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Osteopathic Family Physician

The official peer-reviewed publication of the American College of Osteopathic Family Physicians

SPRING 2025
Volume 17 | Number 2
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The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

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TABLE OF CONTENTS

SPRING 2025
VOLUME 17 | NUMBER 2

ALSO IN THIS ISSUE...

ACOFP 2025 AWARDS

UPCOMING EVENTS

JUN 6-8 2025 — Future Leaders Conference, Chicago, IL

DEC 5-7 2025 — Future Leaders Conference, Chicago, IL

EDITOR'S MESSAGE

A Welcome from the New Editor

Lindsay Tjiattas-Saleski, DO, MBA, FACOEP, FACOFP

As the newly appointed editor of the *Osteopathic Family Physician Journal*, I am honored to introduce myself to our readership. I am a dually boarded Family and Emergency Medicine Physician, and I also serve as the Associate Dean of Clinical Affairs at the Edward Via College of Osteopathic Medicine, Carolinas Campus. My journey with this journal began long before this new role, as I have been both a contributor and a reader since my residency graduation in 2012. I stepped into the associate editor role in 2020. Over the years, *Osteopathic Family Physician* has been a valuable resource to me as I navigated my own clinical practice, and I'm thrilled to now lead this platform that connects osteopathic physicians across disciplines.

I am also excited to welcome Dr. Michaeleena Carr, who will be stepping into the role of Associate Editor. Dr. Carr, also a dually boarded Family and Emergency Medicine Physician, has been a longtime contributor to the journal. Her experience and commitment to advancing osteopathic education will be invaluable in helping us continue to elevate the quality and impact of the journal.

Osteopathic Family Physician has always been more than just a publication—it is a vibrant space for osteopathic physicians to teach, learn, and share our collective experiences. It provides an invaluable opportunity for students, educators, and clinicians to publish and advance academically within our field. In these challenging times, when various aspects of the medical profession are under scrutiny and evolving rapidly, it is more important than ever for us to communicate effectively. Through this journal, I hope we can create an open forum where we share the most current and credible information, ensuring that osteopathic principles continue to be upheld and promoted in every facet of care.

I look forward to collaborating with each of you as we continue to grow and enrich the osteopathic community. As we move forward, I encourage respect, courage, and an open dialogue in the work we do together. Thank you for your ongoing contributions, and I'm excited for what we will accomplish in the future.

ONLINE-ONLY EXCLUSIVE: OBESITY MANAGEMENT IN PRIMARY CARE

Visit the *OFP* website to read "Obesity Management in Primary Care: A Joint Clinical Perspective and Expert Review from OMA and ACOFP," a comprehensive review article covering best practices in treatment of obesity, authored by experts from ACOFP and the Obesity Medicine Association (OMA).

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FROM THE PRESIDENT'S DESK

Why Family Medicine Matters Now More Than Ever

Gautam J. Desai, DO, FACOFP *dist.*

In a digital world where misinformation spreads faster than the truth, osteopathic family medicine has never been more essential. As the trusted first point of contact, primary care physicians are often the only consistent voice guiding patients through the noise. Whether it's social media–fueled myths about vaccines, misleading wellness trends, or the politicization of healthcare delivery, patients are overwhelmed. They're searching for reliable, compassionate care that sees them as whole people, not just symptoms. That's where we come in.

The keynote speaker at ACOFP's April convention, Mikhail Varshavski, DO (Doctor Mike to his 25 million followers on social media, https://www.doctormikemedia.com), uses his digital platform to counter health misinformation. An osteopathic family physician who is committed to educating his patients and followers, he commented on how so many people worldwide use the internet as their trusted source of medical information and advice. Accordingly, Dr. Varshavski is using his presence on the internet to provide a reliable source of medical information. His work can inspire us to use our own influence to do the same. Not all of us are trained in how to deal with the pitfalls of social media, but DOs are uniquely trained to provide comprehensive continuous care that considers physical, mental, and social health, using the principles and practices of osteopathy to build lasting relationships with our patients and communities. We don't just treat illness, but aim to prevent disease, and in doing so, help our patients make informed decisions grounded in science and empathy. The bond between a patient and their family doctor remains one of the most powerful tools in medicine. We can act as educators for our patients and as a trusted resource and sounding board for their health questions and medical needs.

In spite of the importance of our specialty, family medicine is facing a major challenge to our future workforce: unfilled residency spots. This year saw a match rate of 85% for family medicine, partially explained by an increase in residency spots available, but still below the match rates for many other specialties. This is more than a workforce issue—it's a public health crisis in the making. If we want to ensure that every patient has access to high-quality holistic care, we need to invest in the pipeline. That starts with mentorship, advocacy, and outreach.

We need to do everything we can to communicate the advantages of family medicine as a career for osteopathic medical students. We must actively engage students and pre-med hopefuls to consider family medicine not as a fallback, but as a first choice. We can share our stories, highlight the breadth of our practice, and create opportunities for shadowing and connection. Just one conversation can spark a career. One moment of encouragement can shape the future of our profession. Let's not underestimate the influence we carry when we say, "You'd make a great family doctor." Think of all the things that osteopathic family physicians do. Whether serving our country in the highest ranks of the military, providing sideline coverage at the Olympics, having practices focused on procedures/cosmetics, or just taking care of patients and communities, we do it all.

These moments of influence are just one of the reasons that I've made mentorship one of the focuses of my year as ACOFP president. I am also returning to another theme I touched on during my presidential address at the recent ACOFP convention: gratitude. It's easy to get caught up in the immediacy of what's next and what's most urgent. But it's just as important to pause and appreciate those who helped us get here.

So, I offer a small challenge: send a message today. Text a mentor who saw something in you before you saw it in yourself. Call a colleague who got you through a tough rotation. Email the residency director who gave you a chance. Let them know their impact mattered. In doing so, we not only honor our past, we strengthen the bonds that will carry this profession forward.

Family medicine is the foundation of our healthcare system, and we need more champions willing to carry the torch. By leading with clarity, compassion, and gratitude, we can cut through the noise—and help shape a healthier, more connected future for everyone.

Warm regards,

Gautam J. Desai, DO, FACOFP *dist*.
2025-2026 President, American College of Osteopathic Family Physicians

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* **Managing Patients on Opioid Analgesics:** Demonstrate best practices in patient education, risk assessment, and long-term opioid management, including tapering and appropriate discontinuation.
* **Addiction Medicine:** Analyze the clinical presentation of opioid use disorder (OUD), available screening tools, and treatment approaches, including MAT regimens and referral strategies.

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ACOi American College of Osteopathic Internists

The activity is supported by an independent educational grant from the Opioid Analgesic REMS Program Companies.

2025 *OFP* CALL FOR PAPERS

OFP is actively seeking review articles, brief reports, and clinical images of general interest to osteopathic family physicians, as well as related to our topics of interest listed below.

If you are interested in writing on one of the suggested article topics, or if you have another subject in mind, you can reserve the topic by emailing ofpeditor@acofp.org.

WOMEN'S HEALTH

- Advances in hormonal therapies and medical management for women's reproductive health
- Advances in treatment options for breast cancer and survivor care

ONCOLOGY

Innovations in Cancer Treatment

- New advancements in targeted therapies, immunotherapy, and precision medicine for cancer patients.
- Multidisciplinary approaches to cancer care, including the role of family physicians in managing treatment side effects.
- Public health campaigns and community outreach for cancer prevention.

Cancer Survivorship and Follow-Up Care

- Post-treatment care for cancer survivors: monitoring long-term side effects and recurrence prevention.
- Psychological and emotional support for cancer survivors in primary care.

CARDIOLOGY

Heart Failure Management

- Approaches to diagnosing and managing heart failure in family practice.
- Advancements in heart failure therapies, including medication and device management.

Prevention and Risk Stratification in Cardiovascular Disease

- Evidence-based strategies for cardiovascular disease prevention, including risk assessment and lifestyle changes.
- Statin therapy, aspirin use, and other pharmacological options for primary prevention.

UROLOGY

Urinary Incontinence: Diagnosis and Treatment

- Effective treatments for urinary incontinence, including pharmacologic, behavioral, and surgical options.
- Strategies for improving patient quality of life with incontinence.

Kidney Disease: Early Detection and Management

- Identifying and managing chronic kidney disease (CKD) in the primary care setting.
- Interventions to slow the progression of kidney disease, including lifestyle and pharmacological approaches.

RHEUMATOLOGY

Systemic Lupus Erythematosus (SLE): Clinical Insights

- Advances in the management of SLE, including new biologics and immunosuppressive therapies.
- Long-term care strategies for patients with lupus, including monitoring for flare-ups and organ damage.

SURGERY

Minimally Invasive Surgery: Current Trends

- Advances in minimally invasive surgical techniques and their benefits over traditional methods.
- Managing patient outcomes following laparoscopic or robotic-assisted surgeries.

PEDIATRICS

Developmental Delays and Early Intervention

- Identifying and managing developmental delays in early childhood.
- Multidisciplinary approaches to supporting children with developmental disorders such as ADHD, autism, and speech delays.

Common Pediatric Infections: Diagnosis and Management

- Vaccination schedules and recommendations for preventing infectious diseases.
- Immunizations: advancements, strategies for public health concerns

DERMATOLOGY

- Approaches to diagnosing and treating skin infections like impetigo and cellulitis.

Management of Hair and Nail Disorders

- Approaches to diagnosing and treating common hair loss conditions (e.g., alopecia areata, male pattern baldness).
- Nail diseases, including fungal infections, ingrown nails, and psoriasis.

HOSPICE CARE

Palliative Care in Family Medicine

- Approaches to providing compassionate palliative care for patients with terminal conditions.

Submit an Article

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REVIEW ARTICLE

Considerations for the Guidelines of Chronic Venous Insufficiency in Older Individuals

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KEYWORDS

Geriatrics

Veins

Ulcers

ABSTRACT

Chronic venous insufficiency is a common condition categorized by ever-increasing incidence, prevalence, and recurrence, despite treatment. Older individuals (adults 65 years of age and older) are most affected in terms of diagnosis and severity. Guidelines discussed include disease characterization and dictation of adequate treatment to prevent ulceration or profound infectious disease. The adjunctive role of OMT is summarized as well with an emphasis on maintaining functional independence of this vulnerable population.

INTRODUCTION

Chronic venous insufficiency (CVI) develops primarily in older individuals due to long-standing chronic disease such as obesity, diabetes mellitus (and associated peripheral vascular disease), chronic systolic heart failure (because of long-standing hypertension or atrial fibrillation), obesity, and other disease states. CVI is characterized by pain, skin discoloration, swelling, varicosities, and, if inadequately treated, venous stasis ulcerations.[1] Though most prevalent in older individuals, a tremendous 150,000 patients are newly diagnosed each year.[2] Venous insufficiency is most commonly due to venous valve incompetence, but may also be due to obstructed or regurgitated blood flow. Risk increases with increasing age, female gender, tobacco abuse (former or current), pregnancy history, ethnicity (whites and Hispanics most affected), obesity, and family history.[3] The most affected body region is the lower extremities, with venous leg ulcers (VLUs) showing burgeoning prevalence in direct proportionality to age.[4] Such wounds are seen with increasing frequency in older adults with increased functional dependence, particularly those in a skilled nursing or long-term care setting.[5] Despite proper treatment, VLUs have as high as a 50%-70% recurrence rate 6 months after initial diagnosis.

The associated cost burden of CVI is approximately $3.1 billion per year,[6] representing >2% of the annual healthcare budget in the United States.[6] In addition, CVI progresses to VLU in up to 3% of Americans 65 years of age and older. These costs are compounded by high rates of recurrence and wound mimics that make prevention, diagnosis, and treatment cumbersome.[7] Diagnosis is most often made using a bilateral lower-extremity venous duplex ultrasound in addition to a physical examination.[8] The physical examination is best performed with the patient standing to assess for positional fluid changes, superficial venous dilation, and any other obvious signs of venous valvular incompetence. If VLUs are identified, further differentiation between arterial, venous, lymphatic, and other mixed-vascular ulcer types is necessary. Diagnosis may be complicated in individuals with darker skin tone due to physician unfamiliarity with disease presentation in this setting. However, signs of precursors to VLU should be noted, such as varicosities, telangiectasias, and edema.

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 Print ISSN: 1877-573X doi: 10.33181/17203

The authors have no conflicts of interest or financial disclosures relevant to the topic of the submitted manuscript.

Even if properly diagnosed and treated, VLUs have a high recurrence rate.[10]

The Vein Consult Program found that of 99,359 participants, clinically significant chronic venous disease (CVD) was found in 63.69% of participants; the highest severity of CVD was found in patients aged 65 and older.[11] Additionally, the Bonn Vein Study concluded similar age-related CVD findings.[12] Of those with CVI, over 20,000 patients a year develop venous stasis ulcers.[5]

DIAGNOSIS OF CVI IN OLDER ADULTS

Diagnosis of CVI requires a lower-extremity venous duplex ultrasound. Reflux is measured in both superficial and deep veins. Though ultrasound is best obtained in the standing position (like ideal positioning for physical examination), it may be performed in the reverse Trendelenburg position if necessary; this modification often yields less accurate results, however. Tools developed to classify and stage CVDs include the Classification, Etiology, Anatomy, and Pathology (CEAP) Classification of Venous Disorders, the Venous Clinical Severity Score (VCSS), and the Short Physical Performance Battery (SPPB).

