exceed \$5 million.⁷ In an effort to end this outbreak, ADH continues to investigate cases in a timely manner; communicate relevant information to the public, stakeholders and policy-makers; and collaborate with county judges and county health officers to identify and target high-risk populations for vaccination.

Many states, including Arkansas, have been responding to this outbreak for more than a year. It has proven difficult to address and contain among high-risk individuals, largely due to the challenge of effectively engaging and providing preventative care to high-risk groups. Drug users, MSM and homeless

persons are often marginalized and stigmatized. Additionally, the worsening opioid and stimulant epidemic, compounded with a scarcity of drug abuse treatment resources, has likely contributed to the perpetuation of the hepatitis A outbreak nationally and in Arkansas.

More cases of hepatitis A are likely in the coming months, but ADH and its partners will continue to work toward innovative strategies to combat the outbreak and stymie the virus' spread through targeted vaccination and education. ADH needs the help of all physicians to control this outbreak. We ask you to intervene in three ways:

- **Consider a hepatitis A diagnosis in any case** with typical symptoms; order hepatitis A IgM testing in those patients.
- **Identify and vaccinate those with risk factors** (illicit drug use, homelessness, MSM, etc.) for hepatitis A.
- **Report all cases of hepatitis A** (and other reportable diseases) to ADH at 501-537-8969.

Complete hepatitis A vaccination recommendations at <https://www.cdc.gov/hepatitis/outbreaks/InterimOutbreakGuidance-HAV-VaccineAdmin.htm>.

The Health Alert Network (HAN) provides notification regarding outbreaks or other public health events. Learn more about HAN and sign up for alerts at <https://hanregistration.adh.arkansas.gov>. ▲

Dr. Dillaha is ADH medical director for immunizations and outbreak response. Dr. Cima is ADH chief epidemiologist and associate director for science. Dr. Tumilson is ADH medical director for child and adolescent health. Mr. May is ADH health program specialist I.

REFERENCES

1. Purcell, RH, Wong, DC, Shapiro, M. *Relative infectivity of hepatitis A virus by the oral and intravenous routes in 2 species of nonhuman primates.* J Infect Dis, 2002. **185**(11):1668-71
2. Fiore, AE, *Hepatitis A transmitted by food.* Clin Infect Dis, 2004. **38**(5): 705-15
3. Ott, JJ, Wiersma, ST. *Single-dose administration of inactivated hepatitis A vaccination in the context of hepatitis A vaccine recommendations.* Int J Infect Dis, 2013. **17**(11):e939-44
4. *Viral hepatitis surveillance: U.S. 2017.* Centers for Disease Control and Prevention. 2019; at: <https://www.cdc.gov/hepatitis/statistics/2017surveillance/pdfs/2017HepSurveillanceRpt.pdf>
5. *Widespread person-to-person outbreaks of hepatitis A across the U.S.,* CDC 2020; at: <https://www.cdc.gov/hepatitis/outbreaks/2017March-HepatitisA.htm>
6. Hofmeister, MG, et.al., *Estimating prevalence of hepatitis C virus infection in the U.S., 2013-2016.* Hepatology, 2019. **69**(3):p.144-51
7. Epton, EE, et.al., *Risk factors for hospitalisation and associated costs among patients with hepatitis A associated with imported pomegranate arils, U.S., 2013.* Public Health, 2016. **136**:144-51

AFMC WORKS COLLABORATIVELY WITH PROVIDERS, COMMUNITY GROUPS AND OTHER STAKEHOLDERS TO PROMOTE THE QUALITY OF CARE IN ARKANSAS THROUGH EDUCATION AND EVALUATION. FOR MORE INFORMATION ABOUT AFMC QUALITY IMPROVEMENT PROJECTS, CALL 1-877-375-5700 OR VISIT AFMC.ORG.

APRIL 2020

¹Fellow, Child and Adolescent Psychiatry, Division of Child and Adolescent Psychiatry, Department of Psychiatry, University of Arkansas for Medical Sciences, Little Rock, AR²Professor, Department of Child and Adolescent Psychiatry, Cambridge Health Alliance, Cambridge Hospital, Cambridge, MA³Program Manager, Research and Evaluation Division (RED), Department of Family and Preventive Medicine, University of Arkansas for Medical Sciences, Little Rock, AR

Withdrawal-Emergent Dyskinesia Sydenhams Chorea and PANDAS: One Syndrome or Three?

