APRIL 2020 | ISSUE 3

AMWA RESIDENT QUARTERLY NEWSLETTER

Quarterly newsletter for resident and fellows

INSIDE THIS ISSUE:

HIGHLIGHTS FROM AMWA'S 105TH ANNUAL MEETING

Day 1: President's Welcome & Keynote Speakers

Roberta Gebhard, DO, FAMWA
AMWA Immediate Past President 2020 - 2021

First day of the conference started off with a big welcome from AMWA's president, Roberta Gebhard, DO, FAMWA. She is the founder and current chairwoman of AMWA's Gender Equity Task Force. She graduated from University of New England College of Osteopathic Medicine in 1986. She completed an Osteopathic Rotating Internship at Normandy Osteopathic Hospital's in 1987, and an Allopathic Family Medicine Residency at Mid-Hudson Family Medicine Residency Program in 1990 where she received the LITZ Foundation Award for Outstanding Participation in Community Practice at graduation. Dr. Gebhard is active politically and advocates in Washington, DC for women's rights and gender equity, as well as funding for women and girls throughout the world.

Then we heard from both of our keynote speakers. Dr. Patrice Harris MD, MA addressed the impact of COVID-19 on the healthcare system, and Dr. Darilyn Moyer, MD, FACP discussed creating a more "JEDI" (just, equitable, diverse, and inclusive) healthcare environment for women in medicine.

Day 2 Highlights:

Gender Equity in Healthcare and Leadership

Nancy D. Spector, MD; Michael S. Sinha, MD, JD, MPH; Shikha Jain, MD, FACP

- 18% of dean of medical schools are women.
- 13% of CEOs of healthcare corporations are women.
- Dr. Shikha Jain gets lots of interest from medical students and residents about getting involved in her research regarding gender inequities in healthcare, to which she encourages them to TAKE ACTION - for example, do an implicit bias training and administer a survey before and after, and report findings.

"Confidence is contagious"

- DR. SASHA SCHILLCUT

AMWA The Vision and Voice of Women in Medicine Since 1915
American Medical Women's Association

Effective Communication for Healthcare Leadership

Margaret M. Hopkins, PhD; Elizabeth A. Rider, MSW, MD, FAAP, FACH; Karen Valencic, ME; Elise C. Carey, MD, FAAHPM, FACP

- Tips for effective communication:
  - When having to give feedback, first ask the other person "how do you think that went?" Often times, they are aware of what they need to improve on.
  - A more non-confrontational way to give feedback to a colleague or peer is to ask, "would it be helpful if I gave you some feedback?"
  - When resolving a conflict with another colleague or peer, step back and ask yourself, "what do I want to get across to them?" That can help guide the conversation.

Social Media for the Medical Professional

Jennifer Gunter, MD (author of The Vagina Bible)

- Tips for social media use for medical professionals:
  - Dr. Gunter goes by the rule of "3 degrees of separation" to protect patient information when talking about her job on her social media accounts.
  - Think of your social media account as your resume, because it is.
  - If you're interested in making an anonymous social media account, never assume anonymous is anonymous - there is always a way for people to identify you either through the people you follow or your location.
- IDEA FOR RESEARCH STUDY: It would be interested to look at medical students' social media accounts and usage, in relation to residency acceptance.

Day 3 Highlights

Last day of the conference included more talks about leadership essentials for women in medicine, as well as maximizing the power of social media.

It was followed by presentations about hot topics in medicine:

- HPV Vaccination and the Elimination of Cervical Cancer
- Vaping Lung Injury
- The Fastest Route to Strengthen Women Physicians' Resilience
- Endometriosis
- Genetic and Environmental Factors Contributing to Breast Cancer Risk
- Anesthesia and Contraceptives
- Obesity Treatment: a look at the USPSTF guidelines
- Addressing ED in a Relationship

"Connect to your purpose. Write it down. Talk to someone about [it]. [It will] give you power, joy, and fulfillment"

- DR. CHEMEN TATE (LEADERSHIP ESSENTIAL FOR WOMEN IN MEDICINE)

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RESIDENT POSTER WINNERS

Congratulations to all! And thank you to all those who participated!

