Dear Colleagues,

The events of past few months have reminded us that racism and bigotry are alive and well in our nation. While the curse of legal slavery ended, remnants of racism and bigotry are alive and well. While people of color and marginalized groups bear the brunt of the curse of racism, our black sisters and brothers suffer the most. Allow me to recount some of my own recent experiences that taught me how difficult it would be to bring about change. It is not the laws I am talking about. It is the mindset. However, being an optimist, I do believe we can and will bring about change.

When I advocated for diversity, inclusion, and equity, a pediatrician colleague wrote back to me saying he hears “reverse discrimination” instead. While many of us would struggle to understand a transition from such a just cause to a twisted interpretation, this reaction was authentic. While I did engage him in a civil discourse, I am unsure I changed his mind. Rather, it indicated to me how deep the chasm is in this debate.

Recently, I wrote that we have an “epidemic of racism and bigotry” in America. In response, a white, male pediatrician was adamant that I was overstating and demagoguing. Once again, we engaged in a civil discourse. I can see why he does not think that it is an epidemic because he or his family were probably never victims of racism and bigotry. The people of color and their families, like myself and my own family, who have been victims of racism and bigotry see it as an epidemic. The difference is that it impacts only a certain segment of our population in epidemic proportions.

Then there are those microaggressions that the many do not even see or know. A person in a leadership position characterized to me that the recent election of a black individual to leadership role was because he was the “diversity candidate.” It did not even occur to him that the individual was extremely qualified, and his words undervalued him as a person and a leader.

Many years ago, a Dean was going on and on about how international medical graduates are somehow less qualified overall. I informed the Dean that I was an international medical graduate myself. The Dean did not miss a beat and responded that I was somehow different from other international medical graduates. In retrospect, I should have said no, I am not. Instead, I let the comment go past. Only a few years ago a former President of the American Academy of Pediatrics in the presence of several AAP leaders said something similar and none of us challenged her. I now understand what an African American pregnant physician meant when she said that she prays that she has a daughter because a son would always be at risk. She would always be worried. Another successful black physician stated that she is afraid for her father, her brother, her husband, and her son each time they are out and late coming back home. That is no way anyone or any family should have to live. It is torture.

These are major issues. Until we can change mindsets and Americans see the injustice happening around them, change will be hard to come. To see a black man dying slowly over almost 9 minutes in front of our eyes, in pain, begging to breathe, and desperately asking for his dead mother for help while a white police officer places his knee on the dying man’s throat, calm, emotionless, hands in his pockets. It is a stark depiction of how some people view others of different color of skin, ethnicity, faith tradition, national background, and lifestyles as not wholly human. I cannot even imagine treating an animal in that manner, let alone a human being.

I hope things will change. They must. I firmly believe that, this time, it is not a moment but a movement. All of us must be the change agents. No one else is going to come and do it for us. We are the ones we have been waiting for. We are the ones who will have to bring the change. We are the ones who will make sure that we as a nation will live DIFFERENT TOGETHER.

Mobeen H. Rathore, MD, CPE, FAAP, FPIDS, FSHEA, FIDSA, FACPE
Editor, The Florida Pediatrician
Within the University of Florida – Jacksonville’s pediatric residency program, the evidence-based medicine (EBM) curriculum was completely overhauled over the past three years. In this brief report, we summarize the curriculum, results, and lessons learned so that other programs looking to improve their evidence-based medicine curricula can gain from our experience.

BACKGROUND

The Accreditation Council for Graduate Medical Education requires that residents receive training and gain competence in Evidence-Based Medicine (EBM). One way in which this is accomplished is through Resident Journal Clubs, but these are often removed from clinical practice, sparsely attended, and less than ideal. Despite publication of best practices for journal clubs, residents throughout the country report a lack of comfort with biostatistics as well as evidence-based medicine. EBM knowledge is required by fewer than half of medical specialties. Efforts have been made to make EBM more approachable and transferable to clinical practice.