Abstract

This report discusses two cases of children who presented to an inpatient children's hospital with overlapping symptoms reminiscent of pediatric acute-onset neuropsychiatric syndrome associated with streptococcal infection (PANDAS), Sydenham's chorea (SC), and withdrawal-emergent dyskinesia (WE-D). When changes to antipsychotic doses were made, SC and PANDAS followed when said changes occurred in current or post streptococcal infection. As the resulting symptoms could be viewed as SC, WE-D, or PANDAS, it is hypothesized that the sudden onset of these rare conditions resulted from the reduction of antipsychotics in the context of post streptococcal infection, leading to a severe PANDAS syndrome.

Introduction

Withdrawal-emergent dyskinesia (WE-D) is a drug-induced movement disorder that is caused by abrupt discontinuation of dopamine receptor blocking drugs (DBRDs) such as haloperidol, risperidone, etc. WE-D usually disappears spontaneously in six to 12 weeks following discontinuation of DBRDs.^{1, 2} Cholinergic over activity and dopamine-acetylcholine fluctuations in the basal ganglia may lead to the dyskinesia.³ Diagnosis of pediatric acute-onset neuropsychiatric syndrome associated with streptococcal infection (PANDAS) manifests as an unusually abrupt onset, relapse and remitting course of neuropsychiatric symptoms in patients with a prior history of streptococcal infection. PANDAS can also be present without the presence of a streptococcal infection, positive ASO titer, or anti-streptococcal B antibodies and is referred to as PANS. Neuropsychiatric presentation of PANDAS may include obsessive-compulsive symptoms or tics, motor hyperactivity, and choreiform movements.⁴ Children with PANDAS may also present with cognitive dysfunction, hallucinations, and/or de-

lusions and movement disorders.⁵ We report on two cases of a combined presentation of WE-D and PANDAS, raising issues about differential diagnosis and the possibility that PANDAS was an exacerbating factor in the emergence of WE-D

Case One

An 8-year-old male with a history of fetal alcohol syndrome, disruptive mood disorder, attention-deficit/hyperactivity disorder (ADHD), and aggression presented with sudden onset, extremely severe choreiform movements of bilateral upper and lower extremities. He was transported from his local emergency department (ED) to another one at a tertiary children's hospital and ultimately placed in a pediatric intensive care unit (PICU). En route to the tertiary care hospital, he was given diphenhydramine 25mg, benztropine 1 mg, midazolam 2 mg, diazepam 2 mg, and morphine 4mg. Upon arrival in the tertiary care hospital ED, he was given benztropine 2mg IV and acetaminophen 487 mg PR. He was then transferred to PICU and has received benztropine 2 mg, risperidone 0.5 mg, and continued on lorazepam 2 mg Q4h. He was placed on dexmedetomidine 0.5mcg/kg/hr IV in the PICU.

Abnormal movements had started two weeks earlier after initiation of lithium 600 mg BID and discontinuation of risperidone 6mg, which he had been on for the last two years. He had been on and off risperidone for the antecedent five years without withdrawal issues. Medications on admission included buspirone 10 mg TID, clonazepam 3 mg QHS, clonidine 0.4 mg QHS, lithium 600mg BID, methylphenidate 10 mg QAM, propranolol 15mg TID, and topiramate 50 mg BID & 200 mg QHS. Patient had a history of chronic streptococcal infections; his admission anti-streptolysin O (ASO) titer was 696 (>200 IU is positive) and his anti-DNase B (ADB) was 2260. Creatine kinase (CK) was 4679 (150-499 U/L),

and on day two, CK went down to 2689. Patient had electrolyte abnormalities that included sodium 153 (136 to 144 mEq/L), and chloride 120 (96 to 106 mEq/L). He had a fever of 39.7 Celsius. During examination, the patient was thrashing both arms and legs and had involuntary mouth movements and facial grimacing. He was placed in four-point restraints to prevent any injuries.

After consultation, neurology diagnosed Sydenham's Chorea (SC). Neuroleptic Malignant Syndrome (NMS) may also be considered in the differential due to elevated creatine kinase and hyperthermia. Infectious disease team started penicillin 1.25 mu Q6 hrs daily and prednisone 40 mg Q daily to treat potential strep infection. Psychiatry-initiated quetiapine 25 mg titrated up to 125 mg BID, lorazepam 2mg Q6H daily, which resulted in a significant reduction of involuntary movements. At six months follow-up, patient continued to take prophylactic penicillin 250 mg BID and had no abnormal movements. Quetiapine was eventually switched to olanzapine.