The CEAP Classification of Venous Disorders is the standard for grading levels of venous disease; it was last updated in 2020,[7] with stages ranging from telangiectasias (C1), varicose veins (C2), edema (C3), stasis changes (C4), and venous stasis ulcers (C5 and C6). (Figure 1)

Under Classification, or C, C0 represents no visible or palpable sign of venous disease. Next, C1 is telangiectasias and reticular veins. Following, C2 is varicose veins, which are visibly enlarged and twisted. As disease progresses, C3 shows leg edema, indicating advanced disease. Ultimately, C4 is identified by one of three scenarios: (1) changes to skin or subcutaneous tissue, especially hyperpigmentation due to hemosiderin deposition and superficial skin layer reactions with cytokine (particularly interleukin-6); (2) lipodermatosclerosis, inflammation leading to fibrosis or skin induration; or, (3) corona phlebectasia, dilated veins at the ankle. End-stages of CVI lead to VLU, characterized by C5 as a healed ulcer and C6 as an active or recurrent ulcer.[7] The remaining components of CEAP include etiology, anatomy, and pathology. Etiology, E, may be congenital, primary, or secondary. The most common etiology of CVI is valve incompetence. Site and depth of venous reflux are captured in anatomy, A. The downstream effect is addressed by pathophysiology, P, as obstruction; reflux; both; or neither.[7] Interestingly, using the CEAP classification, Sinikumpu et al concluded that CVD affects one in two individuals over age 70 years and with increasing severity.[13] The risk of disability and immobility due to CVD in older adults is magnified when superimposed with immobility, multiple comorbid disease states, and decreased wound healing ability, all of which precipitate the development and progression of both venous disease and chronic leg ulcers.[13]

The VCSS grades severity of venous insufficiency by incorporating variables such as pain; edema; varicose veins; skin pigmentation; inflammation; induration; the number, size, and duration of active ulcers; and the use of compression therapy, by scoring from 0 to 3. These scores indicate no absent, mild, moderate, and severe disease, respectively.[14,15] (Table 1)

The SPPB evaluates lower-extremity functionality.[13] The three activities assessed are standing from a chair, holding a post of slightly precarious balance, and gait speed. Each activity is scored from 0 to 4, with 0 being poor and 4 being the best. Results are summed with the maximum score being 12.[13]

FIGURE 1: Classification, etiology, anatomy, and pathology classification of venous disorders[7]

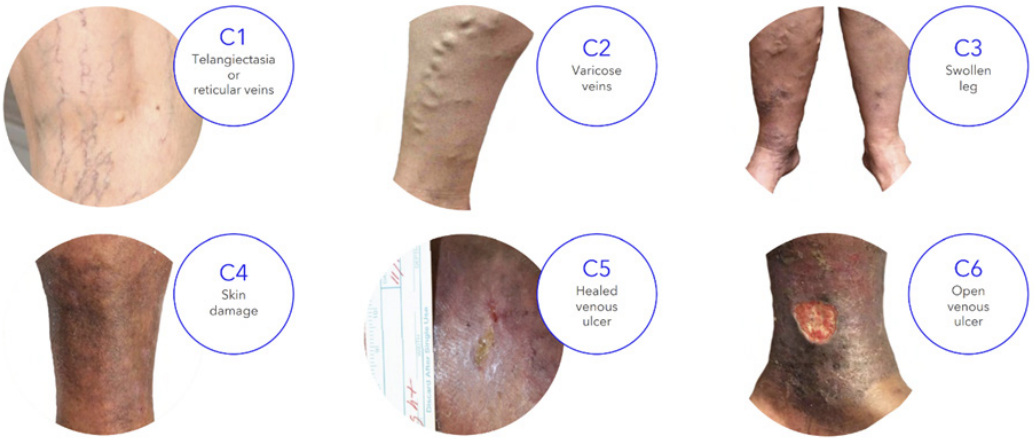

TABLE 1: Venous clinical severity score[14,15]

(GSV = greater saphenous vein; LSV = lesser saphenous vein)

Attribute	Absent (score = 0)	Mild (score = 1)	Moderate (score = 2)	Severe (score = 3)
Pain (frequency, limitations, analgesic use)	None	Occasional pain, not limiting activities, no analgesics	Daily pain, moderate limitation, some analgesics	Daily pain,severe limits, frequent analgesics
Varicose veins	None	Few, scattered; branched varicose veins	Multiple: GSV varicosity to calf or thigh	Extensive: GSV/LSV and calf/thigh
Venous edema	None	Evening ankle edema only	Midday edema above ankle	Morning edema above ankle
Pigmentation	None	Mild cellulitis; marginal area around ulcer	Moderate cellulitis, most of lower half	Severe cellulitis lower half and up; venous eczema
Inflammation	None	Focal (<5 cm), circummalleolar	Moderate cellulitis, most of lower half	Severe cellulitis lower half and up; venous eczema
# of active ulcers	0	1	2	>2
Active duration	None	<3 months	>3 months/<1 year	>1 year
Active size	None	<2-cm diameter	2- to 6-cm diameter	>6-cm diameter
Compression	Not used or non-compliant	Intermittent use	Most days	Full compliance (+ elevation)

GUIDELINES FOR THE TREATMENT OF CVI AND RECOMMENDATIONS FOR OLDER INDIVIDUALS

For older individuals, nonpharmacologic interventions are preferred to pharmacologic whenever possible to minimize the potential for drug-drug interactions or drug-disease interactions. Conservative nonpharmacologic therapy for CVI and VLU consists of elevation, compression therapy including stockings, and skin care.[10] For patients for whom conservative therapy is indicated, compression provides modest improvement in the healing process, but does not correct the underlying pathology, enabling recurrence and compliance issues. Furthermore, compression is not indicated for patients with venous ulcers with comorbid arterial insufficiency with an ankle-brachial index <0.05.[10] The Society of Vascular Surgery, American Venous Forum, and American Vein and Lymphatic Society have published new guidelines regarding the proper diagnosis, management, and treatment of CVI. These guidelines, published by Glovicki et al, are available open-source in the January 2024 issue of *Journal of Vascular Surgery: Venous and Lymphatic Disorders*. Summarizing this extensive document, the guidelines outline indications and contraindications for conservative management while emphasizing moving toward surgical management for more definitive management of CVD.

However, considerations of older adults are not explicitly addressed. Specific factors to consider include standing times in venous reflux studies, functional status (independence of activities of daily living and instrumental activities of daily living), ambulation status, the ability to lay prone or supine for procedures, arterial status, and other comorbidities. Due to the potential for hypertension and obesity to cause venous distension and eventual stasis as well as CVI, management of these conditions should also be incorporated as a concurrent treatment of CVD.

For symptomatic varicose veins with axial reflux, surgical management such as phlebectomy is recommended over conservative approaches, unless the patient has a clear contraindication due to a comorbidity.[16] The REACTIV trial showed that surgical therapy produced better results in cost-effectiveness, quality of life, and patient satisfaction than compression stockings.[16,17] Compression stockings in both older adults and the population in general pose a compliance issue and the guidelines confirm with strong level 1 evidence that surgical management is therefore preferred.[16,17] For accessory veins, concurrent phlebectomy with ablation is recommended, unless medically contraindicated.[16] This caveat affects older individuals and necessitates the need to undergo two separate procedures. Unless there is axial reflux and CEAP grade C3 or higher, ablation may not be necessary.[16] Endovenous ablation of a refluxing axial vein is recommended over chemical ablation due to long-term improvement and reduced recurrence.[16] This distinction may be less relevant in older individuals in whom long-term outcomes are less noticeable.

Non-FDA therapies may also potentially be recommended for those with CVD. Micronized purified flavonoid fraction (MPFF) or Ruscus extractions were shown to alleviate some edema and pain in the RELIEF trial.[18] Medical management for CVI-related pain includes venoactive agents such as flavonoids, calcium dobesilate, and red vine leaf extract.[3,16] Exploration and further studies for older individuals of medical management are needed both in terms of interactive medicine and the possibility of a medical approach. As effects of drug-drug interactions must be considered, any use of supplements should be advised with utmost caution.

TABLE 2: Summary of osteopathic manipulation treatments for lymphatic treatments

Technique	Direct or Indirect	Active or Passive	Mechanism of Action	Absolute Contraindications	Relative Contraindications
Myofascial release (MFR)	Direct or indirect	Passive	· Light, moderate, or heavy force, which engages fascia vs deeper tissue with constant pressure; piezoelectric changes relax and release restricted tissues (direct) · Guiding fascia along the path of least resistance until free movement is achieved (indirect)	· Treatment directly over fracture or dislocation · Serious vascular compromise · Local malignancy or infection	· Vascular compromise · Malignancy · Infection · Severe osteoporosis or osteopenia · Acutely injured muscles
Lymphatics (extension of MFR)	Direct	Passive	· Mechanical compression via physician's force leads to mobilization of lymphatic fluid	· Necrotizing fasciitis · Inability to make urine	· Acute hepatitis · Mononucleosis · Malignancy · Deep venous thrombosis · Severe heart failure

TABLE 3: Summary of osteopathic manipulation modalities for lymphatic treatments[21]

Lymphatic-directed treatment techniques

- Diaphragm opening – thoracic inlet/outlet opening, doming of the abdominal/respiratory diaphragm, presacral diaphragm release, and popliteal diaphragm release
- Pedal pump
- Effleurage/petrissage

Autonomic-directed treatment techniques Lymphatic-directed treatment techniques

- Occipitoatlantal (OA) release – myofascial release
- Occipitomastoid (OM) suture release – myofascial release
- Associated tender points – counterstrain
- Tissue texture changed over transverse processes in axial spine – postisometric muscle energy treatments

OSTEOPATHIC MANIPULATIVE TREATMENT OF CVI

While this is not mentioned in any guidelines, osteopathic manipulative medicine (OMM) is a safe and effective adjunctive modality from which patients with CVD may benefit. Osteopathic treatment that specifically targets the lymphatic system has been linked to improved wound healing.[19] A pilot study from 2018 demonstrated a clinical reduction in wound size (P = 0.15) of lower-extremity venous leg ulcerations. During the intervention phase, individuals received two 10-minute OMM sessions a week for 6-8 weeks.[20] However, due to a lack of larger more generalizable studies, OMT should be employed cautiously and in addition to standard-of-care treatments. A summary of lymphatic treatment techniques is provided in Table 2.

Specific treatment techniques that may be utilized include opening of diaphragms in a head-to-toe sequence (thoracic inlet/outlet, abdominal/respiratory diaphragm, presacral diaphragm, and popliteal diaphragm), pedal pump, and effleurage and petrissage techniques to mobilize fluid back to the lymphatic system and ultimately returned to the right side of the heart. These techniques are described in outside sources, such as *Nicholas Atlas of Osteopathic Techniques*, 4th ed.[21]

In addition to treating the lymphatic components of any underlying somatic dysfunction, autonomic contributions should also be addressed. Increased tone from parasympathetics occurs via vagus nerve inputs. This can be addressed with OA release as well as evaluation and treatment of compressed occipitomastoid sutures. Sympathetic innervation from T10-L2 due to increased tone leads to dilated arterioles of the muscles mediated by both cholinergic and adrenergic receptors of the lower extremities.

The authors are currently in the process of acquiring data for a project entitled "Effectiveness of the Osteopathic Pedal Pump in Reducing Lower Limb Volume in Older Adults With Chronic Leg Lymphedema," which is sponsored by an American Osteopathic Association grant; the goal is to publish findings and show the benefit derived by performing OMT in the appropriate settings as described.

CONCLUSION

Overall, the management of CVD in older individuals presents a multifaceted challenge that necessitates a nuanced approach. This paper expounds on the need for potential modifications to better serve the aging population. The complexities inherent in older individuals present unique challenges, such as functional and mobility limitations, comorbidities, and potential intolerance to specific procedures as well as adjustments to their VCSS scores to accommodate ongoing pain syndromes not related to venous disease. These factors must be carefully considered when applying guidelines. The management of older adults requires collaboration, ongoing research, and a commitment to improving their quality of life. Adhering to established guidelines while acknowledging the unique needs of older individuals provides more effective and compassionate care for the treatment of CVD. Osteopathic treatment that specifically targets the lymphatic system has been linked to improved wound healing and offers a nonpharmacologic treatment option without risk associated with adverse drug events. Further research with larger sample sizes and statistically significant outcomes remains ongoing, including by the authors of this manuscript.

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REVIEW ARTICLE

Patient Engagement in Type 2 Diabetes: Are We There Yet?

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KEYWORDS

Type 2 diabetes

Patient engagement

Adherence

Patient-centered care

ABSTRACT

Objective: Provide clinical recommendations to help patients engage in type 2 diabetes mellitus (T2DM) self-care

Methods: Review current literature to understand patient engagement (PE) and utilize case examples to demonstrate PE in common scenarios regarding diabetes self-care.

Results: T2DM is a chronic, progressive, lifelong condition that is largely self-managed. While this condition is generally preventable and wholly treatable, it continues to have significant negative personal and public health impacts. People with T2DM often reject the presence of their condition partly due to the many myths that stigmatize the T2DM population. If a person acknowledges that they have diabetes, they frequently do not understand the gravity of their condition in the early stages, nor the difference early intervention makes. Accordingly, it is no surprise that there are low rates of adherence to T2DM treatment plans. This paper seeks to address a critical need for nuanced diabetes care and education.

Practice Implications: Evidence-based strategies to engage patients serve as a first step in self-care in patients with chronic disease conditions such as T2DM. PE starts with meeting the patient where they are. This includes asking questions about what the patient knows and expects regarding the self-management of diabetes in daily life. It also includes shared decision-making toward the development of patient-centered plans. With these steps, clinicians can build effective therapeutic relationships with their patients.

CLINICAL CASE: SOME CHALLENGES OF PATIENT ENGAGEMENT

BR is a 54-year-old woman who has had type 2 diabetes mellitus (T2DM) for 6 years. She reports that her gynecologist sent her back to you. She was supposed to have undergone a minor procedure but was told that her glucose was "too high." Her HbA_{1c} is 9.0%. She reports that she hates it when people tell her she has diabetes. She does not want to have diabetes and tries to pretend it is not there. She reports that she does not feel her diabetes, yet it seems to get in her way. She has had many diabetes visits with you and has been offered several medications. She reports that taking the medications would mean that she "really" has diabetes, and she is "not there yet." Now, she needs a procedure and thus feels forced to address her diabetes.

Patients may be willing to receive medical advice and treatment, but carrying out the plan is more complicated. Our patient, BR, for example, has access to healthcare services and medication treatments but she does not take her medication as prescribed. Her HbA_{1C} level (9.0%) shows she struggles to manage her T2DM appropriately. The question then remains: what is her barrier to treatment-plan implementation?