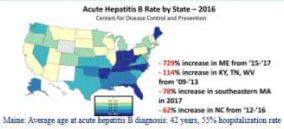
See all the posters here: https://bit.ly/AMWAVIRTUAL

Hepatitis B and the Opioid Epidemic: Opportunities to Increase Adult Hepatitis B Vaccination within the Primary Care Setting

Rita K. Kuwahara, MD MIH[1,2], Jeffrey Caballero, MPH[2], Asha Marhatta, MD MPH[1]

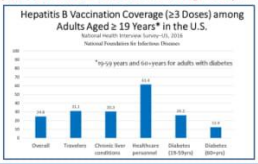
Connecticut Institute for Communities, Inc.[1] and the Association of Asian Pacific Community Health Organizations[2]

Introduction



Chronic Hepatitis B Virus Infection in the United States:

- Up to 2.2 million people living with chronic hepatitis B in the U.S.
- 2/3 of individuals with chronic hepatitis B are unaware of their infection in the U.S.
- 1 in 4 individuals with unmanaged chronic hepatitis B develop liver cancer, liver failure and/or cirrhosis
  - Individuals with chronic hepatitis B can develop liver cancer without cirrhosis
- Universal childhood hepatitis B vaccination in the U.S. began in the mid-1990s and became the first anti-cancer vaccine to be administered
- Only 25% of adults in the U.S. are vaccinated against hepatitis B



Purpose

- To determine primary care physicians' awareness of current adult hepatitis B (HBV) vaccination rates in the U.S.
- To identify opportunities to increase adult HBV testing and vaccination within the primary care setting.

Methods

► Primary Care Internal Medicine residents and faculty at a Connecticut Community Health Center:

-Completed a survey of their adult HBV testing & vaccination practices.

-Attended a session on current HBV testing & vaccination guidelines.

-Completed a post-test survey to determine their anticipated practice changes to address adult HBV testing and vaccination.

► Engaged in advocacy to raise awareness of adult HBV vaccination.

Results

Perceptions of Adult Hepatitis B Vaccination Rates:

- 0% Realized that the adult HBV vaccination rate is only 25%
- 86% Incorrectly believed that the adult HBV vaccination rate is 75%

Vaccinate All Adults at Risk for Hepatitis B AND All Adults who Request Vaccination

- 29% did not know that anyone requesting HBV vaccination should be vaccinated against HBV according to the Advisory Committee on Immunization Practices (ACIP)

Patients with HBV Risk Factors

- 86% Cared for at least 10-19 patients with at least 1 HBV risk factor in the past month

43% Cared for over 20 patients with an least 1 HBV risk factor in the past month, yet…

Adults at Risk for Hepatitis B

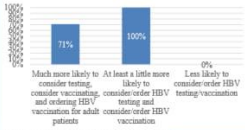
- HIV positive persons
- Persons who inject drugs
- Men who have sex with men
- Persons with chronic liver disease
- Persons with hepatitis C
- Persons with diabetes
- Persons with end stage renal disease and those on hemodialysis
- Pregnant women
- Persons on immunosuppressive therapy
- Persons from regions with a ≥2% prevalence of hepatitis B
- Incarcerated persons
- Healthcare personnel
- Household contacts or sex partners of persons with chronic hepatitis B

Pre-Intervention HBV Testing and Vaccination Practices

Never considered testing their patients for HBV in the past 1 month	**43%**
Never considered vaccinating their patients against HBV in the past 1 month	**29%**
Reported ordering HBV vaccinations for less than 5 of their patients in the past 1 month	**71%**

Post-HBV Clinical Guidelines Update

Reported Practice Changes Post-HBV Clinical Guidelines Update (%)



HBV Adult Vaccination Guidelines:

Advocacy Phase

♦ Employed advocacy techniques and coalition building strategies to raise awareness of the need to increase adult hepatitis B vaccination rates in the setting of the opioid epidemic

♦ Collaborated with Members of Congress to introduce a Resolution in the U.S. House of Representatives and U.S. Senate to Designate April 30 as National Adult Hepatitis B Vaccination Awareness Day

Conclusions and Next Steps

- There are significant opportunities to increase adult hepatitis B testing and vaccination in the primary care setting:
  -Routinely speak with patients regarding hepatitis B testing and vaccination.
  -Implement protocols to identify patients requiring hepatitis B testing/ vaccination, including integration into diabetes checklists, standing orders, etc.
- To prevent outbreaks of acute hepatitis B within the opioid epidemic, it is vital to raise awareness of adult hepatitis B testing and vaccination among clinicians at all levels of training, as well as in the community.