Case Two

A 13-year-old male with a past history of tics, seizures, autism spectrum disorder, ADHD, and oppositional defiant disorder presented to a local ED with flailing, ballistic, choreoathetoid full body movements that were continuous except when asleep. The severity of his movements caused injury to himself and his mother. The onset of the movements seemed to coincide with decrease of quetiapine 300 mg to 200 mg that was in response to concerns about the seizure threshold following a first onset seizure. The patient had been stable on varying doses of quetiapine for five years prior to admission with no past history of any withdrawal syndromes when doses were decreased. The seizure was treated initially with levetiracetam and then lacosamide. He was sedated in the local ED with diphenhydramine, lorazepam, and diaze-

pam and then transferred to a tertiary children's hospital. On physical examination, there was facial grimacing and prominent choreoathetoid movements in bilateral upper and lower extremities. There was absence of rigidity, lip smacking/puckering, cog wheeling, dystonia, and hyperreflexia.

The mother reported the patient had a long history of recurrent streptococcal infections including a confirmed streptococcal infection several months prior to this admission, which was treated with a 10-day course of amoxicillin. The MRI was unremarkable, and the EEG showed mild slowing. Laboratory findings were remarkable only for elevated creatine kinase 661 (4-87 U/L) and mildly elevated CRP 22.8 (0.0-10.0 mg/L). His rapid antigen streptococcal test (RAST), ASO titre (< 25), and ADB titre (<86) were negative. WE-D from decreasing quetiapine dose and/or a movement disorder complicated by PANDAS is a plausible explanation of the patient's abnormal movements. Sydenham's Chorea is also high on the differential. Treatment was initiated by increasing quetiapine up to 200 mg PO BID, which led to gradual improvement of abnormal movements. A trial of antibiotic therapy was recommended by the psychiatry consult team; however, patient showed objective signs of improvement with quetiapine titration alone. At an outpatient three-month follow up visit, records indicate that the patient is stable on the quetiapine without any abnormal movements.

Discussion

It is postulated that neuro inflammation plays a major role in the etiology and pathogenesis of PANDAS.⁶ Serum IgG from patients with SC and PANDAS, which bind to components of the group A Streptococcus cell wall, have also been shown to cross-react with neuronal components in the basal ganglia caudate, putamen, and the globus pallidus.⁷ The PANDAS Consortium recommends conventional psychiatric treatment⁷ and targeted antimicrobial therapy⁸ for severe infections resistant to antibiotic therapy IVIG and corticosteroids.⁶

Both cases involved patients with a long history of complex and comorbid psychiatric diagnoses treated with multiple medications and changing doses of medications along with a concomitant history of recurrent streptococcal infections. In both cases, changes to the dose of antipsychotic, which had never been problematic previously, was followed by SC and PANDAS when the decrease in antipsychotic occurred during

current or post-streptococcal infection. These movements could be understood as either PANDAS, SC, or WE-D or a combination of all three conditions. Both patients responded to increasing doses of quetiapine. We hypothesize that the sudden onset of these three rare conditions resulted from the reduction of antipsychotics in the context of post-streptococcal infection, leading to a severe PANDAS syndrome. The clinical implication is that clinicians should consider prophylactic treatment with antibiotics for complex psychiatric syndromes with recurrent strep infection, take caution in reducing antipsychotics in this population, and that the presentation of SC may be a manifestation of a PANDAS syndrome.

References

1. Fahn S. The tardive dyskinesias. Recent advances in clinical neurology. 1984;4:229-60.
2. Klawans HL, Brandabur MM. Chorea in childhood. Pediatric annals. 1993;22(1):41-50.
3. Gardos G, Cole JO, Tarsy D. Withdrawal syndromes associated with antipsychotic drugs. Am J Psychiatry. 1978;135(11):1321-4.
4. Swedo S, Leckman J, Rose N. From research subgroup to clinical syndrome: modifying the PANDAS criteria to describe PANS (pediatric acute-onset neuropsychiatric syndrome). Pediatr Therapeut. 2012;2(2):113.
5. Toufexis MD, Hommer R, Gerardi DM, Grant P, Rothschild L, D'Souza P, et al. Disordered eating and food restrictions in children with PANDAS/PANS. J Child Adolesc Psychopharmacol. 2015;25(1):48-56.
6. Jennifer F, Susan S, Tanya M, C. DR, Dritan A, Kyle W, et al. Clinical Management of Pediatric Acute-Onset Neuropsychiatric Syndrome: Part II—Use of Immunomodulatory Therapies. Journal of Child and Adolescent Psychopharmacology. 2017;27(7):574-93.
7. Kirvan CA, Swedo SE, Kurahara D, Cunningham MW. Streptococcal mimicry and antibody-mediated cell signaling in the pathogenesis of Sydenham's chorea. Autoimmunity. 2006;39(1):21-9.
8. Margo T, Tanya M, James L, Richard S, Kyle W, Cynthia K, et al. Clinical Management of Pediatric Acute-Onset Neuropsychiatric Syndrome: Part I—Psychiatric and Behavioral Interventions. Journal of Child and Adolescent Psychopharmacology. 2017;27(7):566-73.