EDUCATIONAL APPROACH AND INNOVATION

A baseline survey was performed which identified three main areas of weakness within our existing EBM program: lack of mentorship, no involvement in presenting EBM until the final year of training, and lack of guidance on application of knowledge to clinical practice. With this in mind, we designed a curriculum that would help to solve these problems. The current ongoing curriculum involves having a resident from each class participate in the EBM activity collaboratively each month with faculty mentorship. Faculty mentors were chosen from the residency faculty to include those who had knowledge of EBM theory and a track record of scholarship. Although no formal training or requirements existed, all EBM faculty were brought to the curriculum and to Oxford University’s Centre for Evidence-Based Medicine (www.cebm.net). Residents were introduced to the curriculum and to Oxford University’s Centre for Evidence-Based Medicine (www.cebm.net). Residents use previous clinical case to identify a clinical question, formally search literature and identify a relevant article. The group then discusses the article and appraises it with the mentor. Throughout the two years since we implemented this curriculum, we utilized periodic qualitative feedback for continuous improvement. One change made during this time included shifting the biostatistics or EBM specific pearl from the middle of the resident presentation to the start of the session, thus allowing residents the opportunity to be thinking through the information with the right context in mind. This lesson is given by the faculty mentor; this is intended to relieve a major source of stress for the presenting residents in previous iterations. A second change was to highlight a specific clinical take-home on a final slide after the critical appraisal and discussion.

Annual surveys were sent to the 38 pediatric residents within the program. The surveys sought to gauge resident-reported comfort, self-assessed competency, and testable knowledge of EBM. Comfort and competency were reported on a five-point Likert scale. Knowledge was summarized with a tally of right vs. wrong responses. Likert-scale data was tested using a Mann-Whitney U Test and binary data was tested with a Chi-squared test, comparing baseline to the two years of follow-up.

RESULTS

Statistically significant improvement was noted in resident comfort with EBM in general (p = 0.006), and comfort with presenting journal club (p = 0.04). Statistically significant improvement was noted in self-reported competency in developing a well-built question from a clinical scenario (p = 0.007), critically appraising an article (p = 0.002), applying a Pearl to a clinical scenario (p = 0.005), placing a study in the context of other relevant research (p = 0.007), understanding statistical concepts (p = 0.034), creating an effective slide show (p = 0.025), and providing education in a large-group setting (p = 0.024). No significant change was noted in explaining evidence-based medicine concepts (p = 0.058). Of the four knowledge-based questions, only the one testing ability to choose an appropriate study design was significantly improved (p = 0.016). There was a non-significant improvement in knowledge of the EBM model (p = 0.032) and calculating a number needed to treat (p = 0.433), and a non-significant decrease in interpreting a confidence interval (p = 0.072).

DISCUSSION AND NEXT STEPS

Thus far, this new curriculum has allowed for a clinically relevant, longitudinal, collaborative, and mentored experience with EBM. Residents report improved comfort with aspects of EBM and self-rate their milestones higher than with our prior curriculum. In addition to the quantitative data above, there has been a qualitative shift over the two years of curriculum. As the residents who were interns when the new curriculum started rise to senior resident, they have been able to take a greater role in mentoring the junior residents through the process and leading the discussion both within the small-group meetings and during the presentation itself. Further cycles will be needed to better incorporate knowledge of evidence-based medicine, epidemiology, and biostatistics into the curriculum.
HISTORY OF THE NFMLP

In 2002, Jacksonville Area Legal Aid, Inc. (JALA) began a medical-legal partnership in Jacksonville, Florida with the Duval County Health Department and at the behest of pediatrician and then health department director, Dr. Jeffrey Goldhagen. The idea sprang from a national movement of healthcare providers partnered with legal aid organizations to address social determinants negatively impacting their patients’ health. The idea then evolved from a national movement of healthcare providers partnered with legal aid organizations to address social determinants negatively impacting their patients’ health.1 The idea then evolved from a national movement of healthcare providers partnered with legal aid organizations to address social determinants negatively impacting their patients’ health.1 The idea then evolved from a national movement of healthcare providers partnered with legal aid organizations to address social determinants negatively impacting their patients’ health.1 The idea then evolved from a national movement of healthcare providers partnered with legal aid organizations to address social determinants negatively impacting their patients’ health.1