WHAT IT MEANS TO LIVE WITH A CHRONIC DISEASE LIKE T2DM

Receiving a diagnosis of a chronic health condition such as T2DM places a great weight on a patient's shoulders. From the patient's perspective, diseases are often cured and conditions are permanent. What is less well understood by many patients is that the severity of some chronic

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 Print ISSN: 1877-573X doi: 10.33181/17202

Disclosures: JHS has served on advisory boards for Abbott, Bayer, Eli Lilly, Madrigal, Novo Nordisk, and Sanofi. EU and SCD have no conflicts to declare.

conditions like T2DM can be managed with self-care tools and strategies. For example, with daily glucose monitoring, problem-solving, and therapeutic lifestyle changes, patients with T2DM can enjoy relatively reasonable control of their T2DM and experience improved quality of life. Several studies have proven the efficacy of diabetes self-management.[1-3]

However, as a progressive condition, uncontrolled T2DM is associated with many complications that can lower quality of life and make management even harder. As such, we should assist our patients to gain control of their T2DM as early as possible in the disease course. Early glucose control has been shown to have legacy effects for many years to follow.[4]

This paper evaluates patients' experiences of living with diabetes, how these experiences affect patients' emotions and beliefs, and how much these psychological factors affect patients' decision-making regarding their active participation in self-care management.[5,6] Further, understanding these principles will allow the physician to better meet patients where they are and help them start on the road to acceptance and self-care.

THE SIGNIFICANCE OF DIABETES

Over 38 million Americans have diabetes.[7] Of those, 90% have T2DM).[7] Currently in the United States there are around 30 medications available to treat diabetes.[8] Despite the abundance of treatments, more than 49% of patients with T2DM do not meet the <7% HbA_{1C} goal.[9-11] Low levels of medication adherence are a major factor affecting HbA1C levels.[12,13] Low patient adherence has been well-documented among patients with T2DM.[13] The World Health Organization reported that "increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments."[14]

The Medication Possession Ratio (MPR) is a tool to assess medication adherence. One study found that only 60% of 1321 patients filled a prescription, and of those, only 34% were adherent to taking the filled prescription.[15] This does not necessarily mean that patients are ignoring physicians' recommendations or do not care. The are multiple contributors to low adherence including patient factors such as low literacy or numeracy and a lack of involvement in decision-making. Clinician-related factors might include unclear or inconsistent messaging, overly complex instructions or regimens, language concordance, and a lack of time to share all needed components of recommendations and instructions. There are also system factors, including access to care and education, and systematic limitations on time available for care and education.[16]

Patient-centered factors that preclude self-treatment include denial of the condition. In addition, there may be barriers to the patient's literacy. There may also be issues with communication, as well as limitations on the time required to counsel patients regarding acceptance and self-care engagement. It is also possible that goals communicated to the patient were not consistent with the goals of the patient.

Further, healthcare professionals' (HCPs) communication style regarding medication regimens may inadvertently have a negative impact on patients' adherence to their medication regimens. Heisler et al reported poor agreement between patients' and HCPs' diabetes treatment goals and strategies.[17] Unfortunately, some clinicians, frustrated with their patients' low medication adherence, may attempt to take on a paternalistic role.[18] In a one-directional conversation led by HCPs, where language is unfamiliar, patients may be unable to understand disease-related concepts or consider themselves coparticipants in the self-management process.[19,20]

Potential Solutions

Edelman and Polonsky, reporting on a high prevalence of nonadherence among patients treated with injectable and oral antidiabetic medicines, hypothesized that many issues could be addressed with appropriate education, respectful patient-physician interactions, and shared decision-making (SDM) between patients and HCPs.[12] Other studies reported that discussing patient-relevant disease content areas can increase patient engagement (PE) in self-treatment. It is also worth noting that patients with more confidence in their treatment regimen efficacy, and those who were more formally educated, were more willing to agree with their HCP regarding treatment goals and strategies.[21,22] In effect, strong agreement between patients and their HCPs results in better patient outcomes.[17]

Structured diabetes education is a critical part of treatment for someone newly diagnosed with T2DM. Diabetes self-management education and support (DSMES) has clear evidence to show that it improves diabetes control. Proven benefits of DSMES include: improved HbA1C levels (-1.5%), improved management of blood pressure and cholesterol levels, higher rates of medication adherence, healthier lifestyle behaviors (eg, better nutrition, increased physical activity, and use of primary care and preventive services), enhanced self-confidence to manage diabetes, fewer or less-severe diabetes-related complications, and decreased healthcare costs, including fewer hospital admissions and readmissions.[23] Despite these benefits, fewer than 7% of people attend and complete DSMES training.[23]

Patient-centered language is also essential regarding T2DM self-management. Using labels such as "diabetic" instead of "patients with diabetes" can negatively affect patients' perception of their identity and decrease their sense of control in diabetes self-management and other activities of daily living.[19,20] Wollny et al demonstrated that patient-centered communication substantially increased positive perception of SDM.[24] Patients are more likely to feel heard and understood when addressed and referred to as individuals instead of as diseases. This results in greater trust between HCPs and patients, which, in turn, leads to greater treatment-plan adherence.[17] Saying your patients' names when responding to their questions can convey a personalized approach rather than a one-size-fits-all approach.

Patients at the Center of the Clinical Intervention

Collaboration between patients and their HCPs has been demonstrated as a valuable strategy to improve PE in chronic disease self-management. What is critical to include in the collaboration may vary by condition and patient.

Patients report that their HCPs do not explain how prescribed diabetes management helps them achieve their goals.[25] Often there is a mismatch in priorities between patients and providers.[26] For example, information about goal HbA_{1C} levels, an important measure for clinicians, is insufficient to improve medication adherence and goal accomplishment.[27] While clinicians often explain how a medication works, patients would prefer to hear how they will feel on the medication and what good and bad effects they might experience. In addition, there may be other barriers (unrelated to the medication) that limit the patient's willingness to take it. Asking the patient about what they would like to do and if they have any concerns about the recommendations gets them involved in the decision-making process. Further, it is reasonable to expect that individual factors such as ethnicity, socioeconomic status, language, and number literacy will affect patient understanding and adherence. Therefore, acknowledging patients' unique needs and preferences could result in better clinical interventions and improved health outcomes.[28]

PATIENT ENGAGEMENT

The World Health Organization (WHO) defines PE as "the process of building the capacity of patients, families, caregivers, as well as health care providers, to facilitate and support the active involvement of patients in their own care, in order to enhance safety, quality and people-centeredness of health care service delivery."[29] Patients should reasonably expect HCPs to engage with them in the process of decision-making or any conversation while considering their health conditions, preferences, circumstances, and values.

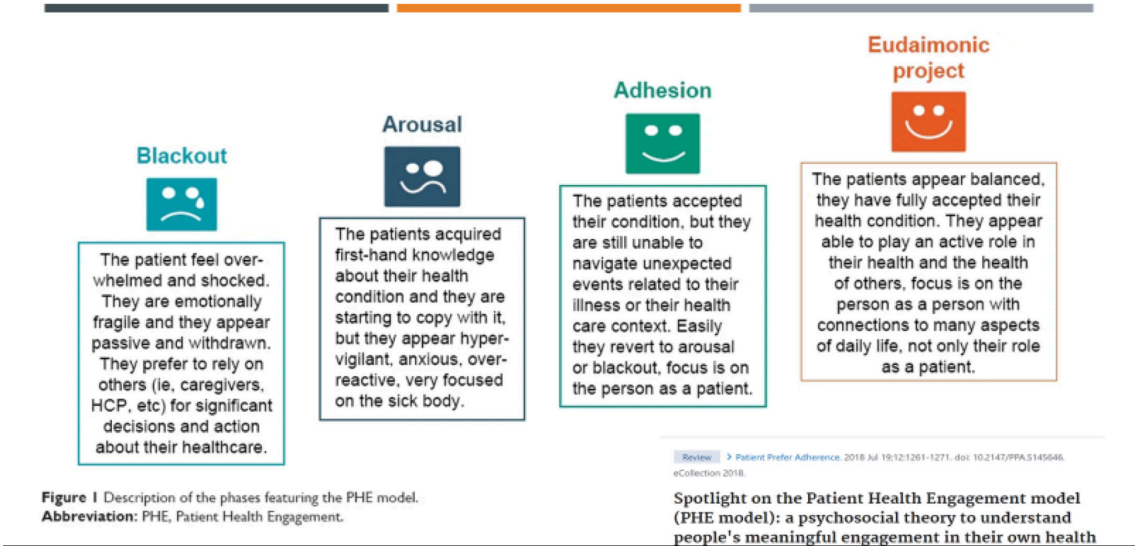
PE will make the patient more confident to talk about positive and negative experiences and be more open to negotiating and agreeing with the healthcare plan. Laurance et al summarized the aim of PE as shifting the clinical paradigm from determining "what is the matter" to discovering "what matters to you?"[30]

Graffigna and Barello, in their patient health engagement (PHE) model, describe the developmental phases in a patient who is newly diagnosed with a chronic disease condition such as diabetes.[31,32] The first phase is the blackout phase wherein the patient feels overwhelmed and shocked by the diagnosis. In the subsequent two phases, arousal and adhesion, the patient learns about their particular health condition and slowly comes to terms with it. The final phase is the eudaimonic phase, wherein the patient acknowledges the implications of the diagnosis, makes a better judgment of the pertinent lifestyle modifications needed, and incorporates disease management into their life goals. It should be noted that Graffigna and Barello explain that patients can vacillate among these phases when there are changes in lifestyle or health conditions. At each phase the authors report that patients need varying levels and types of support to be actively involved in their own care. For example, they may need basic information and more psychological support during the blackout phase, while they may need scaffolding in the latter phases. In each phase, trust between the patient and HCP should be paramount. Recognition of these common phases can help the clinician engage the patient where they are at. This may be more effective than an educational data dump that does not take the patient's priorities and patient phase into account.

Diabetes distress is a psychological comorbidity commonly associated with T2DM.[33] Polonsky describes diabetes distress as the emotional response to living with diabetes, the burden of relentless daily self-management, the potential of long-term complications, and the social and financial impact of living with T2DM.[34] The time needed to complete all recommended daily T2DM self-management routines is 66 minutes.[35] Adhering to this schedule can result in a major change in a patient's daily life and may be too big a burden to complete all at one time.

While physicians have an important role in helping people manage their diabetes, the actual time physicians have with patients is quite small. Patients typically have diabetes visits every 3 months for 15 minutes. In essence, this is a total of 1 hour per year focused on helping a patient manage a complex and progressive condition. If a patient perceives that their HCP is in a hurry during a clinical intervention, they will often refrain from asking

FIGURE 1: Phases of the Patient Health Engagement Model (reprinted with permission)



pertinent questions that may significantly improve self-management behaviors.[18] Needless to say, most diabetes care is self-care. Dedicating time at each visit to support patients with T2DM in managing their condition can help significantly. Other evidence-based components include using SDM, involving a team in patient care, and actively making the treatment plan patient-centered. With great support and patient-improved confidence in self-care, patients may advance to the adhesion and eudaimonic phases of engagement

Strategies to engage patients

Measuring a patient's level of engagement in the treatment of their health condition is a good start toward building effective self-care habits. To this end, Graffigna and Barello developed the Patient Health Engagement Scale (PHES) based on the PHE model.[31,32] The PHES can be used to assess PE status and identify potential modifications to maximize patient skills in self-management.[36,37] Diabetes distress can be measured using the Problem Areas In Diabetes (PAID) scale, a 20-item tool that assesses patients' perceptions of diabetes-related problems.[38] The scale evaluates several feelings that T2DM patients might be experiencing, such as fear, discouragement, and depression. The hierarchical model of medication adherence encourages measuring patient health literacy, beliefs about their illnesses and medications, and self-efficacy. An adherence diagnosis can also be included in the documentation during clinical interventions if it is helpful to remind the HCP of patient-related issues that should be included in treatment plans. If nonadherence is documented but not addressed, it can serve as a barrier for the patient and HCP in getting to the underlying challenges involved.

Patient empowerment–based education is another concept related to disease control. In particular, it has proven useful in the prevention of diabetes-related complications such as diabetic foot infections.[39] Patient empowerment–based education is defined as a process in which "individuals gain the knowledge, skills, attitudes, and self-awareness necessary to influence their behavior, thereby improving responsibility and autonomy and obtaining power to make informed decisions."[29]

Making the behavior changes necessary to manage diabetes (such as changes in nutritional choices, physical activity, and lifestyle) demands strong determination as well as open-mindedness.[40] Such behavior changes are more likely to be successful when they are taken on as collective efforts between patients and physicians. A team that includes physicians, nurses, pharmacists, diabetes educators, dietitians, and social workers better supports the patient and provides more touchpoints with the patient. Patients' needs cannot be fully addressed if there are gaps in their care requirements. Family involvement can also lead to better PE.[41,42]

It is important that HCPs allow for variability in duration of office visits. An office visit may require more time for one T2DM patient than another, depending on particular illness factors and complexity of care. The number of people with diabetes who are on several medications for diabetes and its related conditions has risen dramatically. At the same time, there was only a minimal increase in the duration of clinical visits.

Providing appropriate diabetes education takes time. When time is limited, this important step can be curtailed or even eliminated. National studies have shown that

only 5% to 7% of patients newly diagnosed with diabetes receive diabetes education support in the first year of their diagnosis.[43] Shared medical appointments have been demonstrated to provide an opportunity to help people with similar conditions support each other in the self-care process. These group training sessions can increase a patient's confidence while empowering others with similar experiences,[44] This finding suggests an urgent need for expanded program education with equal accessibility for patients with T2DM to improve self-management skills, decrease diabetes-related complications, and increase numeracy skills. In addition, online educational materials can help patients and physicians alike. The American Diabetes Association has a "Patient Engagement Toolkit" as part of its therapeutic inertia initiative that can be used by clinicians to better engage patients.[45]

The growth of diabetes technology has really helped patients see how their lives affect their diabetes. Tools like continuous glucose monitors (CGMs) can bring into sight what was once a mystery for many patients. Use of CGMs has been shown to improve outcomes and patient self-care in type 1 and type 2 diabetes.[46,47] As with all technology, physicians should be mindful of patient literacy and numeracy.[48]

What Awareness and Support Can Do

Bobby is a 48-year-old male. He has had T2DM for 4 years. He reports that he knew he was going to get diabetes, as everyone in his family has it. His diabetes was first identified from routine blood work. Currently he takes metformin, sitagliptin, and glargine daily to manage his T2DM. He feels like he is on a lot of medications and is not sure why his readings are not better. He does not check his glucose because he works in landscaping and his hands are always dirty. He is worried about stopping long enough to be able to get a reading. He is always surprised that his readings are high in the office as he is very physically active and works 8 to 10 hours a day most days of the week. Bobby reports that he tries to keep up with his medications—missing less than one dose per week. His current HbA1c is 8.8%.