You take care
of Arkansas

**WE TAKE
CARE OF
YOU**

Security / HIPAA

Compliance

Medicare &
Medicaid Audits

Transactions

Medical
Malpractice

Employee
Matters

Fraud & Abuse

Physician
Contracts &
Compensation

Operations &
Management

Private Wealth
Services

FRIDAY
ELDREDGE
& **CLARK** LLP

*Taking care of all the legal
needs of medical providers*

www.FRIDAYFIRM.com

A nine-month-old male presents to his pediatrician with hyperpigmented macules of the arms, back, and abdomen that have been noticeable for the past three months. At birth, the child had a similar lesion present on the neck that has persisted.

These macules become raised and red “wheals” after bathing, pressure or exposure to the outdoor heat, causing significant itching and irritability. In addition, the lesions often flare at night, disrupting the patients’ sleep. The parents express concern that these markings are bruises that will not resolve, and request an investigation for possible abuse. No evidence for such is found. Subsequently, blood panels to investigate a concern for vasculitis, panniculitis or blood dyscrasias are performed and show normal results.

The most appropriate next step in the diagnosis and management of this patient’s condition includes which of the following?

- A. Reassure the parents, as this eruption represents urticaria pigmentosa, a cutaneous variant of mastocytosis that typically resolves spontaneously prior to adolescence. Prescribe 2.5% topical hydrocortisone for periodic relief of symptoms and educate the family on potential exacerbating factors.
- B. The lesions are café au lait macules. The physician should initiate genetic testing, looking specifically for mutations in the NF1 gene of chromosome 17 that are implicated in Neurofibromatosis Type I (Von Recklinghausen disease).
- C. Reassure the parents that the marks on the child’s body are congenital nevi, and that the signs of irritability with heat exposure are developmentally appropriate responses of young children to previously unrecognized stimuli.
- D. Immediate biopsy of the lesion(s) to confirm the diagnosis of systemic mastocytosis. Begin systemic corticosteroids to mitigate symptoms and minimize the risk of anaphylaxis.

is the most common presenting variant of mastocytosis in the pediatric population, accounting for more than 80% of mastocytosis diagnoses in this group. This condition can be divided into a polymorphic and monomorphic subtype. Polymorphic UP is characterized by multiple lesions that vary in shape and size and are typically located on the neck, face, back, abdomen, and/or extremities of the affected individual; in contrast, the monomorphic subtype is noted for lesions of uniform shape and size resembling lesions of the adult UP variant and generally carries a poorer prognosis with respect



to the extension of the disease into adulthood. The lesions of UP represent coalescing mast cells that over proliferate in response to various KIT gene mutations, most notably the D816V constitutive activating mutation. Urticaria pigmentosa is a clinical diagnosis resulting from a thorough history and physical examination; however, definitive diagnosis is confirmed with an H&E stain of the biopsied lesion. Diagnostic criterion requires more than 15 mast cells per cluster or scattered mast cells with greater than 20 mast cells per high powered field. It is not uncommon to find upwards of a 40-fold concentration increase in mast cells in the dermis of sampled tissue as compared to normal skin.

The clinical manifestations of UP in children are typically confined to cutaneous symptomology and are often exacerbated by heat (i.e. when the child

is exposed to a warm bath). Other culprits of mast cell stimulation include certain drugs (salicylates, NSAIDs, narcotics), exercise, various food-stuffs, and even local trauma or tactile stimulation (Darier’s sign). Darier’s Sign, a bedside test to help confirm the suspicion of UP, is wheal formation at the lesion elicited by firmly stroking one of the hyperpigmented macules. These stimuli provoke mast cell activation and degranulation, permitting the release of various molecules such as histamine, eicosanoids (prostaglandins and leukotrienes), and heparin, among other molecular intermediaries. These biochemical ligands act in coordination to target their respective receptors, initiating inflammatory messenger cascades that instigate the various signs and symptoms associated with mast cell degranulation. Pruritus, erythema, and edema quickly ensue. Though UP is defined by mastocyte containment within the skin itself, systemic signs such as fatigue, nausea, and vomiting can present in these patients as well.