The purpose of what eventually became the “Northeast Florida Medical-Legal Partnership” or “NFMLP” was to train health department employees to identify health-harming, civil legal aid needs in patients such as: terminating leases for substandard housing, protecting the rights of individuals with disabilities in accessing the community, safeguarding eligibility to public benefits, securing child custody agreements and support, modifying immigration status, and advocating for special education services. These needs, of course, have direct ramifications for a patient’s health.2 Important examples include pests and mold in residences presenting health risks to children with a suppressed immune system or allergies/asthma; access to health insurance and healthy food as critical to the needs of medically complex children; primary caregivers who require financial support from the other parent to enable them to respond to their child’s medical needs; continued lawful presence in the U.S. that stabilizes the family support system and offers more opportunities for employment and access to public benefits; and an educational environment adapted to the child’s individual needs to maximize mental and behavioral health.

Once health department employees were trained in identifying needs, they would next evaluate patients for legal aid assistance. If a need was identified, a referral fax would be sent to the NFMLP attorney at JALA. The referred patient would be screened by the NFMLP attorney and assistance would be offered either through the NFMLP attorney, another JALA attorney, or if neither had the requisite expertise, the patient would be referred to JALA’s pro bono unit for placement with a volunteer attorney. The number of NFMLP healthcare provider partners located in and around Duval County quickly grew from

REFERENCES

one to five and eventually to thirteen. Prior to 2009, the NFMLP received approximately 60 referrals per year. After JALA was awarded a partial funding grant from the Florida Bar Foundation that supports civil legal aid, the number of referrals increased significantly. From 2012 to 2016, the NFMLP received 1,191 patient referrals.

**REDESIGN OF THE NFMLP**

However, the NFMLP model was unsustainable as designed. With thirteen medical provider partners and growing, the demand for legal services without dedicated funding outstripped the supply. Not all of the patients’ legal needs could be met. The NFMLP underwent reorganization in 2017 to address the issues of funding and sustainability, transitioning into a dedicated pediatric medical-legal partnership and entering into a memorandum of understanding (MOU) with Wolfson Children’s Hospital and Nemours Children’s Specialty Care, Jacksonville (“Nemours”). With these changes and the continuing leadership and involvement of the University of Florida, Wolfson Children’s Hospital now shares the cost with JALA to render legal services to pediatric patients. Equally important, Wolfson Children’s Hospital provides office space to the NFMLP attorney so the attorney can be readily available to both patients and providers. This in turn reduces the wait time between patient referral to attorney contact.

Under the MOU, the pediatric referral partners are limited to four organizations: Wolfson Children’s Hospital, Nemours, UF Health Specialty Pediatric Clinics, and Community PedsCare®, a pediatric program of Community Hospice & Palliative Care. Also, under the MOU, JALA’s deliverables were expanded. The NFMLP currently handles more than patient referrals. Its new roles include: training healthcare providers on topic specific legal issues, providing legal consultations both over the phone and onsite to healthcare providers regarding patient’s civil legal aid needs, and collecting and analyzing data to track patients referred and outcomes of the NFMLP’s assistance to patients.