Bobby was offered a CGM to try (FreeStyle Libre 14 Day). This would allow him to access his glucose readings at any time for a 2-week period. In addition, he could stop doing fingerstick glucose readings. He wanted to make sure the device was accurate and waterproof; we confirmed that it was.

When Bobby returned 2 weeks later, he was very excited. He said he now understood his diabetes and was able to "see" what was going on. He learned that the sweetened beverages he drank during the day kept his sugars high. He was also surprised that some lunches affected his sugar more than others, so he decided to change his lunch selections accordingly. At his next visit, his HbA_{1c} was 6.6%. He was able to get off insulin and feels like his diabetes management "runs like a well-oiled machine."

Discussion and Conclusion

One of the most significant factors in the treatment of any patient with diabetes is the degree to which the patient engages in their own self-care. Despite the name, successful "self-care" requires the investment of the entire team of HCPs. With a dedicated team that provides patient-centered care and well-selected resources, patients can reduce and even avoid diabetes-associated health complications. With education and engagement, we can build mutual understanding among HCPs and patients and improve patient outcomes.

PRACTICE IMPLICATIONS

Clinical intervention must start with meeting the patient where they are by asking questions about what the patient knows and expects when conducting diabetes self-management practices in the context of their daily life. In this way, patients will feel that they are not there just to follow instructions or accomplish the HCP's expectations. Instead, they will grow in confidence to manage their own health and, in turn, their own quality of life.

Top 10 things to improve PE in diabetes care and self-care[49]:

1. Recognize that each patient comes from a different starting place. Meet them where they are.

2. Adherence to treatment is complicated and includes patient, physician, and system factors. Be mindful of each.

3. Patient literacy and numeracy are common challenges among patients. Use a team approach to provide patients with support and education.

4. Structured diabetes education programs improve outcomes and adherence. Very few patients go to DSMES. We need to refer them much more often.

5. Use patient-centered language that is not stigmatizing or shaming.

6. Celebrate the effort (process), not just the outcome.

7. Make one treatment change at a time. This allows for incorporation into treatment routines and limits overwhelming the patient.

8. Utilize health education resources concordant with patient literacy, language, and culture.

9. Cost is a major barrier for most patients. Acknowledge this and adjust treatment plans accordingly.

10. Celebrate small patient victories. This can motivate the patient who puts a lot of work into diabetes self-care.

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BRIEF REPORT

Apathetic Hyperthyroidism as an Adverse Effect of Amiodarone for the Treatment of New-Onset Atrial Fibrillation for the Primary Care Physician

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KEYWORDS

Hyperthyroidism

Geriatrics

Amiodarone

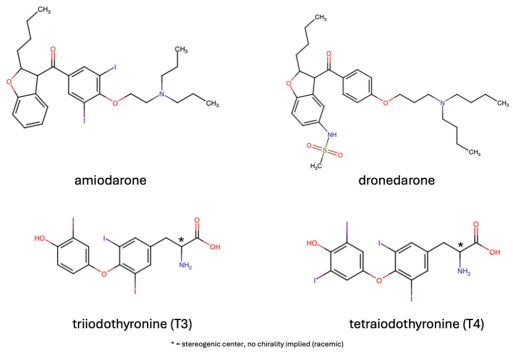
ABSTRACT

Amiodarone is the most used anti-arrhythmic drug worldwide.[1] Its effectiveness for the treatment of multiple arrhythmias including atrial fibrillation, supraventricular tachycardia, and ventricular tachycardia is well documented.[2] Older adults, however, are especially prone to adverse drug effects; amiodarone being no exception to this concern. Thyroid disorders, including both hypothyroidism and hyperthyroidism, as well as liver disease and pulmonary fibrosis are among the idiopathic conditions associated with its use. Presented here is a case report of a patient who developed apathetic hyperthyroidism due to amiodarone use, and the subsequent clinical course and management.

INTRODUCTION

Amiodarone is the most used anti-arrhythmic drug worldwide and is indicated for the treatment of multiple arrhythmias including supraventricular tachycardia, ventricular tachycardia, junctional tachycardia, atrioventricular nodal re-entry tachycardia (AVNRT), and atrial fibrillation.[1] Structurally, amiodarone is highly lipophilic owing to its primary structure containing a di-iodo meta-substituted benzene and aliphatic substituents. These structural similarities are shared with both triiodothyronine (T3 hormone) and tetraiodothyronine (T4 hormone). It is primarily metabolized by the liver in the cytochrome P450 system.[2] In addition, due to its sequestration in adipose tissue, amiodarone may have a terminal half-life of up to 140 days.[2] (Figure 1) Dronedarone is structurally like amiodarone but does not have iodine substituents.[1,3]

FIGURE 1: Chemical structures[1,3]
(Chemical structures drawn at: https://www.rcsb.org/chemical-sketch)



The predisposition to thyroid disease because of amiodarone use is due to iodine serving as a principal substrate for thyroid hormone synthesis (Figure 2).[3] Autoregulation of iodine prevents hyperthyroidism (Wolff-Chaikoff effect), but individuals with underlying thyroid disease lack the ability to regulate iodine uptake. Amiodarone toxicity manifests due to parenchymal deposition of iodine.[4] A specific mechanism of pathophysiology implicated includes intrinsic amiodarone[5] inhibition of mono-deiodination responsible for converting T4 to T3.

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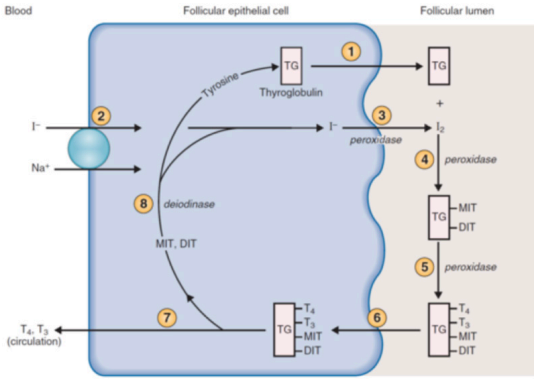
 Print ISSN: 1877-573X; Electronic ISSN 1877-5748 doi: 10.33181/17204

The authors have no conflicts of interest or financial disclosures.

FIGURE 1: Thyroid hormone synthesis[3]



There are two types of apathetic hyperthyroidism, specifically termed amiodarone-induced thyrotoxicosis (AIT): (1) type 1 AIT and (2) type 2 AIT. In type 1 AIT, hyperthyroidism occurs due to an increased synthesis of T3 and T4 secondary to excess iodine from an amiodarone source providing a substrate for thyroid hormone production. Type 1 AIT is typically seen in patients with pre-existing multinodular goiter or other autoimmune thyroid diseases. Regarding type 2 AIT, hyperthyroidism occurs due to a destructive thyroiditis resulting in excess release of preformed T3 and T4 without increasing hormone synthesis. This occurs due to a direct toxic effect of amiodarone on the thyroid and is typically seen in patients without prior or underlying thyroid disease. The hyperthyroid phase is often followed by a hypothyroid phase with an eventual recovery and return to euthyroidism.

Hyperthyroidism is a type of thyrotoxicosis that occurs when the thyroid produces and releases too much thyroid hormone. Apathetic hyperthyroidism occurs primarily in older adults. It is characterized by depression, lethargy, weight loss, and insidious onset with the absence of adrenergic symptoms (palpitations, anxiety, tremors, and heat intolerance) of classical hyperthyroidism.[6] Other symptoms may include proximal muscle weakness, goiter, atrial fibrillation, and congestive heart failure. The pathogenesis of apathetic hyperthyroidism is unknown or unclear, but potential causes include an age-related decrease in adrenergic tone and change in the autonomic nervous system, along with tissue resistance to the effects of thyroid hormone or lack of magnesium due to reduced dietary intake and gastrointestinal absorption.[7] Sporadic cases have been reported in the literature,[8] and although this condition is relatively uncommon, it is not rare, particularly in the elderly.[9] The case presented here illustrates type 1 AIT.

CASE REPORT

A 72-year-old female (at the time of initial clinical presentation) presented to her primary care physician with a complaint of excessive fatigue, shortness of breath, and progressive dyspnea on exertion with minimal effort. Her symptoms were insidious in onset over the previous year. An electrocardiogram (EKG) done at this visit showed atrial fibrillation with a heart rate of 111 beats/minute. She was seen the next day by cardiology, who ordered a 2D echo and initiated anticoagulation due to an elevated CHA2DS2-VASc score, along with a beta blocker. The results of the 2D echo showed an ejection fraction of 35%-40% with global hypokinesis. Functionally, she met criteria for class III New York Heart Association heart failure (Figure 3).[8]

FIGURE 1: New York Heart Association heart failure classification[8]

Class	Patient Symptoms
I	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation or shortness of breath.
II	Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, shortness of breath or chest pain.
III	Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, shortness of breath or chest pain.
IV	Symptoms of heart failure at rest. Any physical activity causes further discomfort.

Subsequent follow-up with her primary care physician 1 month later showed profound bradycardia with a heart rate of 32 beats/minute. Her physical examination at that time showed increased lower-extremity edema for which she was treated effectively with furosemide. Her beta blocker was gradually reduced to avoid rebound tachycardia. She was maintained on appropriate guideline-directed medical therapy, and her ejection fraction ultimately improved to 55%-60%. She underwent two attempts at cardioversion, which were unsuccessful. In addition, a cardiac catheterization was unremarkable for coronary artery disease. Due to the patient's preference to avoid invasive procedures, medical therapy with amiodarone was attempted. She was on the medication for approximately 6 months with modest improvement, and she therefore consented to cardiac ablation.

Despite medical management and cardiac improvement on laboratory and imaging studies, her clinical status continued to decompensate. With the cardiac symptoms effectively managed, she began to complain of new symptoms such as fatigue without shortness of breath and generalized weakness. She was referred to a physiatrist who performed a thorough neurological examination including muscle strength, deep tendon reflexes, and sensation. She was noted to have profound proximal muscle weakness. An electromyogram (EMG) of the bilateral upper and lower extremities was ultimately

unremarkable. A thyroid-stimulating hormone (TSH) level done at the time of amiodarone initiation was unremarkable; a repeat approximately 9 months later showed a TSH of 0.09 mIU/L (reference range: 0.4-4.5 mIU/L). She was referred to endocrinology who performed additional testing, including thyroid peroxidase antibody and thyroid stimulating immunoglobulin, all of which were unremarkable. The endocrinologist then initiated treatment with methimazole and her TSH achieved normal range at 1.05 mIU/L approximately 12 months after the previously abnormal test.

As part of comprehensive testing, a thyroid ultrasound was ordered by endocrinology revealing multiple thyroid nodules, two of which met criteria for fine needle aspiration (FNA) based on ACR TI-RADS [American College of Radiology Thyroid Imaging Reporting and Data System] criteria. Due to the likelihood that these nodules were hyperfunctioning autonomous hot nodules, biopsy was not pursued. An iodine-123 scan was ordered to try and determine if the thyroid nodules were hot or cold, recognizing that the scan may not be able to discern this due to previous amiodarone use. Amiodarone use can suppress iodine uptake on iodine-123 scans due to the large iodine content in amiodarone and can suppress uptakes for many months after discontinuing amiodarone due to the long half-life.[10,11] Amiodarone contains approximately 37% of iodine by weight (75 mg of iodine per 200-mg tablet); standard amiodarone therapy can provide more than 100 times the daily iodine requirement.[10]

Iodine-123 scans were ordered by endocrinology to assess thyroid function. The initial iodine-123 scan was done 5 months after stopping amiodarone but due to the very long half-life of amiodarone, iodine uptake on the scan was still suppressed from amiodarone and unable to determine if the nodules were hot or cold. A repeat iodine-123 scan was completed 9 months after stopping amiodarone but still showed suppressed uptakes from previous amiodarone use. A third iodine-123 scan is scheduled in the future to try and determine if the nodules are hot or cold. The workup process remains ongoing at the time of this writing. It is important to determine if the nodules are cold because this would warrant FNA biopsy of the cold nodules. However, if the nodules are hot, no FNA biopsy is indicated, as hot nodules have a low risk of malignancy.[11] Biopsy of a hot nodule may additionally lead to a false positive biopsy; the cited reference describes in detail the workup of a thyroid nodule and pathology classifications, as well as workup.[12] Clinically, with the addition of methimazole to her medication regimen, her symptoms significantly improved. Of note, when methimazole was held for 5 days per protocol prior to iodine-123 scans, she noted a recurrence and exacerbation of her initial symptoms.

Her active medical problems at the time of the apathetic hyperthyroidism diagnosis were hypertension, morbid obesity, obstructive sleep apnea (on nocturnal continuous positive airway pressure [CPAP]), osteoarthritis, thyroid nodules, and lung nodules. The previous atrial fibrillation and associated systolic heart failure resolved following the ablation and with medical therapy; repeat 2D echo showed restoration of ejection fraction to 55%-60%. Past surgical history included C-section, tonsillectomy, and cardiac catheterization. She smoked intermittently for approximately 40 years with a total of 15 pack-years, infrequently consumes alcohol, and denied any illicit drug use. Family history was unremarkable for any similar symptoms. Medications include apixaban, furosemide, dapagliflozin, spironolactone, atorvastatin, potassium chloride, and sacubitril/valsartan.

DISCUSSION

Apathetic hyperthyroidism is a unique and paradoxical presentation for hyperthyroidism in that the expected adrenergic clinical features are often lacking. Present more predominantly are fatigue, apathy, cognitive impairment (sometimes termed "brain fog"), and cardiovascular symptoms like atrial fibrillation. Whether atrial fibrillation is a presenting symptom or a consequence of adverse drug events (i.e., amiodarone-induced apathetic hyperthyroidism) is not effectively established. The use of amiodarone is increased in the older population (ages 65 years and above) for the treatment of anti-arrhythmias.[13] Recent literature sources note (paraphrasing)8: Amiodarone reduces the peripheral conversion of T4 to T3, resulting in modest reduction in serum concentrations of T3 (often to below the normal range) and modest elevation in serum T4 (often to above the normal range). TSH is typically slightly elevated early after initiation of treatment.[5] Approximately 2-3 months after amiodarone is started, the serum TSH level is an accurate indication of thyroid function. Thyrotoxicosis, of which apathetic hyperthyroidism is but one entity, should only be diagnosed in the presence of significant elevation of free T4, together with elevation in serum T3 and suppression of TSH in addition to the previously described symptoms. Sometimes serum T3 is at the upper range of normal rather than elevated, probably because of associated "nonthyroidal" illness in individuals 65 years of age and older, together with the block of T4 to T3 conversion seen with amiodarone.