Study Limitations:

- Single center study site with small sample size
- Lack of local and national comprehensive hepatitis B surveillance data

Next Steps Include:

► Improving access to hepatitis B testing and vaccination by stocking the 2- and 3-dose hepatitis B vaccines in clinic and enabling individuals to access hepatitis B testing and vaccination in non-clinic settings.

► Developing systems to appropriately link those with chronic hepatitis B into care for ongoing management/hepatocellular carcinoma surveillance.

► Strengthening local, state and national hepatitis B surveillance systems.

► Building coalitions with national partners, Members of Congress and government agencies to develop a national adult hepatitis B vaccination and testing awareness campaign, particularly within the opioid epidemic.

References

Contact: KuwaharaR@ct-institute.org

Dapsone Induced Methemoglobinemia and Hemolytic Anemia in a Single Patient

Rina Yadav D.O., Jonathan Aeschliman M.D., Linda Huang M.D., Jennifer Mundell M.D.

St. Vincent Hospital, Indianapolis, IN

INTRODUCTION

- Dapsone is an antibacterial and anti-inflammatory medication.
- It is used to treat leprosy, pneumocystis pneumonia, dermatitis herpatiformis, and wounds.
- While effective, many serious adverse reactions are associated with Dapsone - Stevens-Johnson syndrome, toxic epidermal necrolysis, hemolytic anemia, methemoglobinemia, and agranulocytosis.
- Dapsone likely induces hemolytic anemia and methemoglobinemia (metHb) by direct oxidative stress.
- Symptoms of both metHb and hemolytic anemia include shortness of breath, skin discoloration, and even death.
- Dapsone use is associated with 42% of acquired methemoglobinemia cases.
- We present a patient with methemoglobinemia and hemolytic anemia after taking Dapsone for severe wounds.

CLINICAL COURSE

- A 77-year-old Caucasian female who presented to the hospital after 3 weeks of shortness of breath, hypoxemia, weakness, and skin discoloration.
- The patient reported a past medical history of chronic venous stasis with ulcers, atrial fibrillation, and hypertension.
- Patient reported taking Dapsone, just days before symptoms began, for non-healing leg wounds.
- Computed tomography angiography (CTA) ruled out pulmonary embolism, infection, and heart failure.
- Peripheral Smear: Presence of many bite cells (degmacytes) concerning for hemolytic anemia.
- Lab values demonstrated elevated MetHb level, LDH level, and reticulocyte count.
- Lab values demonstrated low hemoglobin and haptoglobin levels.
- Dapsone was stopped.
- LDH, methemoglobin, and hemoglobin levels return to normal limits.
- Patient was discharged without supplemental oxygen.

CASE PRESENTATIONS

Table 1. Patient's lab values on hospital presentation.

Lab Type	Patient's Result	Reference Range
MetHb level	14%	0-3%
Hemoglobin	8.8 g/dL	12-17.5 g/dL
LDH	1417 U/L	140-180 U/L
Reticulocyte Count	14.2%	0.5-2.5%
Haptoglobin	<8	30-200mg/dL
G6PD Level	10 units/g	5.5-20.5 units/g

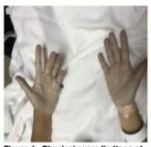


Figure 1. Physical exam findings of metHb include blue skin discoloration (Blue Man Effect).

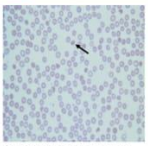


Figure 2. Peripheral smear may reveal "bite cells" to reflect hemolysis/hemolytic anemia.

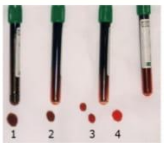


Figure 3. Greater percentage of metHb in blood results in altered blood pigmentation. 1Normal blood, 220% metHb, 350% metHb, and 480% metHb.

Table 2. Methemoglobin levels and their associated signs and symptoms.