**RESULTS OF THE NFMLP IN 2017-2018**

July 2018 closed out the first year of the pediatric-focused NFMLP. Sustainable funding and the focus solely on pediatric patients led to notable results. From July 1, 2017 to June 30, 2018, patients referred to the NFMLP stood at 285. Of those, 356 legal issues were identified. Almost half of patients referred (125) received full representation by an attorney. Advice and counsel were provided to 126 patient families on their legal issue(s). Among these, 37 issues were referred to other legal services. As an example, for patients residing in a county outside JALA’s reach or in another state such as Georgia, employment, housing, education, immigration, and family law. Medical and Social Security benefits represented the largest percentage of issues referred at 41.76%. Guardianship and adoption represented another significant percentage at 13.41%. The line between a patient’s health and access to health insurance, an income subsidy, or the legal authority to consent to healthcare, is short and direct. As such, healthcare providers are quick to identify these civil legal needs in their patients and refer to the NFMLP which explains the high percentage of these legal issues referred.

As stated above, Wolfson Children’s Hospital cost shares with Jacksonville Area Legal Aid, Inc. to deliver legal services to pediatric patients through the NFMLP. In addition to enhanced patient services and support to social work and other healthcare provider staff, the NFMLP achieves a direct return on investment for healthcare provider partners. In 2017-2018, the NFMLP secured health insurance coverage for $12,802,67 in unpaid medical bills. Using data from Berry (2014), the NFMLP calculated from internal data that approximately $10,414 was retained in healthcare utilization dollars in the same period.

Finally, NFMLP assistance is not limited to individual advocacy. The impressive gains beyond individual advocacy are described in Table 1. These gains would not have been possible without the extraordinary benefit of the NFMLP’s direct access to pediatric specialists and primary care providers who refer affected patients and more importantly, provide their expertise to support the legal remedy sought.

**NFMLP SYSTEMIC ADVOCACY GAINS**

<table>
<thead>
<tr>
<th>Gain Description</th>
<th>Number of Clients Affecteed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reinstatement of medically complex children into the Children’s Medical Services (CMS) program for those identified as “disability” or “need for care”</td>
<td>125</td>
</tr>
<tr>
<td>Statewide legal changes to notices regarding eligibility for the Supplemental Nutrition Assistance Program (SNAP)</td>
<td>126</td>
</tr>
<tr>
<td>Amendment to a Jacksonville, Florida, municipal ordinance requiring that all rental housing in the city have either air conditioning or functioning screens on windows and doors</td>
<td>126</td>
</tr>
<tr>
<td>A statewide policy change from the Department of Children &amp; Families (DCF) clarifying that children ineligible for Social Security benefits due to immigration status do not need to provide the number in order for DCF to process a Medicaid application</td>
<td>126</td>
</tr>
</tbody>
</table>

While medical-legal partnerships such as the NFMLP benefit both patients and providers, the model also serves the interests of civil legal aid. As noted, the model allows the NFMLP unprecedented access to medical and other healthcare staff whose expertise is used to support patients’ claims. Providers’ expertise and experience in healthcare and other state systems shed light on systemic problems that the medical-legal partnership attorney and the provider can work in concert to remedy. Civil legal aid organizations that could be viewed as politically controversial, benefit from being an ally of the healthcare system. The NFMLP’s partnership with the children’s hospital in Jacksonville has allowed the NFMLP to raise awareness about civil legal aid’s importance to giving circles that may not have otherwise been interested in funding such work. Most importantly, the medical-legal partnership model allows legal aid to meet clients where they are. Legal aid clients do not realize many of the issues that contribute to their poverty, and stress can be resolved in good measure through civil legal aid.
assistance. The medical-legal partnership model enables civil legal aid to fulfill its mission by training providers to identify these issues (as opposed to expecting a client to self-identify) and providing a direct route to legal services.

**CHILDREN WITH MEDICAL COMPLEXITY NEEDS ADDRESSED BY THE NFMLP**

The majority of clients referred to the NFMLP are children with complex medical conditions. Providing legal services to the families of and patients with medically complexity is critical. These families experience significant stress especially if they are living in poverty. The NFMLP's role is to assist healthcare providers in the identification of stressors caused by civil legal aid issues. Since these issues are defined, the NFMLP will respond to the problem and reduce family stress and worries, thereby opening time and capacity for the family to address the child's medical needs.