TABLE 1: Summary of findings for apathetic hyperthyroidism

History
• Abrupt or recent onset of fatigue, anorexia, weight loss, apathy or depression, agitation, or cognitive impairment • Diagnosis of atrial fibrillation or other dysrhythmias/arrhythmias • Treatment of arrhythmias with amiodarone • Ingestion of excessive amounts of iodine • History of thyroid disease (Hashimoto's thyroiditis, Graves' disease, or others), abnormal thyroid laboratory studies, or abnormal thyroid imaging
Focused physical examination
• Goiter or thyroid enlargement • Proximal muscle weakness • Atrial fibrillation • Lower-extremity edema
Laboratory studies
• Thyroid panel including TSH, free/total T3, and free/total T4 • B12 and folate • Thyroid-stimulating immunoglobulin • Thyroid peroxidase antibody
Imaging/diagnostic studies
• Thyroid ultrasound – assess for nodules • Iodine-123 uptake scan – will see decreased uptake with residual amiodarone
Appropriate referrals
• Physiatry – EMG to rule out nerve damages • Endocrinology – thyroid disease management • Cardiology – arrhythmia management
Treatment
• Stop amiodarone • Initiate treatment with methimazole

Treatment involves thioamides – specifically, methimazole, which is structurally a 5-membered imidazole ring with a methyl group on the tertiary nitrogen in the imidazole and a thione group at position 2 – in addition to laboratory studies and imaging. The patient described in this case report was prescribed methimazole 5 mg daily.

A summary of history, physical examination findings, and workup for apathetic hyperthyroidism for primary care physicians is included in Table 1.

Apathetic hyperthyroidism is a rare syndrome predominantly observed in older adults associated with amiodarone use, though not exclusively. Its impact in this population cannot be understated due to the impact it may have on their functional status. In older adults, functional status is a major predictor of mortality. Two instruments are used to assess functional status in older adults: the Katz Activities of Daily Living (ADLs) and Lawton-Brody Instrumental Activities of Daily Living (IADLs). (Table 2)

TABLE 2: Functional status criteria – ADLs and IADLs[14,15]

Katz Activities of Daily Living	Lawton-Brody Instrumental Activities of Daily Living
• Bathing • Dressing • Toileting • Transferring • Continence • Feeding	• Ability to use the telephone • Shopping • Food preparation • Housekeeping • Laundry • Mode of transportation • Responsibility for own medications • Ability to handle finances

By considering a premorbid and posttreatment functional status, the urgency of identifying and treating this unlikely diagnosis is made apparent. In the case of this patient, she was independent of 6/6 of her ADLs and 8/8 of her IADLs. However, with onset of symptoms as described, she remained independent of both ADLs and IADLs but with considerable effort and occasional assistance. In addition to medical management, physical and occupational therapy were consulted due to concerns of physical deconditioning due to profound fatigue; however, her participation was limited. Upon treatment, her functional status significantly improved to the point where she was able to perform her ADLs and IADLs without any assistance or considerable effort. (Table 3)

TABLE 3: Pre- and Posttreatment functional assessment measurable outcomes

Criteria	Pretreatment	Posttreatment
ADL independence	6/6 independent but required considerable effort	6/6 independent
IADL independence	8/8 independent but required considerable effort	8/8 independent
Patient Health Questionnaire (PHQ) scores	PHQ-2: 4/6 PHQ-9: 11/27	PHQ-2:1/6 PHQ-9: N/A
Montreal Cognitive Assessment	30/30	30/30
Fall risk: timed up and go	17 seconds	10 seconds
Hours sleeping per day	10-12 hours	6 hours

CONCLUSION

The symptoms of apathetic hyperthyroidism are often insidious and lack the typical adrenergic hyperthyroid or thyrotoxicosis presentation. Symptoms may be masked by more likely diagnoses or geriatric syndromes, particularly in medically complex older adults with conditions such as cognitive impairment or depression. Amiodarone-induced apathetic hyperthyroidism, like the classical presentation of amiodarone-induced hyperthyroidism, can be characterized on laboratory studies by decreased

TSH, decreased serum T3, and increased T4 due to amiodarone's effects on the peripheral conversion of T4 to T3. The case presented here illustrates type 1 AIT. Apathetic hyperthyroidism should not be considered a diagnosis of exclusion, but other reversible or organic causes of associated symptoms should be ruled out. There are only a small number of cases reported in the literature as cited previously. The significantly prolonged half-life of amiodarone plays a large part in pathologic progression and the need for prolonged monitoring until resolution or cure of the disease.

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CLINICAL IMAGE

Ingested Foreign Body in a 2-Year-Old Boy

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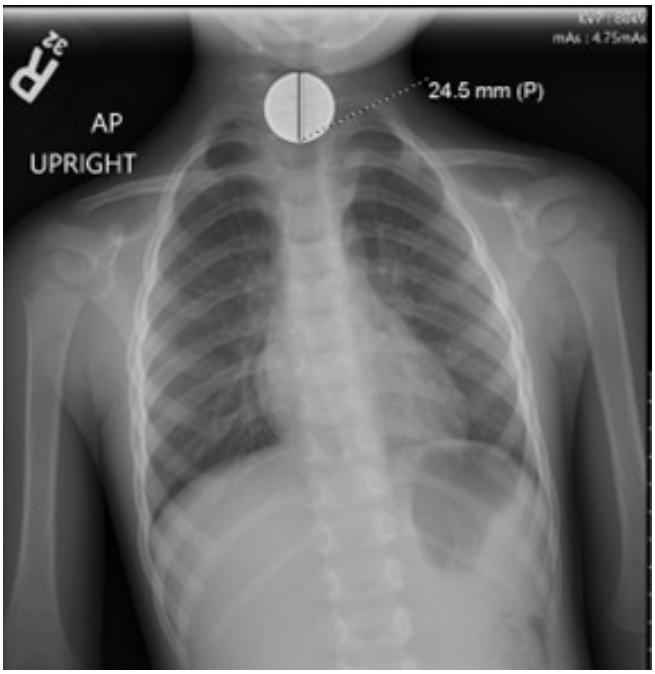
CASE REPORT

A 2-year-old male with history of episodic eczema presented to the emergency department following multiple episodes of emesis throughout the morning. The mother estimated that the patient had 5-10 episodes of nonbloody, nonbilious, mucus-predominant emesis. The mother also endorsed 1 day of rhinorrhea, sinus congestion, decreased appetite and fever (Tmax 101°F). The patient did not have any relief in symptoms or fever reduction with over-the-counter cold and flu medications. He maintained regular stool and urine output since symptoms began. Upon further questioning, it was determined that the child potentially swallowed a coin while playing earlier that morning. Mother was unsure of the size or type of coin he may have ingested.

On exam, the child was alert, active, and nontoxic-appearing. There was no sinus discharge, tympanic membranes were unremarkable, and the posterior pharynx was moist without erythema or exudates. His lungs were clear bilaterally without any stridor or signs of respiratory distress. The abdomen was soft, nondistended, and nontender. The skin was warm, dry, and had good turgor. Vital signs were stable, he was afebrile, not tachycardic, and maintained 100% oxygen saturation on room air. A respiratory panel was obtained, which was negative for SARS-COV-2, respiratory syncytial virus (RSV), influenza A, and influenza B. An anterior/posterior (AP) chest/abdomen/pelvis x-ray was obtained, which revealed a 2.5-cm coin at the level of the cervicothoracic junction visible in the coronal plane (see Figure 1).

FIGURE 1: Anterior Posterior x-ray revealing a coin within the cervical esophagus



QUESTIONS

1. What is the most common ingested foreign body in children?

a. Battery

b. Coin

c. Food

d. Magnet

e. Safety pin

Correct Answer:
b. Coin

Coins are the most commonly ingested foreign body.[1] Although any object can become impacted when swallowed, severity and management varies based on the foreign body characteristics and location.

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 Print ISSN: 1877-573X; Electronic ISSN 1877-5748 doi: 10.33181/17205

The authors have no conflicts of interest or financial disclosures.

2. What is an exam finding that indicates an urgent need for intervention?

a. Abdominal pain

b. Cough

c. Gagging sensation

d. Rash

e. Stridor

Correct Answer:
e. Stridor

Stridor can indicate that an object is lodged within the trachea posing potential for airway obstruction. Other concerning signs include drooling with an inability to manage secretions, which may indicate a complete esophageal occlusion, and crepitus along the neck, which could suggest esophageal perforation. Other symptoms can vary depending on the type of object and its location along the gastrointestinal (GI) tract, and may include a foreign body sensation, gagging, coughing, and abdominal discomfort.[1] Depending on the length of time since ingestion, patients can develop fever and other systemic symptoms due to sensitivity reactions to the object material.[1] It is important to note that even with a witnessed foreign-body ingestion, half of the patients may remain asymptomatic.[1]

3. What is the best definitive management of a confirmed coin within the esophagus?

a. Endoscopic retrieval

b. Induce vomiting

c. Observation at home

d. Surgical intervention

Correct Answer:
a. Endoscopic retrieval

Spontaneous passage is possible dependent on the size of the coin, age of the patient, and position of the coin in the esophagus at time of presentation. Coins lodged within the distal esophagus are more likely to spontaneously pass into the stomach; however, depending on size, intervention may still be needed to avoid entrapment distally.[1] Endoscopic intervention has shown great success with removal of upper GI foreign bodies, avoiding the need for open surgical intervention in most cases.[2] Medical management by inducing vomiting has not been shown to be effective and has potential to increase harm.1 The patient in this clinical scenario was subsequently transferred to a pediatric hospital for endoscopic retrieval.

DISCUSSION

Within the United States, there are more than 100,000 cases of ingested foreign bodies annually.[3] Of these cases, a vast majority occur in children, with the most ingested object being a coin.[1] While some ingestions are witnessed, children may swallow objects without caregivers being aware. More concerning, half of patients who do ingest an object will display nonspecific symptoms or remain asymptomatic.[4] This highlights the need to maintain a broad differential diagnosis when evaluating children with concern for potential ingestion, regardless of presenting symptoms.

On initial assessment, it is important to identify concerning signs and symptoms that would prompt emergent endoscopic intervention including stridor, inability to manage secretions, and crepitus with tenderness along the neck.[4] Stridor is suggestive of the object partially occluding the trachea or within the esophagus but large enough to cause tracheal compression.[2] Drooling may be seen with an ingested foreign body regardless of severity, however the inability to manage secretions is indicative of complete esophageal occlusion.[4] Pain along the neck associated with crepitus raises concern for esophageal perforation.[5]

It is important to promptly identify the ingested object, as not all objects are managed in the same manner. In a well-appearing child without concerning symptoms, it is recommended to proceed with a 2-view x-ray of the neck and chest.[6] Traditionally, it has been thought that ingested coins in the esophagus are seen in the coronal plane versus those in the trachea that are seen in the sagittal plane on radiography. However, there have been several case reports demonstrating variability between anatomic position and imaging findings.[7] Ingestion of multiple small magnets, button batteries, or sharp objects poses significant risk and are managed differently than a common coin ingestion.[8,9] While a singular magnet most likely can pass without intervention, two or more ingested magnets can attract each other, posing risk for severe complications such as obstruction or perforation.[10] Ingested button batteries can induce a current that causes localized hydrolysis of tissues leading to focal caustic burns and potentially perforation of the mucosa.[9,11]

Batteries and coins may be hard to differentiate initially on radiography, therefore it is important to properly identify each due to their variation in clinical management. There are a few key techniques to utilize when reviewing the x-ray if there is concern for a coin ingestion versus a button battery. A button battery will have a “double halo” sign around the edge, as well as a “step off” seen on lateral images due to the segmentation of positive and negative poles. This contrasts with a smooth or ridged edge that may be visible on a coin (see Figure 2).[11] There are few

documented cases of multiple coin ingestions at once resulting in a "stacked" coin orientation, which can falsely give a "double halo" appearance as seen with button batteries.[12]

FIGURE 2: Button batteries front and back with notable "step off" groove

The location of the coin along the GI tract dictates the next step in management. Coins with a diameter >25 mm are unlikely to pass through the pylorus.[13] The American quarter is 24 mm, which poses a threat of entrapment especially in those under the age of 5 years.[9] While coins lodged in the distal esophagus are more likely to pass spontaneously versus those in the proximal and middle esophagus, it is still recommended that asymptomatic esophageal foreign bodies be removed endoscopically within 24 hours.[1,9] Stable patients with a distal esophageal foreign body should be observed for 12 hours with repeat imaging prior to intervention to assess passive migration.[13] Coins located within the stomach do not necessitate immediate intervention. Stool straining for spontaneous passage within 1-2 weeks with a repeat x-ray at 2 weeks as an outpatient is recommended.[14] If passage does not occur, endoscopy may be needed.

If ingestion is suspected with concern for multiple magnets, button batteries, or an irregularly shaped or sharp object, prompt consultation with a pediatric GI or surgical specialist is critical. While awaiting their assessment, provide supportive care and prepare to transport the patient to a tertiary center as indicated.

SUMMARY

Ingested objects are common among pediatrics cases and may present with various nonspecific symptoms, potentially even no symptoms at all. It is imperative to identify patients with an acute obstruction and coordinate urgent removal. Other ingested objects that do not pose an initial threat should be properly identified using radiographic imaging and any known history from the ingestion. Management then varies depending on anatomic location, object material, and size characteristics. The most important takeaway is educating caregivers to identify objects with potential for ingestion and to maintain a safe environment in an effort to reduce the incidence of pediatric ingested foreign bodies.[15]

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PATIENT EDUCATION HANDOUT

RESPIRATORY HEALTH

How to Use Your Inhaler

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According to the CDC, as of July 2023, almost 25 million Americans have asthma. Inhaled medications will likely be used at some point as part of their therapy. Asthma medications come in many delivery devices, including metered-dose inhalers (MDIs, also called HFAs [hydrofluoroalkane], a type of propellant), Diskus inhalers, Flexhaler dry powder inhalers, Respimat inhalers, Twisthalers, Ellipta dry powder inhalers, RediHaler aerosol inhalers, Inhub inhalers, and dry powder inhalers. In addition, devices called valved holding chambers/spacers can also assist with using the delivery systems more effectively.