MetHb Level (%)	Sign and Symptoms
<3	None
3-15	Blue/slate-gray skin
15-30	Cyanosis, chocolate-brown blood
30-50	Breathlessness, headache, dizziness, syncopal attacks
50-70	Tachypnea, lactic acidosis, arrhythmias, seizures, CNS depression, coma
>70	Death

PATHOPHYSIOLOGY

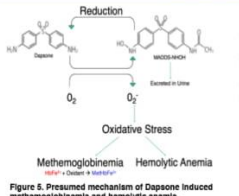


Figure 5. Presumed mechanism of Dapsone induced methemoglobinemia and hemolytic anemia.

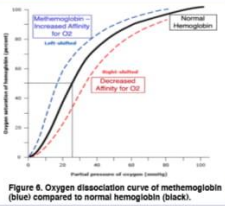


Figure 6. Oxygen dissociation curve of methemoglobin (blue) compared to normal hemoglobin (black).

DISCUSSION

- Dapsone was first studied as an antibiotic in 1937.
- Dapsone's use for leprosy treatment began in 1945.
- Since Dapsone's establishment, it has been used to treat a variety of medical illnesses, including pneumocystis pneumonia, dermatitis herpatiformis, and even non-healing wounds.
- Dapsone has significant side effects, two of which include hemolytic anemia and methemoglobinemia .
- Although methemoglobinemia and hemolytic anemia are known Dapsone adverse reactions, it is rare for a patient to have both conditions simultaneously.
- 138 cases of Dapsone induced methemoglobinemia were reviewed by Ash-Bernal et al between 1996 and 2011. Only 1 patient out of 138 suffered from both Dapsone induced methemoglobinemia *and* hemolytic anemia.
- The literature suggests that in G6PD normal patients, the mechanism of injury may be related to Dapsone dose.
- In our particular case, the patient took a high Dapsone dose (100mg twice daily) and is likely her etiology.
- Physicians should be cognizant of Dapsone dosing and the related adverse effects.
- Furthermore, clinicians should have a low suspicion for Dapsone induced methemoglobinemia and hemolytic anemia after recent administration of Dapsone.
- A peripheral smear, hemoglobin, LDH, methb level, haptoglobin level, and G6PD level should be used to confirm the diagnosis.

ACKNOWLEDGEMENTS & REFERENCES

I wish to thank Dr. Jennifer Mundell for her mentorship, guidance, and continued support throughout this project.

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Addressing Abuse Histories in Dyssynergic Defecation

Harini Gurram, MD • Darren M. Brenner, MD

Northwestern Medicine® Feinberg School of Medicine

Department of Medicine, Division of Gastroenterology and Hepatology, Feinberg School of Medicine, Northwestern University

Case

HPI: 27-year-old female who presented to gastroenterology clinic for **chronic constipation**

- life-long subjective bowel dysfunction exacerbated by **3 years of sexual trauma**
- Previously underwent **4 years intensive trauma therapy**
- Prior use of multiple laxatives without relief
- Never pursued pelvic floor physical therapy (PFPT) or biofeedback (BF) due to **distress surrounding invasive therapy**

PMH: post-traumatic stress disorder from sexual abuse, generalized anxiety disorder, chronic fatigue syndrome, irritable bowel syndrome-constipation predominant, chronic regional pain syndrome, vaginismus, postural orthostatic tachycardia syndrome

Physical Exam: notable for intermittent anxiety and tearfulness

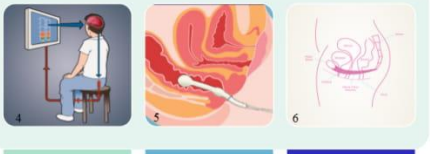
Prior Workup: Unremarkable serologies, imaging, and a negative colonoscopy

Diagnostic Testing:
Anorectal Manometry
- Elevated resting sphincter pressures (95-105 mmHg)
- Type 3 dyssynergic strain pattern
- Rectal hypersensitivity
- Failed balloon expulsion study

Background

- **Dyssynergic Defecation (DD)**: inability to coordinate abdominal and pelvic floor muscles to effectively evacuate stools[1]
- Common symptoms: straining, incomplete evacuation, passage of hard stools, decreased stool frequency[1]
- Constipation female: male ratio 2.2:1[1]
- Associated with increased psychological distress and decreased quality of life[1]