Medically complex children require significant assistance with a variety of legal issues in particular, including public benefits, guardianship, and fair housing. By ensuring that families can successfully obtain and retain Medicaid, Medicaid waiver, and Social Security benefits, the NFMLP keeps children connected to care. The NFMLP also negotiates with managed care entities and the state to ensure access to care coordination and essential health services for these children including private duty nursing, subspecialty care, and durable medical equipment.

The NFMLP, in partnership with JALA’s Fair Housing Unit, has been able to quickly and effectively address substandard conditions in rental housing on behalf of children with medical complexity. For example, in 2018 the Fair Housing Unit compelled a private landlord to repair the air conditioning in a rental unit of a child at risk for seizures. The landlord replaced the air conditioning in less than 24 hours. Prior to the attorneys’ intervention, the landlord told the family that the replacement would be addressed in the order that the service request was received.

**STATE AND LOCAL EFFORTS TO SUPPORT MLP**

The NFMLP is not the only medical-legal partnership in the state of Florida. Innovative projects exist around the state. At the Florida International University Herbert Wertheim College of Medicine in Miami, a medical-legal partnership exists within the Neighborhood HELP® program that provides integrated, in-home healthcare services to low income communities. Medical-legal partnerships can also be found at: Legal Aid Society of Palm Beach County, Three Rivers Legal Services, Community Legal Services of Mid-Florida, and Bay Area Legal Services. This list is not exclusive.

Funders such as the Florida Bar Foundation for civil legal aid have recognized the benefits of medical-legal partnerships and have recently prioritized the work of these partnerships. The Foundation currently funds a working group comprised of medical legal partnerships around Florida that use the group to share information and resources and work to develop the reach of the model around the state. The group is also drafting a set of principles to guide established and new medical-legal partnerships in Florida.

JALA and Wolfson have also moved further toward increased and sustainable funding for the NFMLP, which started with funding generated during Jacksonville attorney Michael Freed’s “Freed to Run” effort. JALA aims to raise $1 million over the next five years to fund an endowment with Baptist Health (of which Wolfson is affiliated). Baptist Health is matching JALA’s $2.25 million and more than double the NFMLP’s potential impact. The endowment principal will be held in perpetuity, with earnings from the invested assets will help pay for legal services offered to children with medical-legal needs. The “Freed to Run” event raises funds to establish the endowment, most recently occurring in December 2018, which involved over 100 runners and raised approximately $414,000.

For more information about medical-legal partnerships, including in pediatric care, please visit: https://medical-legalpartnership.org/

**REFERENCES**

3. To learn more and view a snapshot of the NFMLP’s individual case success stories, please visit: https://www.jaxlegalaid.org/endowment/.
4. It is not uncommon for a referred patient’s family to present with multiple legal issues that are identified either by the healthcare provider or later by the NFMLP attorney.
5. Representation is provided by the NFMLP attorney, another JALA attorney, or a pro bono attorney which is an attorney in the private bar who volunteers their time to assist individuals who cannot otherwise afford a civil attorney.
6. Advice and counsel is a delivery method of civil legal aid assistance where the attorney collects information from the client and third parties, assesses the legal issues, and then offers counsel to the client on how to enforce their rights or fulfill their legal obligations. For example, the NFMLP often provides advice and counsel regarding public benefits and the steps a client should take to pursue an application and safeguard their rights if denied.
7. The overrepresentation of Medicaid enrollees may be attributable, in part, to providers’ selection of which patients should be referred to the NFMLP. The NFMLP can only provide direct legal representation to individuals who qualify for civil legal aid assistance (200% of the Federal Poverty Level or below). While the income screen does not occur until after the patient is referred to legal services for assistance, since the NFMLP has not yet adopted a formal screening tool, providers may be more likely to refer those patients they believe will qualify for free civil legal aid assistance.