There are several reasons to use a spacer with MDIs; without a spacer, the medication dispensed can stop at the back of the throat and not actually get into the lungs where it's needed. Spacers allow patients to use the medication more efficiently during a symptomatic period. In addition, spacers help get the medication into the lungs, enabling patients to receive the full dose, even if they cannot coordinate dispensing the medication and breathing it in well.

This handout describes use of MDIs/HFAs, Diskus inhalers, and Ellipta dry powder inhalers, as these are the most common.

METERED-DOSE INHALERS/HFAs

These medications include albuterol sulfate, levalbuterol tartrate, ipratropium bromide, mometasone furoate, fluticasone propionate, fluticasone propionate/salmeterol xinafoate, mometasone furoate/formoterol fumarate dihydrate, beclomethasone dipropionate, and budesonide/formoterol fumarate dihydrate.

1. Shake the inhaler for 10 seconds with the base/mouthpiece resting on the thumb and the medication container resting underneath the index and/or long fingers.
2. Remove the cap from the base of the inhaler. If using a spacer, put the mouthpiece of the inhaler into the spacer device.
3. Take a breath in and then breathe out.
4. After breathing out fully, place the inhaler (or chamber) in the mouth and seal the mouth around the base.
5. While squeezing the thumb and index/long fingers together to dispense one "puff" of medication, breathe in slowly, deeply, and steadily.
6. Remove the inhaler from the mouth and then hold your breath for 10 seconds before breathing out slowly.
7. Repeat for as many puffs as are prescribed and rinse your mouth out when done (especially if the medication contains a steroid).
8. Return the cover to the mouthpiece until the next use.

DISKUS INHALERS

These medications include fluticasone propionate, fluticasone propionate/salmeterol, salmeterol xinafoate, and tiotropium bromide.

1. Open the device by keeping it flat and using your thumb to slide the cover open until it clicks and locks in position.
2. Use your thumb again to slide the dose lever away from the mouthpiece until it clicks.
3. Take a breath in and then breathe out.
4. After breathing out fully, place the inhaler in the mouth and seal the mouth around the mouthpiece.
5. Breathe in quickly and fully.
6. Remove the inhaler from the mouth and then hold your breath for 10 seconds before breathing out slowly.
7. Repeat for as many puffs as are prescribed and rinse your mouth out when done (especially if the medication contains a steroid).
8. Slide the cover back in place until the next use

ELLIPTA INHALERS

These include fluticasone furoate, fluticasone/vilanterol, fluticasone/vilanterol/umeclidinium, umeclidinium, and umeclidinium/vilanterol.

1. Slide the cover of the device until it clicks and loads a dose of medication.
2. Take a breath in and then breathe out.
3. After breathing out fully, place the inhaler in the mouth and seal the mouth around the mouthpiece.
4. Breathe in quickly and fully.
5. Remove the inhaler from the mouth and then hold your breath for 5 seconds before breathing out slowly.
6. Repeat for as many doses as are prescribed and rinse your mouth out when done (especially if the medication contains a steroid).
7. Slide the cover back over the mouthpiece to close until the next use.

If you have any questions about how to properly use your medications, you can always reach out to your osteopathic family physician, their office staff (nurse or medical office assistant, for example), or your pharmacist to walk you through proper use. For updated videos on how to use these or other inhaler types, visit the American Lung Association website.

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PATIENT EDUCATION HANDOUT

PEDIATRICS

Care Guide for Hygiene of Uncircumcised Boys

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WHAT'S NORMAL?

All boys are born with a protective layer of skin to cover the end of their penis. This is known as the foreskin. This layer of skin is present at birth and provides protection from rubbing and infection. It is natural for the foreskin to be tightly stuck to the end of the penis. This is known as physiologic phimosis. Often the opening of the foreskin is narrow and white buildup of shedding skin may be trapped close to the opening. Known as smegma, this buildup of shedding skin will naturally go away with gentle washing. The foreskin should never be forced back. Around age 5 years, the foreskin will begin to pull back from the end of the penis in most uncircumcised boys. This occurs through normal erections and regular cleaning. For some boys, the foreskin may not pull back from the end of the penis until age 16 years. Good hygiene is highly recommended to prevent infection or damage to the penis.

TIPS FOR DAILY HYGIENE

- During daily baths or showers, gently pull back the foreskin to rinse the end of the penis with water. Avoid forcing the foreskin back. It should not be painful to pull back. Too much force may cause scarring, swelling, pain, and increase the risk for unwanted health issues. Allow the area to dry and use a towel to remove extra moisture. This helps prevent bacteria from growing. Then, replace the foreskin back over the head of the penis. This allows the foreskin to protect the end of the penis from rubbing.
- For boys that wear diapers, change soiled diapers regularly to prevent skin irritation, risk of infection, and moisture buildup.
- As boys get older, teach them to gently pull back the foreskin when they shower or before they pee. After they are done, they should also make sure the end of the penis is dry. Then they should replace the skin over the end of the penis.

WHEN SHOULD I SEEK MEDICAL HELP?

Good hygiene is important to prevent unwanted health issues. However, it is important to know the signs of when to get medical help. One problem is pathologic phimosis. This is when the foreskin of the penis cannot be pulled back after age 12 years and the end of the penis is stuck behind the narrow opening of the foreskin. Another problem is when the foreskin is pulled back and gets stuck above the end of the penis. If it cannot be pulled down to cover the end of the penis this is a problem that can cause serious health issues. This is known as paraphimosis and requires a prompt visit with the doctor. Additionally, if your child has repetitive urinary tract infections, problems peeing, painful erections, or swelling, redness, pain, or severe color changes of the penis please seek medical help.

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Recognizing Excellence in the Profession

2025

The American College of Osteopathic Family Physicians (ACOFP) and the ACOFP Board of Governors recognize the following exceptional members for their contributions to the organization and the osteopathic profession.

OSTEOPATHIC FAMILY PHYSICIAN OF THE YEAR AWARD

The ACOFP Osteopathic Physician of the Year Award honors physicians who have made outstanding contributions to the osteopathic profession and local communities.

Gregory James, DO, MPH, CMD, FACOFP *dist*.

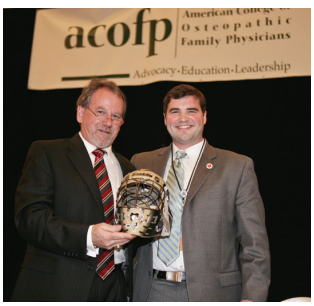
Dr. James received his Doctor of Osteopathic Medicine and a master's degree in public health from Nova Southeastern University in Fort Lauderdale, FL. He completed his residency at Sun Coast Hospital in Largo, FL, and is also board certified in geriatrics. He is currently the senior medical director with Optum senior community care. Dr. James is the immediate past chair of the American Osteopathic Board of Family Physicians. During his 20 years of involvement, AOBFP moved all required elements to digital platforms, and Dr. James has fought extensively against removing the words "Osteopathic Manipulative Treatment" from the certification process. Among other honors, Dr. James has received the ACOFP Educator of the Year Award, the Lifetime Achievement Award from the Florida Osteopathic Medical Association (FOMA), and was selected for several years as an AOA Mentor of the Year. He has served on the FOMA board and as a Florida representative to the AOA House of Delegates for over 20 years.

LIFETIME ACHIEVEMENT AWARD

The ACOFP Lifetime Achievement Award honors individuals for career-long service to their patients, osteopathic family medicine and ACOFP.

Kenneth A Heiles, DO, FACOFP *dist*.

Dr. Kenneth Heiles received his Doctor of Osteopathic Medicine from PCOM–Philadelphia in 1984 and completed his residency at Millcreek Community Hospital in Erie, PA. He is currently the campus dean at Kansas City University in Joplin, MO. His involvement with ACOFP began when he attended the annual convention in 1988 to charter the Arkansas chapter of what was at the time the American College of General Practitioners. Since that time, he has served in dozens of volunteer roles spanning almost every aspect of the national organization, as well as being involved in state leadership in Arkansas and Missouri. He served on the board of governors and became ACOFP president in 2010-2011. Dr. Heiles has provided leadership with the ACOFP Foundation since 2008, including several years on the executive committee, and is currently vice chair of the Assembly of Osteopathic Graduate Medical Educators (AOGME). Some of his past honors include the ACOFP Distinguished Service Award and Physician of the Year for Arkansas. In his personal time, he also volunteers for the Special Olympics for Southwest Missouri. His commitment to ACOFP would not have been possible without the support of his wife Michelle and his children. They keep him moving forward every day.



DIVERSITY, EQUITY AND INCLUSION AWARD

The ACOFP Diversity, Equity and Inclusion Award (DEI) recognizes osteopathic family physicians who make significant contributions toward enhancing DEI within the profession, honoring those who have demonstrated behaviors or led initiatives that foster these principles within diverse and underrepresented communities.

Carol A. Penn, DO, DABOM, FACOFP

Dr. Carol Penn earned her Doctor of Osteopathic Medicine from Virtua Rowan University School of Osteopathic Medicine in 2007 and completed her residency at St. Joseph's Hospital/North Philadelphia Hospital System. She is the director of tracks and electives and assistant professor of clinical sciences at Rocky Vista University Montana College of Osteopathic Medicine in Billings, MT. She is the chair of MCOM's DEI Committee, where she has introduced drop-in intergroup dialogues and has created several electives working toward creating an atmosphere of diversity of thought. She was a founding member of the ACOFP DEI Task Force, now the DEI Advisory Committee. She is currently the chair of the ACOFP Osteopathic Research Work Group, a member of the Health & Wellness Committee, and vice president of Mountain West, ACOFP. Thoughtfulness, compassion, and action have guided her in forging a path for equity and human connection. She has facilitated mind-body groups for communities across the country. Dance is her passion, and she is a member of several ensembles, using dance to further connection and inspire social change.

EXCELLENCE IN ADVOCACY AWARD

The ACOFP Excellence in Advocacy Award recognizes physicians who have significantly contributed their time and expertise to national healthcare policy issues and is presented in honor of Marcelino J. Oliva Jr., DO, FACOFP *dist*.

John R. Gimpel, DO, MEd, FACOFP, FAAFP

Dr. Gimpel has spent most of his professional career leading the National Board of Osteopathic Medical Examiners (NBOME) as a board member, president, and CEO. He has championed osteopathically distinctive assessment and advocated for the DO degree and credentials at the local, national, and international levels. He was a leader in the development of a distinctly osteopathic clinical skills examination. Dr. Gimpel received his Doctor of Osteopathic Medicine from PCOM in 1988. He says, "Advocating for DOs and DO students and our distinct, patient-centered, body, mind and spirit approach is easy...it is exactly what patients want and need, and our time has come to stand up and be proud of our distinction." His advocacy for the profession has earned him many awards and honors, nationally and internationally. Dr. Gimpel has served as a golf coach, caddie, and fan for his two golfer daughters: Emily, who played on the LPGA Symetra Tour, and Clare, a collegiate golfer at Florida Southern College. He also loves to be in the audience when his son Jack is performing, recently seen in the Broadway national tour of Legally Blonde.

OSTEOPATHIC FAMILY MEDICINE EDUCATOR OF THE YEAR AWARD

The ACOFP Osteopathic Family Medicine Educator of the Year Award honors individuals who exemplify the osteopathic family medicine profession's highest standards of excellence in teaching and have made efforts towards the academic achievement of osteopathic students and residents.

Shannon Jimenez, DO, FACOFP, MHPE

Dr. Jimenez received her Doctor of Osteopathic Medicine from Des Moines University College of Osteopathic Medicine. She is currently the dean of Arkansas College of Osteopathic Medicine. Dr. Jimenez led her faculty and staff to make curricular improvements that have resulted in substantial increase in their board scores. Her team also created a student success course for struggling students and expanded their prematriculation program. Her paper "The Future of Ambulatory Graduate Medical Education in Teaching Health Centers" has been used to lobby for funding and support of Rural Teaching Health Center GME programs on a federal level and continues to influence funding and education today. She also serves as national faculty and item writer for NBOME. Dr. Jimenez is currently a member of the ACOFP Preceptorship Committee and Congress Credentialling Committee, and she has served as the president of the North Carolina Osteopathic Association and the NCS-ACOFP. She has been married to Tony Jimenez for almost 28 years and has two grown daughters. She likes music, theater, travel, and growing flowers in her garden.

OUTSTANDING FEMALE LEADER OF THE YEAR AWARD

The ACOFP Outstanding Female Leader Award honors female physicians who serve as role models, teachers, leaders and sources of inspiration for men and women alike.

Priscilla Tu, DO, FACOFP, FAOASM, FAAFP, FAAMA, dipABLM

Dr. Priscilla Tu received her Doctor of Osteopathic Medicine from AT Still University-Kirksville College of Osteopathic Medicine in 2005. She completed her residency at Carilion Health Systems. She is the associate program director and director of osteopathic education at Virginia Tech Carilion Clinic in Roanoke. Her passions of teaching and mentorship allow her to engage medical students, residents, fellows, and faculty in the aspects of medicine she loves and to model a growth mindset. She is chair of the Procedural Committee for ACOFP, immediate past president of AOASM, and the team physician for USA Volleyball. She was honored with the Master Preceptor Award in 2022 and the Outstanding Paper Crest Award in 2021. She has been named Family Physician of the Year by Virginia Academy of Family Medicine and Family Medicine Preceptor of the Year by Duke University Medical School. Her family is everything to her—she has a loving husband, supportive and encouraging parents, thoughtful brother and sister-in-law, and amazing nephews. Her goal this year is to live a healthier lifestyle and better model self-care for her learners.

NEW OSTEOPATHIC PHYSICIAN OF THE YEAR AWARD

The ACOFP New Osteopathic Physician of the Year Award recognizes physicians who have made significant contributions to family medicine between 2–5 years after entering the specialty.