Treatment of UP is largely targeted at symptom management. Traditionally, the literature has suggested that the condition will spontaneously resolve in over 50% of cases before the child reaches adolescence. However, this consensus has recently been challenged, as some studies suggest that many of these reported cases of complete resolution have quite simply been overstated. Cutaneous symptom alleviation can be achieved with topical steroid ointments or calcineurin inhibitors. Antihistamines, specifically second-generation agents (i.e. cetirizine), have shown to have some clinical benefit in the prevention of skin-specific symptoms that arise as a result of UP. Educating the family and the patient about avoidance of potential triggers is paramount in future prevention of disease exacerbation. Interestingly, the presence of the KIT mutation has led some to suggest the potential therapeutic benefit of monoclonal antibodies and other classes of molecular inhibitors. Though UP is characterized as a benign process, yearly monitoring for progression of the disease into systemic mastocytosis should be initiated by evaluating for persistent abnormalities in the CBC, elevated serum tryptase of >20ng/ml, splenomegaly, and/or persistent lymphadenopathy. The debilitating effects of UP should not be understated, and prompt treatment for these patients will greatly reduce the burden of the disease while increasing the longevity of those affected.

Answer: A.)

Urticaria Pigmentosa (UP), otherwise known as Maculopapular Cutaneous Mastocytosis (MCM),

References

1. Klaiber N, Kumar S, & Irani A. (2017). Mastocytosis in children. *Current Allergy and Asthma Reports*, 17(11), 1-8. doi:http://dx.doi.org.libproxy.uams.edu/10.1007/s11882-017-0748-4
2. Heinze A, Kuemmet TJ, Chiu YE, & Galbraith SS. (2017). Longitudinal Study of Pediatric Urticaria Pigmentosa. *Pediatric Dermatology*. 2017;34(2):144-149. doi:10.1111/pde.13066
3. Vaz AS, Rodrigues J, Moura L, & Mascarenhas R. (2019). Early diagnosis of cutaneous mastocytosis in an infant: The importance of a clinical sign. *BMJ Case Reports*, 12(1) doi:http://dx.doi.org.libproxy.uams.edu/10.1136/bcr-2018-22883
4. Macri A & Cook C. (2019). Urticaria Pigmentosa (Cutaneous Mastocytosis). [online] Ncbi.nlm.nih.gov. Available at: https://www.ncbi.nlm.nih.gov/books/NBK482503/?report=classic [Accessed 10 Aug. 2019].

MAKE THE SMART CHOICE,

ADVERTISE IN:

THE Journal
OF THE ARKANSAS MEDICAL SOCIETY

For more advertising information, contact Penny Henderson at 501.224.8967 or penny@arkmed.org

Medical Board Legal Issues?

Call
Pharmacist/Attorney
Darren O'Quinn
1-800-455-0581

www.DarrenOQuinn.com

The Law Offices Of
DARREN O'QUINN PLLC
Little Rock, Arkansas



We provide peace of mind
so you can, too.

We've been addressing the legal needs of the Arkansas healthcare industry for almost 120 years.

- Medicare/Medicaid Reimbursement
- Stark I and II & Anti-Kickback Compliance
- Contracts & Business Transactions
- Government Regulations
- Operations & Management
- Medical Device & Pharmaceutical Products Defense
- Licensure Matters & Board Hearings
- Employment Issues
- Privileging & Peer Review
- HIPAA Compliance & Training
- Medical Malpractice Defense
- Drug Diversion Prevention

Your Northwest Arkansas
Health Law Team



WRIGHT LINDSEY JENNINGS

Rogers Little Rock wj.com





WELCOME TO THE AMS COMMUNITY

The following physicians have joined AMS between December 2019 and March 2020.

Abdel Rahman Ah Al Emam, MD - Little Rock	Kimberly M Macferran, MD - Little Rock
Justin Allen, MD - Heber Springs	Mohammad Malik, MD - Crossett
Kevin Barber, MD - North Little Rock	Katy Marino, MD - Little Rock
Dennis Beck, MD - Jonesboro	Ashley E. Mason, MD - Springdale
Rudolph Bowens, MD - Jonesboro	John Paul Mounsey, MD - Little Rock
Gary W. Bowman, DO - Greenbrier	Ethan Munzinger, MD - Searcy
Kristen Bracy, MD - Little Rock	Michael Shawn North, MD - Searcy
Laura Bradney, MD - North Little Rock	Senushi J. O'Sullivan, MD - Fayetteville
Jim Carmical, MD - Monticello	Ikemefuna Onyekwelu, MD - Little Rock
Katelyn Carmical, MD - Monticello	Arpit R. Patel, MD - Little Rock
Rodrigo Cayme, MD - Little Rock	Kristine Leigh Patterson, MD - Little Rock
J. Richard Duke, MD - Searcy	David James Pennywell, MD - Little Rock
Maureen Flowers, MD - Mountain Home	Clint Seymour, MD - Conway
Meera Gangadharan, MD - Little Rock	John R. Sims, MD - Little Rock
Katie Herring, MD - Hot Springs	David Mark Spiro, MD - Little Rock
John Freeland Jayroe, MD - Little Rock	Charles J. Stearns, MD - Little Rock
Allison Johnson, MD - Fayetteville	Eric J. Stewart, MD - Bentonville
William Gerald Jones, MD - Little Rock	Erica Stokes, MD - Little Rock
Jane Jee-Sun Kang, MD - Little Rock	Athanasios Stoyioglou, MD - Little Rock
Nasir Khan, MD - Little Rock	Tomoko Tanaka, MD - Little Rock
Julia Killingsworth, MD - Little Rock	Katherine Nicol Thurman Patel, MD - Little Rock
Matthew Kincade, MD	Cory Vaughn, MD - Springdale
Konstantinos Kossidas, MD - Little Rock	George Wang, MD - Russellville
Harry Kourlis, MD - Little Rock	Brianne Leigh Wehner, DO - Jonesboro
Aswini Kumar, MD - Fort Smith	Susan Wittman, MD - Little Rock
Jose Loyo-Molina, MD - Fort Smith	Steven H. Wright, MD - Pine Bluff
Jack Lyon, MD - Morrilton	Ramon Carlos Ylanan, MD - Fayetteville