Treatment Mainstays



Biofeedback Therapy[4]
- instrument based
- 70-80% effective
- Success also depends on patient motivation

Biofeedback Techniques[1]
- Rectoanal coordination
- Simulated defecation with rectal sensory training
- Equipment: solid-state manometry probe, EMG probe, simulated balloon, home BF device

Pelvic Floor Physical Therapy[2]
- Assessment: visual inspection, vaginal and rectal digital palpation
- Treatment involves manual internal techniques and external core muscle stabilizing exercises

Abuse Associations

- Prevalence of sexual abuse 15-25% in general female population[3]
- Sexual abuse reported in 22-48% of constipated patients & increased incidence in pelvic floor dysfunction (PFD) patients[1]
- Physical abuse reported in 31-74% of constipated patients[1]
- Abuse history is common in women with PFD and functional GI disorders[2,3]
- Invasive nature of treatment mainstays can reinvoke feelings of prior trauma

Addressing Abuse[2]

References

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MISSED THE MEETING?

THE CME MODULES ARE STILL AVAILABLE TO VIEW ONLINE!
(LINK: HTTP://BIT.LY/AMWAVIRTUAL)
THEY WILL BE AVAILABLE FROM MARCH 2020 – FEBRUARY 2021 (11.5 CME HOURS)

CME MODULE 1: AMWA LEADS ACADEMY PART I

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CME MODULE 2: AMWA LEADS ACADEMY PART II

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CME MODULE 3: PRACTICAL TOOLS TO INCREASE YOUR LEADERSHIP POTENTIAL

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CME MODULE 4: EFFECTIVE COMMUNICATION FOR HEALTHCARE LEADERSHIP

.

CE MODULE 5: HARNESSING THE POWER OF SOCIAL MEDIA

.

CME MODULE 6: GENDER EQUITY IN HEALTHCARE AND LEADERSHIP

.

CME MODULE 7: OVERCOMING IMPOSTER SYNDROME

AMWA RESIDENT PANEL

AMWA residents and fellows participated in a live Q&A session during the AMWA Annual Conference for medical students! They talked about what it is like to be a resident in their specialty, and what advice they had for medical students.

PRESIDENT'S CORNER

Congratulations to the 10 new AMWA Resident Leaders!

Although all the positions are filled, below is a list of AMWA initiatives/committees that have an OPEN position for a Resident Representative:

1. COVID-19 with a Gender Lens
2. Wellness
3. Medical Humanities
4. Preventative Medicine

If you are interested in getting more involved with AMWA, please email ***<president@amwa-resident.org>***

Opportunity to Publish on Digestive Diseases in Women

The American Journal of Gastroenterology is seeking original research manuscripts and narrative reviews focused on the impact of digestive disease in women. Given that many functional GI disorders, autoimmune diseases, and pregnancy-related conditions preferentially affect women, the Journal is dedicating a special issue to women's health in the context of GI and liver disease. The deadline for submission is August 1, 2020.

For more information, please contact <journals@gi.org>

Enter to Win a Personalized High-End White Coat! (Retail Price $172)

Enter the $10 raffle for your chance to win a personalized MEDLITA white coat, known for its sophisticated style with fluid-repellent fabric.

Enter by **May 5, 2020**, for a chance to win!

Link: https://www.amwa-doc.org/product/white-coat-raffle-by-amwa-resident-division/

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CONFERENCE CO-CHAIRS

The AMWA Annual conference has been moved to **March 25-28th 2021 in Indianapolis** and of course we hope to see you all there! Your new resident conference co-chairs are Nandini Nittur and Sonia Bhandari Randhawa! Please contact us with any suggestions, input or questions! In order to see what you all would find useful, we've created a google form.

We look forward to hearing your input:

https://docs.google.com/forms/d/e/1FAIpQLSfEpexStfbxWvVw3H3cg_IzyXPIxaUTUKJYbWz7zrE82UscHg/viewform?usp=sf_link

See you at the next AMWA Annual Conference!