Seth Hintze Carter, DO, MSMEd

Dr. Carter earned his Doctor of Osteopathic Medicine from Lake Erie College of Osteopathic Medicine in 2016. He completed both a family medicine residency and geriatric fellowship at LECOM Health-Millcreek Community Hospital. He serves as the chief of staff for Millcreek Community Hospital and Corry Memorial Hospital and in several other roles for LECOM Health. He spends his clinical time divided between the LECOM Institute for Successful Aging, Eastside Medical Center, and LECOM Center for Memory Impairment and Neurocognitive Disorders. He is also a hospice physician for Visiting Nurses Association of Erie County and a medical director for Twinbrook Healthcare and Rehab. Dr. Carter serves on the ACOFP Constitution and Bylaws Committee and Resolutions Review Committee. Past honors include the Michael Avallone Sr. Scholarship for Outstanding Advocacy and A.T. Still Osteopathic Skills and Knowledge Award. Dr. Carter married his sweetheart, Chantelle Fowler, in 2011. They have three beautiful daughters and one son. Ruth, Lucy, Thomas, and Lydia love to occupy daddy's time by having him chase them around the house or yard. The family loves camping and hiking and spending time with friends at Presque Isle in Erie, PA.

DISTINGUISHED SERVICE AWARDS

The ACOFP Distinguished Service Award honors individuals who demonstrate outstanding service to ACOFP through committee involvement or other activities that help achieve ACOFP's objectives.

Ioanna Z. Giatis-Kessler, DO, FACOFP, received her bachelor's degree in biology from John Carroll University in Ohio and later studied at the Lake Erie College of Osteopathic Medicine in Pennsylvania, where she earned her Doctor of Osteopathic Medicine. She completed an internship and residency in family medicine at South Pointe Hospital in Ohio, which she also served as chief resident.

Prior to joining WakeMed Physician Practices Primary Care Fuquay-Varina in North Carolina, Dr. Kessler spent 10 years as a practicing family medicine doctor in Ohio. She also spent 10 years as a staff member in the Department of Family Medicine at South Pointe Hospital, where she was named department chair in 2006 and served on several committees, including the Medical Executive Committee. In 2006, she was named the OU-COM South Pointe Hospital Family Physician of the Year.

Dr. Kessler's committee roles in ACOFP have included the 75th Anniversary Task Force and the Legacy Group. She is also an active member of AOA. She has served as a clinical professor of family medicine at the University of Pikeville College of Osteopathic Medicine in Kentucky, Lake Erie College of Osteopathic Medicine, and Ohio University College of Osteopathic Medicine (OU-COM).

Joseph P. Molnar, DO, FACOFP *dist.*, graduated from Kirksville College of Osteopathic Medicine in Kirksville, Missouri. He completed his internship at Normandy Osteopathic Hospital.

Dr. Molnar retired from active practice in 2022, where he practiced osteopathic family medicine and emergency medicine at Floyd County Medical Center in Charles City, IA. He has been an active leader in the osteopathic community, serving on the Iowa Osteopathic Medical Association (IOMA) Board of Trustees, as well as its Legislative and Bylaws Committees. He is a member of the ACOFP Legacy Group and a former member of the ACOFP Ethics Committee, and has also been a member of the Ethics Committee and Bureau of Conventions for the American Osteopathic Association. Dr. Molnar served all the chairs of ascendency and served as the President of the Iowa Osteopathic Medication Association 2015 to 2016. He received the Life Service Award from IOMA in 2005. He was president of the Missouri Association of Osteopathic Physicians and Surgeons in 1988 and received their Physician of the Year Award in 1991.

Larry J. Witmer, DO, FACOFP, earned his Doctor of Osteopathic Medicine from Ohio University College of Osteopathic Medicine (Athens, Ohio) in 1997 and completed his residency at St. John Westshore in Westlake, Ohio. He is a board-certified family physician and serves as the Associate Program Director of Family Medicine at University Hospitals Community Consortium Geauga Family Medicine Residency.

Throughout his career, Dr. Witmer has been dedicated to advancing osteopathic family medicine through clinical excellence, medical education, and quality improvement. He had the honor of chairing the first outpatient quality assurance committee in the 150-year history of University Hospitals of Cleveland, a role that has empowered family medicine residents to actively contribute to improving outpatient care.

In addition to his clinical and leadership roles, Dr. Witmer is passionate about mentoring students and residents, helping to shape the next generation of family physicians. His commitment to mentorship and quality improvement has had a meaningful impact on both patient care and medical education in his region.

Outside of medicine, he enjoys traveling and spending time with his family. His greatest source of strength and joy comes from his wife, Maria, and their three children, Cory, Brandon, and Lana, whose unwavering support has been the foundation of his career.






SANDER A. KUSHNER, DO, FACOFP MEMORIAL OSTEOPATHIC FAMILY MEDICINE RESIDENT AWARD

acofp FOUNDATION

The Sander A. Kushner, DO, FACOFP Memorial Osteopathic Family Medicine Resident Award, sponsored by the ACOFP Foundation, honors residents who demonstrate outstanding academic achievement and motivation for careers in osteopathic family medicine.

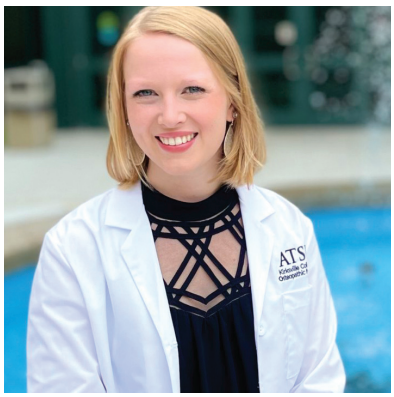
Mohit Chhatpar, DO, MS

Dr. Chhatpar earned his undergraduate degree from New York University and his Doctor of Osteopathic Medicine from William Carey University College of Osteopathic Medicine in 2019. He is a resident at Indiana Regional Medical Center Family Medicine (Indiana, PA), and will be starting an addiction medicine fellowship in July at Hartford HealthCare. Dr. Chhatpar has actively advocated for osteopathic education and resident engagement through leadership roles, including serving as co-chair of the ACOFP Resident Council and as resident trustee for POMA and American Osteopathic Academy of Addiction Medicine. In his role on Resident Council, he drafted a resolution for the ACOFP Congress of Delegates to increase primary care funding, which was approved. Dr. Chhatpar's research and outreach efforts have highlighted barriers to treatment for patients with substance use disorders in rural areas. He loves Bollywood movies and dance and founded the nationally renowned Bollywood dance team NYU Dillagi.

MARIE WISEMAN OUTSTANDING STUDENT OF THE YEAR AWARD

AACOFP Auxiliary TO THE AMERICAN COLLEGE OF OSTEOPATHIC FAMILY PHYSICIANS

The Marie Wiseman Outstanding Osteopathic Student of the Year Award—selected in partnership between ACOFP and the Auxiliary to the ACOFP—recognizes an osteopathic medical student who demonstrates strong philanthropic and community service.



Haley Schuster, OMS-III

Haley Schuster, OMS-III, is currently studying towards her Doctor of Osteopathic Medicine at A. T. Still University-Kirksville College of Osteopathic Medicine (ATSU-KCOM). She holds an undergraduate degree in nutritional sciences from the University of Wisconsin-Madison. Schuster is the secretary of the National Student Executive Board (NSEB) for ACOFP, has served on the SAACOFP Education Committee, and was the vice president of her ACOFP student chapter at ATSU-KCOM. She was also a student delegate for Missouri to the ACOFP Congress of Delegates.

Schuster's other leadership roles include being a student member of the board of directors of the Wisconsin Association of Osteopathic Physicians and Surgeons as well as a member of the Student and Post-Graduate Committee. In her volunteer work with Still Caring Health Connections, Schuster provided free health screenings and education to the local community and performed osteopathic manipulation—an experience she credits with deepening her understanding of healthcare disparities and the power of OMT to improve someone's pain and function.

EMERGING OSTEOPATHIC STUDENT LEADER AWARDS

Katie Metzler, OMS-IV, will graduate from Rocky Vista University College of Osteopathic Medicine in May and is excited to begin her family medicine residency in July. She earned her bachelor's degree in molecular, cellular, and developmental biology from the University of Colorado Boulder. Metzler serves as the chair of the Student Association of the ACOFP Public Relations Committee and led the first-place team at the 2024 Future of Family Medicine Think Tank competition. She is also passionate about community outreach, developing and presenting health education programs for middle school students in Denver Public Schools and mentoring refugee teenagers in her community.

Urenna Nwogwugwu, OMS-III, is a third-year osteopathic medical student at Touro College of Osteopathic Medicine-Middletown. She holds a master of science in systems science with a concentration in health systems and two bachelor of science degrees in integrative neuroscience and human development from Binghamton University. She has served as the as the Region IX Osteopathic Liaison for the Student National Medical Association and was the 2023-2024 National Student Executive Board parliamentarian, where she also acted as board liaison to the SAACOFP Resolutions Committee.

Dedicated to advancing health equity, she is leading the planning of a health screening and community resource fair aimed at prevention and education for underserved populations, scheduled for May 2025. She is also a National Health Service Corps Scholar and is passionate about rural family medicine, with a particular interest in obstetrics, preventive medicine, advocacy, and community-based care.

George Tong Yang, OMS-IV, is currently studying towards his Doctor of Osteopathic Medicine at University of the Incarnate Word School of Osteopathic Medicine. He holds a master of public health and a bachelor's degree in biochemistry and molecular biology, both from the University of California Davis. He is currently president of the National Student Executive Board and also served as the first Hmong Student Governor on the ACOFP Board of Governors. His other leadership positions have included spearheading an international campaign that raised critical funds for the medical care of underprivileged children in Laos.

FELLOW AWARDS OF THE AMERICAN COLLEGE OF OSTEOPATHIC FAMILY PHYSICIANS

acofp | *Conclave of Fellows* OF THE AMERICAN COLLEGE OF OSTEOPATHIC FAMILY PHYSICIANS

The Fellow of the American College of Osteopathic Family Physician (FACOFP) is an honorary designation bestowed upon candidates who have contributed outstanding national and local service through teaching, authorship, research or professional leadership and who demonstrate dedication to ACOFP, as well as commitment to the health and welfare of their patients and to the future of osteopathic family medicine.

Danielle L. Barnett-Trapp, DO, FACOFP, earned her Doctor of Osteopathic Medicine from A.T. Still University School of Osteopathic Medicine in Arizona (Mesa, AZ) in 2011 and completed her residency at St. Joseph's Family Medicine Residency (Phoenix, AZ). She is currently a Clinical Associate Professor in the Department of Osteopathic Community and Family Medicine at AZCOM and an urgent care physician at Banner Urgent Care. She serves as the ACOFP Membership Committee Chair, is the current President of the AZ-ACOFP, and Vice Chair of the ATSU Board of Trustees. Her past honors include the ACOFP Auxiliary Award (2009-2011) and many state and local honors, including the Arizona Osteopathic Medical Association Mentor of the Year (2024), Arizona Chapter ACOFP Physician of the Year (2023), and Arizona Osteopathic Medical Association Emerging Leaders Award (2019).

Sponsor: Shannon Scott, DO, FACOFP

Research Paper: "Transformative Impact of Clinical Decision Support Systems in Family Medicine"

Philip Collins, DO, FACOFP, earned his Doctor of Osteopathic Medicine from Philadelphia College of Medicine (Philadelphia, PA) in 2013, and completed his residency at Rowan School of Osteopathic Medicine–Family Medicine (Stratford, NJ). He is an associate professor at Rowan–Virtua SOM. He currently serves on the ACOFP OFP Editorial Committee and Osteopathic Clinical Research Work Group, as well as being a national faculty member for NBOME. His past honors include the NJOEF New Physician in Practice Grant (2017) and South Jersey Magazine "Top Doc" in 2017.

Sponsor: Nils Brolis, DO, FACOFP

Research Paper: "Lipodystrophy Following COVID-19 Vaccination"

Anthony D. Elkins, DO, FACOFP, earned his Doctor of Osteopathic Medicine from Midwestern University–Chicago College of Osteopathic Medicine (Downers Grove, IL) in 1999, and completed his residency at Michigan State University–Genesys Regional Medical Center (Grand Blanc, MI). He is a family physician at Iredell Primary Care (Mooresville, NC). He serves in both the ACOFP Congress of Delegates and the AOA House of Delegates. He is on the board of directors of NCS-ACOFP and is a past president of both NCS-ACOFP and NCOMA. His past honors include the NCS-ACOFP Physician of the Year (2023) and Preceptor of the Year from VCOM (2009 and 2012). In his free time, he enjoys wakeboarding, boating, and real estate investing, and is a fitness enthusiast.

Sponsor: Barbara Walker, DO, FACOFP, FAAFP

Research Paper: "An Osteopathic Approach to Postural Orthostatic Tachycardia Syndrome (POTS)"

Abigail A. Frank, DO, FACOFP, earned her Doctor of Osteopathic Medicine from West Virginia School of Osteopathic Medicine (Lewisburg, WV) in 2010 and completed her residency at Family Medicine Residency (Ronceverte, WV). She is the assistant dean of Graduate Medical Education, director of Medical Education, and associate professor of Clinical Sciences at West Virginia School of Osteopathic Medicine (WVSOM), as well as the executive director of Mountain State Osteopathic Postdoctoral Training Institution. She currently serves in several volunteer positions with AACOM and is the vice president of West Virginia Chapter of ACOFP. Her past honors include the OPP Integration Teaching Award (2018).

Sponsor: Rachel Johnson, DO, FACOFP

Research Paper: "Grand Rounds: Coughing up the Right Diagnosis: A Case of an Esophageal Foreign Body in a Nonverbal Patient"

Jeffrey A. Gold, MS, DO, FACOFP, earned his Doctor of Osteopathic Medicine from Philadelphia College of Osteopathic Medicine in 1994 and completed his internship at Allentown Osteopathic Medical Center (Allentown, PA) and residency at Reading Hospital and Medical Center (Reading, PA). He is currently an associate professor of medicine at the Philadelphia College of Osteopathic Medicine and a shareholder and owner of a multispecialty group in two counties, Oley Medical Associates Division of Integrated Medical Group. He is a Pennsylvania delegate to ACOFP, and currently serves as chair of the board of trustees of the Pennsylvania Osteopathic Family Physicians Society and chairmen of POMA District 11. He is active in POMA as a member of the CME Committee, Leadership Committee, Finance Committee, and CME/GME Committee. His past honors include the Sigma Xi National Research Society (1996–2006) and the ACGP/Sandoz Primary Care Award (1993).

