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opinions expressed in this publication.
Intrinsic to any discussion of ensuring a culture of safety is limiting children’s exposure and access to firearms. National statistics on gun violence are staggering. In 2013, 3924 homicides and accidents and 2347 suicides by firearms occurred in the 0-24 age groups, amounting to approximately 17/day. Injuries by firearm that year were 36,205 or about 100/day in that same age group. While NJ’s statistics are better than the national average (5.7 NJ vs 10.4 US rate/100,000 all ages), in 2012, we still experienced 107 homicides and 15 suicides among 0-24 year olds.

Firearms have been and remain the most commonly used method of suicide in the adolescent age group. Combining adolescent impulsivity with the availability of firearms in the home leads to a highly lethal (90%) fatality rate when adolescents attempt suicide. Availability also contributes to unintentional firearm injuries and fatalities when children get a hold of unlocked and loaded firearms in the home.

For these reasons, NJAAP advocates for policies and programs that promote safe storage of guns and ammunition. Studies have shown that keeping a gun locked and unloaded and separated from similarly stored and locked ammunition, produces a 70% protective effect on reducing the risk of unintentional injury and suicide rates in children and adolescents. Parent education during office well visits addressing gun safety within Bright Futures Anticipatory Guidance and national campaigns such as ASK (Asking Saves Kids) has also been shown to be effective in delivering the “ensuring safety when guns are in the home” message.

NJAAP supports AAP National’s efforts to advocate for smart-gun locks and storage technology, firearm storage laws, as well as eliminating gun show loopholes, tightening background checks and banning assault weapons and high capacity magazines.

The Chapter also strongly supports increasing resources for mental health screening and treatment, especially as it applies to suicide prevention.

As of January 4, 2016, the US Department of Health and Human Services (HHS) has modified the Health Insurance Portability and Accountability Act (HIPAA). Privacy Rule to expressly permit certain covered entities to disclose to the National Instant Criminal Background Check System (NICS) the identities of those individuals who, for mental health reasons, already are prohibited by Federal law from having a firearm.

The data exchange is limited to minimal information (not diagnoses) about those who have been involuntarily committed to mental institutions or have been determined legally to be a danger to themselves or others or lack the mental ability to handle their own affairs. We encourage state legislature to adapt and follow these guidelines as well to ensure the safety of its citizens.

And finally, NJAAP agrees with AAP National that funding for national gun violence research by the NIH and CDC needs to be restored and robustly supported.

Elliot Rubin, MD, FAAP
President NJAAP

NJAAP 2016 Agenda for Children

Supporting a Culture of Safety is one of eight primary areas of focus for NJAAP in 2016-2017.
Download the Agenda for Children from your favorite app store or go to http://mazdigital.com/webreader/37564 to read it now.
Happy Spring! This column focuses on invitations – to all of you! Invitations to become engaged, to advocate, educate, and yes, even to celebrate. Join us and together, we can roll up our sleeves and get to work on the Chapter’s priorities as outlined within the pages of the 2016-2017 Agenda for Children. This publication, the result of a collaborative effort between twelve pediatricians and NJAAP staff, enunciates our pediatric priorities for all children in New Jersey, especially the most vulnerable. It speaks to some of the many barriers confronting pediatricians today, ranging from issues pertaining to vaccine delivery systems to a multitude of administrative and financial burdens. These priorities include: Access to Care, Supporting a Culture of Safety, Food Insecurity, Healthy Weight & Activity, Immunization, Mental Health, Preventative Oral Health and Facing Poverty. The complete Agenda for Children can be found at: www.aapnj.org. And speaking of the website, be on the lookout for the soon-to-come unveiling of the Chapter’s newly designed website. We are anxious to hear your feedback after the site goes live. Please weigh in; your feedback is welcome and appreciated.

April is Child Abuse Awareness month. NJAAP, working in partnership with the NJ Department of Children & Families, supports pediatrician’s efforts to ensure the health and safety of all children (see Dr. Kairys column, pg. 5).

Pediatrician-led practice teams from across the state have participated in one or more of our Child Abuse and Neglect (CAN) prevention programs and many are scheduled throughout 2016. These valuable training opportunities can help your practice advance its abuse prevention knowledge and assist you in incorporating effective strategies for reducing and/or preventing the child abuse. The CAN programs are office-based and offer CMEs. The CAN program also offers an MOC Part 4 Quality Improvement Program that begins in May. Interested in participating in one of the trainings? Perhaps participating as a member of an interdisciplinary educational training team? NJAAP provides train-the-trainer preparation. You’re called when we’re training in your area and if available, you can elect to participate. if you are unavailable for one training, there are always additional opportunities. Is your passion Medical Home improvements, Implementing Bright Futures, Mental Health, Preventative Oral Health, Lead Poisoning Prevention; Raising Immunization Rates, FASD, CCHD, Tobacco Cessation, or other pediatric areas? If so, we have staff ready to talk with you about opportunities that can match your interests with Chapter initiatives. We’re just a phone call or email away!