Interested in joining the FCAAP Editorial Board or submitting an article for a future publication? Contact FCAAP Membership & Communications Coordinator Melanie Range at mrange@fcaap.org for more information!
CASE REPORT

Cold Hands, Warm Heart: Purple Discoloration of Bilateral Hands in a 15-year-old Female

Maya Schueller, MD; Nora AlFakhri, MD; Olivia Mounme, BS; Kathryn E. Wheeler, MD, and Rachel M. Coleman, MD
1 Resident, Department of Pediatrics, University of Florida Health, Gainesville, Florida
2 Medical Student, University of Florida School of Medicine, Gainesville, Florida
3 Assistant Professor, Department of Pediatrics, University of Florida Health, Gainesville, Florida

CASE PRESENTATION

A 15-year-old female presented to a general pediatrics clinic for a well adolescent visit. She was healthy with no medical diagnoses, and she desired contraception. Her personal and family histories were negative for clotting disorders, deep vein thrombosis, pulmonary embolism, stroke, autoimmune disorders and Raynaud’s phenomenon (RP). No contraindication was found, and she was started on oral desogestrel-ethinyl estradiol 0.15-30 mg-µg contraception.

One month after initiation of OCPs, the patient developed intermittent blue/purple discoloration of nails and knuckles (Image 1). She reported that with each episode, her hands felt cold with associated tingling. She denied tenderness or ulceration of the digits. Occurrences were variable in length from 15 minutes to several hours. The episodes initially occurred every day to every few days, then spaced out to every 1-2 weeks. She noted that warming the hands usually resolved the symptoms.

FINAL DIAGNOSIS

Raynaud’s phenomenon secondary to OCP use.

DISCUSSION:

Raynaud’s phenomenon (RP) is an episodic vasospastic ischemic response of the digital arteries that has an estimated prevalence of 3-21%5 and can have a significant impact on quality of life, disability, and ensuing diagnosis of systemic diseases. Thus, it is important for providers to be familiar with the triggers, presentations, and pathophysiology behind RP. RP can occur as a primary (idiopathic) process which is generally harmless, or as a direct result of other diseases or serious causes, known as secondary RP.

Secondary RP as a result of OCPs has been previously reported in medical literature, as well as associated with the use of estrogen in hormone replacement therapy in postmenopausal women. When prescribing OCPs, practitioners generally screen for bleeding or clotting disorders, as it is well accepted that estrogen-containing OCPs increase clotting factors, but do not generally screen for RP.

In any new presentation of RP, providers should have a wide differential diagnosis. Commonly in conjunction with rheumatic diseases. Notably, systemic sclerosis and mixed connective tissue disease are strong precipitants of secondary RP, with 90% of patients with sclerosis and 85% of MCTD reporting symptoms of RP. Secondary RP is also less benign than primary, due to more extensive damage to digits. This damage is postulated to be due to endothelial cell activation resulting in formation of intravascular microthrombosis, as well as promotion of leukocyte, macrophage, and immune complex activity.

In this case, the timeline of drug initiation and development of symptoms lined up appropriately for this patient, with symptoms starting shortly after initiation of treatment with the offending agent. While other causes of RP were considered, our patient was otherwise well-appearing and the exam was non-concerning for other vascular phenomena or systemic disease. No laboratory workup was performed, as her symptoms were consistent with a diagnosis of RP.

All patients with RP should undergo nailfold capillary examination to look for abnormalities like giant capillaries or hemorrhages, which are key markers of systemic microvascular damage. Systemic signs that should be considered “alarm” symptoms for a primary rheumatologic disorder include muscle weakness or pain, arthritis, weight loss, fever, rash, xerostomia or xerophthalmia, and fatigue. Organ-specific symptoms should also prompt providers to search for other etiologies. In these cases, screening labs such as ANA and ESR can be done in conjunction with a thorough physical exam to elicit signs of disease.