Sponsor: Michael Zawisza, DO, FACOFP

Research Paper: "Urine Drug Screening Point of Care Testing"

Bradley Goldstein, DO, CAQSM, MPH, MS, FACOFP, earned his undergraduate degree (BA Psychology) from the University of Virginia, graduate degree (MS Medical Sciences Behavioral Neuroscience concentration) from the University of Florida College of Medicine, graduate degree (MPH Public Health from the Florida State University College of Social Sciences, and doctoral degree (DO Osteopathic Medicine from the Lake Erie College of Osteopathic Medicine Bradenton campus. He then completed a residency in Family Medicine and OMT followed by a Sports Medicine fellowship—both affiliated with NSU-COM. He has served on the ACOFP Procedure Committee for many years. He enjoys teaching all levels, research, office based procedures, OMT, MSK ultrasound, caring for special populations, and health policy, among others. In his spare time, he enjoys going to the beach, watching sports, and meditation.

Sponsor: Linda Delo, DO, FACOFP

Research Paper: "Sport Related Concussion Treatment and the Influence of Social Support: An Emerging Area of Study"

Janel H. Johnson, DO, MPH, FACOFP, earned her Doctor of Osteopathic Medicine from Oklahoma State University College of Osteopathic Medicine (Tahlequah, OK) in 2014 and completed her residency at Northeastern Health System (Tahlequah, OK). She also received her master's in public health from Emory Rollins School of Public Health in 2018. She is currently a clinical assistant professor of medical education and course director for two courses at Oklahoma State University College of Osteopathic Medicine at the Cherokee Nation. She is a member and leader of several state and local organizations, including the Tulsa Osteopathic Medical Society and the Oklahoma Osteopathic Association and a proud Cherokee Nation citizen. Her past honors include the ACOFP Distinguished Service Award (2022) and being inducted into the National Public Health Honors Society, Phi Delta Omega Chapter in 2018. She was an ACOFP Future Leader in 2016. Family: Terry Johnson, father, Donna Johnson (nee Crow, deceased); Amber Burk, sister, Patrick Burk, brother-in-law, Patrick Burk II, nephew, Faith Burk and Addison Burk, nieces.

Sponsor: Ronnie Martin, DO, FACOFP *dist*.

Research Paper: "End of Life Simulation Scenario and the Effects on Undergraduate Medical Learners: A Prospective Cohort Study"

2025 Most Outstanding Scientific Research Award Recipient

Alicia A. Martin, DO, FACOFP, earned her Doctor of Osteopathic Medicine from Midwestern University–Chicago College of Osteopathic Medicine (Downers Grove, IL) in 2006 and completed her residency at Resurrection Medical Center (Chicago, IL). She is currently physician/shareholder at Duly Health and Care (Aurora, IL). She serves on the ACOFP Resolutions Review Committee and Health and Wellness Committee, and in the past was the Program Chair for the ACOFP Annual Convention. She has served as president of the Illinois Society of ACOFP and the Illinois Osteopathic Medical Society. Dr. Martin is a diplomate of the American Board of Obesity Medicine. Her past honors include the ACOFP New Osteopathic Family Physician of the Year Award in 2015.

Sponsor: Paul Martin, DO, FACOFP *dist*.

Research Paper: "Main Stream Media Coverage in 2024: An Impediment to Obesity Medicine or Just Spreading the Good News?"

2025 Scientific Research Crest Award Recipient

Susan R. Medalie, DO, FACOFP, earned her Doctor of Osteopathic Medicine from West Virginia School of Osteopathic Medicine (Lewisburg, WV) in 2015 and completed her residency at Wellspan/Good Samaritan Family Medicine Residency (Lebanon, PA). She is core faculty, director of the family medicine obstetrics program, and attending inpatient pediatrics at Lehigh Valley Health Network—Schuylkill Rural Residency. She volunteers for the ACOFP Foundation and is on the medical advisory board for Lebanon Family Health as well as the Muhlenberg College Alumni Board. She is active in POFPS as a board member, member of the Education Committee, and the lead of the POFPS Osteopathic Medicine Collaborative Task Force. She is also a fellow of AAFP. Her past honors include the City Avenue Physicians Scholarship Award (2018), the Wellspan Medical Group Service Excellence Award for Compassion (2017), and the Outstanding Resident in Women's Health Award (2016 and 2017).

Sponsor: Lynn Wilson, DO, FACOFP

Research Paper: "How Many Knots in that Cord?"

Mark W. Robinson, DO, FAIHM, FACOFP, earned his Doctor of Osteopathic Medicine from Chicago College of Osteopathic Medicine (Downers Grove, IL) in 2005, and completed his residency at Aurora St. Luke's Medical Center Family Medicine Residency (Milwaukee, WI). He is the medical director, Education and Training; primary care service line; academic representative at LPMS Southeast; director of osteopathic education at Aurora UW Medical Group, and physician quality champion at AUWMG Advocate Health-Midwest. He was an ACOFP Future Leader in 2009. Other past honors include the Teaching Excellence Award from Aurora St. Lukes Family Medicine Residency (2018) and the Aurora Quality Award (2013) and Teaching Excellence Award (2009) from Aurora Health Care.

Sponsor: David Magness, DO, FACOFP

Research Paper: "Pharmacologic Considerations for Common Substance Use Disorders"

Randy C. Sexton, DO, MA, FACOFP, earned his Doctor of Osteopathic Medicine at Midwestern University–Chicago College of Osteopathic Medicine (Downers Grove, IL), in 1994 and completed his family practice internship at Womack Army Medical Center (Fort Bragg, NC). He is board certified in Family Practice/OMT. At the beginning of his career, he attended Central Bible College (Springfield, MO) and completed a BA in Biblical Studies and then served in the United States Air Force controlling jet fighters for NORAD. After leaving the Air Force he returned to college a second time and completed a BA in Biology and two years of graduate work in biology to qualify for medical school. After completing medical school and receiving medical training at Fort Bragg, he served as a major in the US Army as a brigade flight surgeon. After leaving the Army in 1998, he has served as a rural family practice physician and emergency room physician. He is currently an emergency room physician at Cherokee Indian Hospital (Cherokee, NC), serving the Cherokee Indian people since 2011. He is a member of the South Carolina Osteopathic Medical Society and volunteers at VCOM Osteopathic Medical College–Spartanburg, SC. Dr Sexton is also an ordained Catholic deacon and has completed a MA in theology. He does community volunteer work as a member of the Knights of Columbus. As a hobby, he is a martial artist who is a Taekwondo fourth-degree master instructor, an Aikido black belt, and a certified Japanese sword instructor. He has been happily married for 37 years and is a father of three children and grandfather of four grandchildren.

Sponsor: Anthony Dekker, DO, FACOFP, FAOAAM, DFASAM

Research Paper: "Writing Admission Orders: A New Acronym for Osteopathic Physicians"

Jesse D. Shaw, DO, CAQSM, USAW, FACOFP, attended Juniata College in Huntingdon, Pennsylvania, where he received his undergraduate degree in Biology with a secondary emphasis in Psychology (2003), and earned his Doctor of Osteopathic Medicine from Lake Erie College of Osteopathic Medicine–Erie in Erie, Pennsylvania (2007). Dr. Shaw is a practicing primary care sports medicine physician in Pullman, Washington, where he serves as team physician for Washington State University and is involved in the United States Olympic and Paralympic Committee providing care to multiple national Olympic teams. He is actively involved in the American Osteopathic Board of Family Physicians, previously served as ACOFP Resident Governor, and was a member of multiple task forces and committees. Dr. Shaw has presented lectures and workshops at the national and international level and is an accomplished author in peer reviewed journals and textbooks.

Sponsor: Stacy Chase, DO, FACOFP, FAOGME

Research Paper: "Optimization of Wellness Through the Relationship of Medicine, Health, Fitness, and Nutrition"

Sarah J. Wolff, DO, FACOFP, earned her Doctor of Osteopathic Medicine degree from Western University of Health Sciences College of Osteopathic Medicine of the Pacific (COMP) in Pomona, California, in 2016. She completed her residency in family medicine at Family Medicine of Southwest Washington in Vancouver, Washington. Dr. Wolff balances clinical practice with her role as the Director of Clinical Curriculum and Assistant Professor of Family Medicine at Western University of Health Sciences. In this capacity, she oversees the development and implementation of osteopathically distinct curricula for over 700 students across Oregon and California.

An active member of ACOFP since residency, Dr. Wolff has served on various committees, including the ACOFP Leadership Development Committee, Nominations Committee, and New Physicians Committee. She was recognized with the American Osteopathic Foundation's Oregon Emerging Leader Award in 2021 and named an ACOFP Future Leader in 2022. In 2020, Dr. Wolff made history as the youngest physician to deliver the A.T. Still Memorial Address to the AOA House of Delegates, showcasing her commitment to honoring osteopathic traditions while championing diverse and youthful perspectives within the profession. Currently, Dr. Wolff serves as president of the Osteopathic Physicians & Surgeons of Oregon, holds leadership roles within AOA, and is an active member of ACOFP-OR and other professional organizations. She achieves all of this with the incredible support of her husband, Alex, and their two children, Julane (11) and Tatum (9).

Sponsor: Derrick Sorweide, DO, FACOFP

Research Paper: "Opportunities of Alignment between Osteopathic Medical Education & Artificial Intelligence"

DISTINGUISHED FELLOW AWARDS OF THE AMERICAN COLLEGE OF OSTEOPATHIC FAMILY PHYSICIANS

The designation of Distinguished Fellow of the American College of Osteopathic Family Physicians (FACOFP *dist*.) acknowledges those Fellows who have distinguished themselves through service to ACOFP by meeting attendance, as well as by their support of the ACOFP's local and national governance and committees.

Steven H. Barag, DO, FACOFP *dist*.—Dr. Steven Barag graduated with a bachelor of arts in physical anthropology from Temple University in Philadelphia, PA. He received his Doctor of Osteopathic Medicine from Kansas City University College of Osteopathic Medicine (Kansas City, MO) in 1973 and completed his residency at Phoenix General Hospital. He has practiced osteopathic family medicine for 50 years and counting. He is medical director of Aureus Medical Group and principal investigator of Rancho Cucamonga Clinical Research with over 75 trials to his credit. Dr. Barag is also a clinical professor of Family Medicine for Western University and Touro University. He is past chief of staff and on the board of trustees at San Antonio Regional Hospital.

Dr. Barag was named a Fellow of ACOFP in 2008. His service to the profession has included representing California at the ACOFP Congress of Delegates at least a dozen times since 2007. He has also served on the ACOFP Congress Credentialing Committee and Reference Committee. He received the ACOFP Master Preceptor Award in 2022 and 2024. Dr. Barag has served in several leadership roles for ACOFP California, including president, treasurer, and convention chair. His passion is the mentoring of future medical professionals with the emphasis of choosing osteopathic family medicine as a lifelong career.

Jennifer L. Gwilym, DO, FACOFP *dist*., FAAFP, CS—Dr. Jennifer Gwilym holds a Bachelor of Science in biology from Ohio University, where she graduated cum laude. She received her Doctor of Osteopathic Medicine from Ohio University Heritage College of Osteopathic Medicine (OU-HCOM) (Athens, OH) in 2003, and served residencies at Cuyahoga Falls General Hospital (Cuyahoga Falls, OH) in 2004-2005 and Doctors Hospital (Columbus, OH) in 2005-2006. She is currently a clinical professor of family medicine at OU-HCOM and chair of the department of primary care. She is also clinical assistant dean of the Southeastern Ohio campus.

Dr. Gwilym is currently the chair of the ACOFP CME Conference Advisory Committee, as well as being a member of the Health & Wellness Committee and Women's Leadership Committee. She became a Fellow of ACOFP in 2014. Dr. Gwilym has served in several leadership positions for Ohio-ACOFP and Ohio Osteopathic Association, including president of both organizations. She has also represented Ohio in the ACOFP Congress of Delegates on many occasions.

She received the ACOFP Outstanding Female Leader of the Year Award in 2024, and the ACOFP Crest Writing Award in 2015. She has also been recognized with a distinguished service award from the OU-HCOM Society of Alumni and Friends and the Family Medicine Educator of the Year from Adena Family Medicine Residents.

In her personal life, Dr. Gwilym is an advanced SCUBA diver, golfer, world traveler, and Disney fan.

William B. Swallow, DO, MS, FACOFP *dist*.—Dr. William Swallow holds a Bachelor of Science and Master of Science in radiological physics from Bucknell University (Lewisburg, PA), as well as a Master of Science in forensic medicine from Philadelphia College of Osteopathic Medicine (Philadelphia, PA, 2020). He graduated from Philadelphia College of Osteopathic Medicine (Philadelphia, PA) in 1979, following which he did a rotating internship at Community General Osteopathic Hospital (Harrisburg, PA). He currently works at St. Luke's University Hospital Network—Smithfield Clinic (East Stroudsburg, PA).

He served in the US Naval Reserves as a captain in the medical corps during Desert Shield/Desert Storm, and later as a director of medical services, battalion surgeon, and senior medical officer, retiring in 2006.

Dr. Swallow has served ACOFP in a variety of committee roles. He is currently a member of the Federal Legislation and Advocacy Committee, Constitution and Bylaws/Policy and Organizational Review Committee, and Medical and Professional Ethics Ad Hoc Committee. Past roles have included vice chair of the Reference Committee in 2008 and membership in the Membership Marketing Committee and the Policy and Organizational Review Committee. He has served as a delegate to the Congress of Delegates for over 10 Congresses. He is the current president of POMA and has also served in a variety of committee roles for POMA, many related to governance. He is life member of AOA and has represented Pennsylvania in the AOA House of Delegates on several occasions.

In his personal life, he has been involved in Optimist International for over 40 years and has served in a variety of volunteer roles throughout the organization at both the local and international level. He has also served in leadership roles for the American Red Cross, as a board member for the Milton Chapter and chair of the board for the Northeast Regional Blood Center.

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