Do you know other physicians who are not members? We encourage you to reach out to your peers and tell them what the Arkansas Medical Society means to you and why they should join you. Improving health care in Arkansas requires a special procedure - joining us. Visit ARKMED.org to join today.

Use of Thalidomide for Gastrointestinal Angiodysplasia – Not So Uncommon Anymore

Abstract

We report a 67-year-old African American female with extensive proximal small bowel arteriovenous malformations who developed GI bleeding refractory to endoscopic treatments. Her GI bleeding resolved after initiation of thalidomide. Thalidomide is a known teratogenic drug with suppressive action on tumor necrosis factor alpha and an effective inhibitor of angiogenesis, which was shown to be efficacious in treatment of gastrointestinal vascular malformations refractory to other interventions.

Case

We present a 67-year-old African American female who initially presented to an outside hospital stating that she was intermittently having dark, tarry stools for several months and started having fevers, chills, fatigue, and malaise for two weeks. She was found to be febrile to 102° F and hypotensive with a hemoglobin of 4. She was transfused, started on broad spectrum antibiotics, and admitted for workup of GI bleed and sepsis.

She has a past medical history significant for recurrent diverticulitis with perforation requiring hemicolectomy with ostomy placement with subsequent reversal 30 years ago, hypertension, hypothyroidism, insulin-dependent type 2 diabetes, obstructive sleep apnea, and end stage renal disease on hemodialysis. She was noted to have multiple arteriovenous malformations (AVMs) on a previous

colonoscopy. She reports no significant family history. Her daily medications include amlodipine/valsartan, insulin glargine, regular insulin sliding scale, cinacalcet, sevelamer carbonate, levothyroxine, lubiprostone, and simvastatin. Socially, she is not currently married and denies any smoking, alcohol, or illicit drug use history. Per outside hospital records, esophagogastroduodenoscopy (EGD) and colonoscopy showed no obvious source of bleeding and noted only some erosion in the stomach. Tagged RBC scan was

clindamycin and linezolid. She was transferred to our facility for further management of GI bleed and consideration for capsule endoscopy.

Upon arrival to our facility, patient was afebrile, normotensive, with normal heart rate, and on room air. Her abdomen was soft with no tenderness to palpation and normoactive bowel sounds present. She had a left internal jugular Quinton catheter in place. Capsule endoscopy was performed, which showed multiple areas of angioectasia and bleeding AVMs in the proximal small bowel (Figure 1), and

the patient underwent single balloon enteroscopy with argon plasma coagulation of multiple AVMs. Infectious disease was consulted for MSSA bacteremia and the patient was switched to cefazolin for a total course of six weeks. She underwent work up for bacteremia, which included removal and replacement of the Quinton catheter and trans-esophageal echocardiogram that revealed a mitral valve vegetation and perforation with moderate/severe mitral regurgitation. Cardiology and cardiothoracic surgery were consulted for evaluation for possible valve repair. The patient, however, continued to have melena during her preoperative workup, therefore cardiothoracic surgery was unable to perform mitral valve replacement since anticoagulation would be contraindicated with continued GI bleeding.