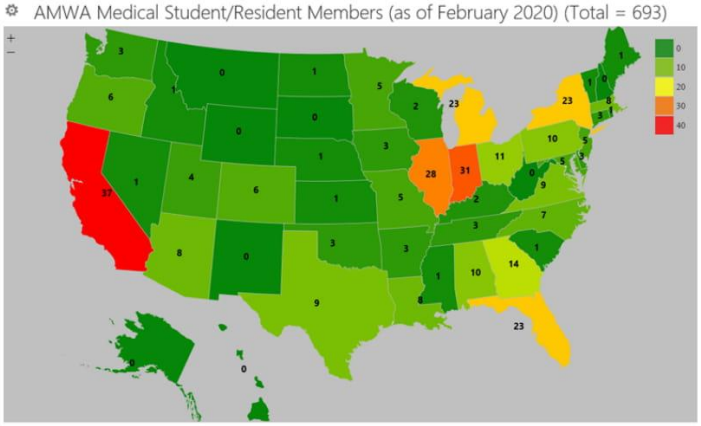
Mark your calendars: March 25-28, 2021 Indianapolis, Indiana

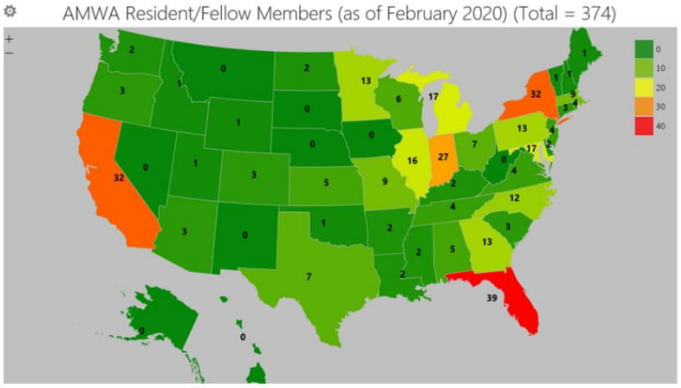
AMWA RESIDENT & FELLOW MEMBERSHIP DATA

Where are our resident and fellow members localized???

See below for a geographical map, by state, of where our resident and fellow members are localized. There is a strong representation of AMWA members in California, Illinois, Florida, and New York! If you are from one of the states - keep the representation strong!

Conversely, we are lacking members in the states of New Mexico, Nevada, Idaho, North Dakota, South Dakota, Montana, Nebraska and West Virginia. If you are from one of these states, consider recruiting fellow colleagues to join AMWA, or start a resident or fellow division branch. The benefit of connecting with fellow AMWA members is networking, support, resources, education, mentorship, scholarship, and more!





MONTHLY INITIATIVES

Did you know April is...

- Alcohol Awareness Month
- National Child Abuse Prevention Month
- National Donate Life Month
- National Minority Health Month
- Sexual Assault Awareness and Prevention Month
- Sexually Transmitted Infection Awareness Month
- Women's Eye Health and Safety Month
- National Public Health Week
- Sexual Assault Awareness Day of Action
- National Infertility Awareness Month
- World Health Day

Organize a volunteer day

Go to your local community culture center and offer to give a presentation to raise awareness and knowledge about a specific health topic.

In keeping with April's theme of National Minority Health Month, address a health care disparity specific to that population. Examples: HIV, hepatitis A, hepatitis B, colorectal cancer screening, breast cancer screening, cervical cancer screening, diabetes,hypertension, etc.

WE WOULD LOVE TO HEAR FROM YOU!

PLEASE SEND US UPDATES AND PHOTOS OF YOUR BRANCH'S ACTIVITIES TO: **RECRUITMENT@AMWA-RESIDENT.ORG**. WE WILL INCLUDE IT IN THE NEXT RESIDENT QUARTERLY NEWSLETTER. PHOTOS ARE ALWAYS WELCOMED!

EDITOR OF THIS ISSUE:
MONIQUE MUN, M.D.
AMWA RESIDENT DIVISION RECRUITMENT CHAIR 2019-2021

IF YOU WOULD LIKE TO CONTRIBUTE OR BE A PART OF THE EDITORIAL TEAM, PLEASE EMAIL: RECRUITMENT@AMWA-RESIDENT.ORG

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