The pathophysiology of RP is not fully understood, but is thought to be a result of constriction of the small muscular arteries and arterioles of the digits. It is thought the nidus of the phenomenon lies in a local defect in the digital vessels. Separate but convergent mechanisms may be involved in primary versus secondary RP as well. For example, abnormal blood viscosity has been implicated in RP for many years. Studies on primary RP have demonstrated increased fibrinogen levels in RP patients. One study of patients with OCP-induced RP noted that all patients had improvement after they stopped taking OCPs. One patient was switched to oral progesterone only, which also resulted in an improvement in her RP. This led some researchers to conclude that increased estrogen was the main cause of the Raynaud’s phenomenon.

This school of thought does align with our case presentation, because we know estrogen is pro-thrombotic and causes significant increase in fibrinogen.

Management of RP includes minimizing exposure to the agents that cause symptoms. For the patient in this report, discontinuing OCPs was the obvious course of action. General therapeutic approaches for RP include avoiding sudden cold exposures, protecting exposed skin during cold weather, avoiding smoking and trauma, avoiding sympathomimetics or other drugs (both legal and illicit) that cause vasoconstriction, and avoiding emotional stress. The patient in our vignette improved with removal of the offending agent. However, if a patient’s symptoms are refractory to lifestyle changes or if damage such as digital ulceration or pitting occurs, medical therapy can be started using dihydropyridine calcium channel blockers (CCB), such as amlodipine, nifedipine, or nicardipine.

COURSE

Given that the onset of RP was concurrent with OCP therapy, OCPs were discontinued due to concern for RP that was caused by the medication. Within 1 week of stopping OCPs, the patient had complete resolution of RP. Based on the full history and physical exam, it was believed that in this case, RP was induced by OCPs. She later completed a trial of progesterone only contraception with no adverse effects. She was transitioned to progesterone injections and had no further episodes. Subsequent follow-up over the next 3 years showed no recurrence of the symptoms. Recently, she had an IUD placed and did well post-procedure with no recurrence of RP.
CONCLUSION

Here we present a case of RP likely due to combined OCP use in an adolescent. While OCP-induced RP is not a common clinical scenario, RP should be considered in any patient taking OCPs who presents with RP. RP is often a benign and transient occurrence, but can result in significant symptomatology and can be a sign of a more serious systemic disease. Understanding the underlying pathophysiology and associated diagnoses is important for any physician. As many patients present in adolescence, pediatricians specifically need to be familiar with the diagnosis.

<table>
<thead>
<tr>
<th>PRIMARY</th>
<th>SECONDARY</th>
<th>NON-ARTHRITIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idiopathic</td>
<td>Rheumatologic</td>
<td>Vibration-induced</td>
</tr>
<tr>
<td>Occupational or exposure</td>
<td>Obstructive vascular diseases</td>
<td>Cold injury</td>
</tr>
<tr>
<td>Drug-induced</td>
<td></td>
<td>Buerger’s disease</td>
</tr>
<tr>
<td>Systemic vasospasm</td>
<td></td>
<td>Atherosclerosis</td>
</tr>
<tr>
<td>Infectious</td>
<td></td>
<td>Raynaud’s disease</td>
</tr>
<tr>
<td>Hematologic</td>
<td></td>
<td>Thoracic outlet syndrome</td>
</tr>
<tr>
<td>Metabolic</td>
<td></td>
<td>Vasculitis</td>
</tr>
<tr>
<td>Immunologic</td>
<td></td>
<td>Antiphospholipid syndrome</td>
</tr>
</tbody>
</table>

Table 1: Differential diagnosis of Raynaud’s phenomenon

REFERENCES

Looking to avoid risk?

WE CAN SHOW YOU THE WAY.

We're taking the mal out of malpractice insurance. Thanks to our national scope, regional experts, and data-driven insights, we're uniquely positioned to spot trends early. We shine a light on risks that others can't see, letting you focus on caring for patients instead of defending your practice. It's a stronger vision that creates malpractice insurance without the mal.

Join us at thedoctors.com