Our GI consultants recommended subcutaneous octreotide 100 mcg BID to decrease need for transfusions. Capsule endoscopy was repeated and showed active bleeding in small bowel most likely from small bowel AVMs with poor localization. Most of the lesions were noted to be in

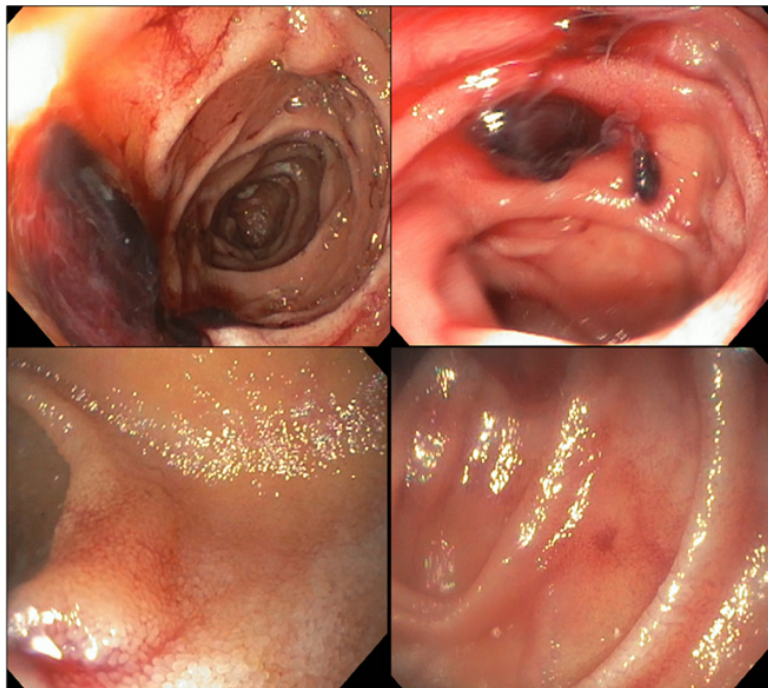


Figure 1: Extensive AVMs and angioectasia in the jejunum with active bleeding noted on serial small bowel enteroscopy studies (TOP). Angiodysplasia of the jejunum (BOTTOM).

performed, which showed hemorrhage in colon but again no obvious source of bleeding. She continued to have melanic stools and she required transfusions almost daily. Blood cultures grew methicillin-sensitive *Staphylococcus aureus* (MSSA), and her antibiotics were switched to IV

the proximal-to-mid small bowel. Repeat push enteroscopy was performed and showed multiple jejunal AVMs but could not rule out distal small bowel AVMs. General surgery was consulted to evaluate for possible bowel resection but felt that it was not feasible due to the extensive nature of the patient's AVMs, and they agreed with GI's recommendation to start octreotide.

Hematology was consulted for assistance for refractory GI bleed secondary to extensive AVMs, and they recommended a trial of thalidomide 100 mg PO daily for four months. Due to continued GI bleeding, the patient required a total of 12 units of packed red blood cells during her first month of her hospitalization prior to approval and commencement of thalidomide. GI continued to follow due to continued bleeding, and they did not feel that the patient would benefit from further endoscopic investigation or therapy. They recommended continuing medical management and suggested a three-week trial of estrogen therapy as a possibility. The patient required a total of 19 units of packed red blood cells during her 49-day hospital course. Her last transfusion was 12 days following initiation of thalidomide treatment, and patient subsequently had complete resolution of her melena.

Discussion

Effective treatment options beyond hormonal agents were quite elusive in the treatment of

gastrointestinal angiodysplasias until thalidomide came into the picture, especially considering the risk of recurrent bleeding and hospitalizations and the associated cost of morbidity and mortality resulting from this condition^[1-2].

Thalidomide is a known teratogenic drug with suppressive action on tumor necrosis factor alpha and an effective inhibitor of angiogenesis, which was shown to be efficacious in the treatment of severe intestinal bleeding as early as 2002 in patients with other chronic intestinal bleeding such as from Crohn's disease^[3]. Later it was shown to be effective for bleeding angiodysplasias^[4] and is now a viable option beyond routine endoscopic care in many hospitals. Of note in our case, the patient became discouraged by her continued melena one week into treatment with thalidomide and wished to discuss starting estrogen therapy in addition to continuing trial of thalidomide. Risks were discussed extensively with the patient regarding treatment with thalidomide and estrogen therapy concurrently. It was explained at length to the patient that concurrent treatment with thalidomide and estrogen therapy would present a likely unprecedented and uncharacterized risk for deep vein thrombosis. Additionally, it was explained to the patient that because she still had her uterus, she would be at risk for endometrial hyperplasia and subsequent malignancy. Ultimately, the patient elected to defer trial of estrogen therapy. Use with caution, as with any chemotherapeutic agent, and awareness

of risks and benefits gives many patients the option of outpatient therapy with marked reduction in the number of transfusions and hospital stays.

References

1. Junquera F, Feu F, Papo M et al. A multicenter randomized, clinical trial of hormonal therapy in the prevention of re bleeding from gastrointestinal angiodysplasia. *Gastroenterology* 2001 Nov; 121(5):1073-1079 [PMID: 11677198]
2. Ge ZZ, Chen HM, Gao YJ et al. Efficacy of thalidomide for refractory gastrointestinal bleeding from vascular malformation. *Gastroenterology* 2011 Nov 14; 141(5):1629-1637 [PMID: 21784047]
3. Bauditz J, Schachschnal G, Wdel S, Lochs H. Thalidomide for treatment of severe intestinal bleeding. *Gastroenterology* 2002; 122:A194.
4. Shurafa M, Kamboj G. Thalidomide for the treatment of bleeding angiodysplasias. *Am J Gastroenterol* 2003 Jan; 98: 221-222 [PMID 12526972]

JOIN THE FIGHT

ARKMED-PAC NEEDS YOU IN 2020

AMS is always fighting for Arkansas physicians and their patients.

Advocacy is our #1 job, but we can't do it alone. Visit **ARKMED.org/advocacy** to learn how you can get involved.



Board of Trustees Election Results

The elections for AMS District Trustees concluded on February 29. The following members were elected for two-year terms and will be confirmed at the Annual Membership Meeting on Friday, May 1, 2020. The trustees who are rotating off the board will also be recognized at the Annual Membership Meeting. Thank you to everyone who voted.

Officers Elected for 2020-2021:

President-elect: Danny Wilkerson, MD - Little Rock
Vice President: Seth Barnes, MD - Hot Springs
Secretary: George Conner, MD - Forrest City
Treasurer: Brad Bibb, MD - Jonesboro

AMA Delegates

Omar Atiq, MD - Pine Bluff
Alan Wilson, MD - Crossett

District 1:

Matt Haustein, MD - Jonesboro

District 2:

Garry Stewart, MD - Conway

District 3:

James DeRossitt, MD - Forrest City

District 4:

Mark Ramiro, MD - White Hall

District 5:

Bill Dedman, MD - Camden

District 6:

Mark Wren, MD - Texarkana

District 7:

Michael Hickman, MD - Hot Springs

District 8:

R. Dale Blasier, MD - Little Rock
Josh Chance, MD - Little Rock
Jennifer Doyle, MD - Little Rock
Amanda Novack, MD - Little Rock
Toby Vancil, MD - Little Rock

District 9:

Carolyn Reeves, MD - Centerton

For a complete list of AMS Board of Trustees, visit ARKMED.org/about/physician-leaders/.



For many clinics, group membership in the **Arkansas Medical**

Society eliminates the hassle of individual renewal and reimbursement for physicians and accounts payable staff and provides **EVERY physician** with the invaluable resources of the largest and strongest Arkansas health care advocate.

We invite groups of five or more physicians to take advantage of the AMS Group Membership Program. Our goal with this program is to be able to provide the practice management resources your practice needs and the advocacy that the physician needs in one group benefit.

THANK YOU TO OUR 2020 AMS GROUP MEMBERS



- | | | |
|-----------------------------|------------------------------|--------------------------------|
| Arkansas Asthma and Allergy | Community Physician's Group | St. Mary's- Millard Henry |
| Arkansas Cardiology | Doctors' Anatomic Pathology | Clinic |
| Arkansas Heart Hospital | Services, PA | Monticello Medical Clinic |
| Arkansas Methodist Medical | GastroArkansas | Mercy Obstetrics and |
| Center | CHI St. Vincent Heart Clinic | Gynecology |
| Associated Radiologists | Arkansas | NEA Baptist Clinic |
| All for Kids Pediatric Care | Highlands Oncology Group | Northwest Arkansas |
| Arkansas Otolaryngology | Hot Springs Radiology | Pathology |
| Center | Services | OrthoArkansas |
| Arkansas Pediatric Clinic | Jacksonville Medical Care | Ozark Orthopaedics |
| Autumn Road Family Practice | Johnson Dermatology | Premier Dermatology |
| Arkansas Urology | Little Rock Family Practice | Radiology Associates PA |
| Bowen Hefley Rhodes Stewart | Little Rock Pediatric Clinic | The Surgical Clinic of Central |
| Orthopedics | Magnolia Regional Medical | Arkansas |
| CARTI | Center | Southern Regional Anesthesia |
| Conway OBGYN Clinic, PA | MANA Physicians | UAMS |

**Interested in your group joining this list?
Contact Laura Haywood at lhaywood@arkmed.org or
501-224-8967 for all the details.**

Here's to 30 years.

As a mutual malpractice insurance company, we share a common interest with our policyholders in lowering their risk and protecting their practices. We are proud to say that for the last 30 years, we have helped the physicians and other medical professionals in Arkansas to do just that.

**Providing protection and support
for Arkansas is our natural state.**



svmic.com | 870.540.9161