You’re invited to celebrate with us on Wednesday, April 20th at our Sixth Annual Children’s Ball, at The Palace in Somerset, NJ. Join us as we present the Pediatrician of the Year Award to Meg Fisher, MD, FAAP; Champions for Children Awards to Senator Robert Gordon & Gary Rosenberg, MD; and the Youth Award to Amara Riccio. This is an evening of fun, and an opportunity to socialize with friends and colleagues and least we not forget, the Chapter’s major fundraiser of the year. Please purchase a ticket, reach out to some friends and take a table – we hope you join us (tickets at: www.aapnj.org). If you cannot make it, please support the important work of NJAAP by purchasing a ticket for a friend, making a donation for the silent auction, or wine pull, or simply make a donation. Questions? Call us… we can tell you more about this exceptional event.

continued on next page
April is Child Abuse and Neglect Prevention Month, a time that should cause us to consider how we, as pediatricians, can provide life-nurturing support to children residing in dysfunctional homes and living with troubled parents. And while the data reports physical abuse to be more common in lower income, stressed households, we must acknowledge that significant abuse and neglect also takes place in middle and upper class homes, both across New Jersey and America. And this abuse is almost always part of a chronic pattern of physical punishment, verbal abuse and lack of safety.

Children rarely let you know how they are being mistreated, so being a ‘trauma’ informed practice can increase your practice’s antenna.

First, it is essential to understand how common and damaging toxic stress is among children living in a dysfunctional household. This chronic trauma can present as children with problem behaviors, children with attentional issues, children who are oppositional, miss school, withdrawn or who develop chronic pain. Consider adding a few simple open-ended questions asking about home life, changes and family support to your well visits. Every family experiences some degree of discord. Ask how the family deals with the conflict. Do the parents work together to resolve conflict? Do they discuss what to do before a crisis materializes?

During times of crisis do the parents get angry? And if so, what happens afterward?

Sometimes evidence-based screening tools such as Ages and Stages, SWYCC or the Pediatric Symptom Checklist can help draw attention to problematic behaviors or moods that could eventually develop into more significant problems. Catching these issues early, before they have had a chance to produce cumulative damage, is critical to preventing the complex downstream effects of abuse.

In addition, multiple, non-stigmatizing resources for helping families avert crisis exist throughout New Jersey. For one, Family Success Centers, which are state-funded neighborhood gathering places where local residents can find support, information and services, operate in all 21 counties. Visit www.nj.gov/dcf/families/support/success/ to find the Center nearest to you. Family Support Organizations, Parents Anonymous, home visiting programs, early intervention, child based supports, catholic charity services, etc...all exist in close proximity and are equally non-threatening and supportive.

Get to know what exists in your community. Call NJAAP if you need help locating the resources. Invite some of these services to visit your practice ahead of time, so that you can get to know them on a first name basis. Assign a member of your staff to develop your own community resource reference book. Having this information readily available can make all the difference.

We hope to see you at the NJAAP Annual Meeting & Conference on May 11th, also taking place at The Palace. We have a planning committee of pediatricians and staff who aim to “hit the mark” on hot topics! This year, we’ve added an MOC Part 2 activity Good4 Growth, presented by Robert Murray, MD, FAAP (20 points). This is a not to be missed conference! Register by April 10th and receive a 20% discount. Check www.aapnj.org for the most up-to-date details. Busy during the day? Join us for the CME Dinner Event: Sleep Problems in Children presented by Nathan Blum, MD, FAAP.

NJAAP is one of the most active Chapters in the nation. Please visit our website to see what we’re up to and how you can become more involved with a current or future initiative. NJAAP leadership and our staff are dedicated and dynamic … and ready to welcome you! Thanks for all you do on behalf of children and their families every day. We look forward to meeting you soon at one or more of our many events!

Kind Regards,
Fran
Vascular Anomalies are broadly categorized as either vascular tumors or vascular malformations. Vascular tumors or hemangiomas are generally not congenital lesions though most commonly are manifest during infancy. Vascular malformations, on the other hand, are congenital lesions that are further categorized based on their hemodynamic properties into high-flow or slow-flow lesions. Combinations thereof can also exist typically as part of a broader syndrome. Nomenclature and classification are of utmost importance as therapeutic options and expected outcomes vary greatly.

As our understanding of the natural history, hemodynamics, diagnostic and therapeutic outcomes of these lesions has expanded and evolved over the last few decades, certain diagnostic and therapeutic principles have been established and are considered standard of care. These principles are important to adhere to in the overall management of these lesions and are highlighted and briefly expanded upon herein.

1. Introduction

Vascular anomaly is a broad term that refers to abnormalities involving the vasculature of the human body. These abnormalities can involve all different types of vessels including large arteries and veins, smaller arterioles and venules, microscopic capillaries, as well as lymphatic channels. Abnormalities involving combinations of these channels can also exist and are more commonly part of a broader syndrome. As a result of the breadth of involvement, vascular anomalies comprise a wide range of disorders from minor, cosmetically concerning problems to organ- and life-threatening conditions. Therefore, it is imperative that the correct diagnosis is made and the appropriate therapy is sought.

Historically, vascular anomalies have been a source of confusion and the terminology used to describe these conditions has been inconsistent and, at times, haphazard. Given recent advancements in scientific discovery, attempts have been made to standardize the terms used to diagnose and describe vascular anomalies. This has facilitated communication with patients as well as amongst physicians of various specialties treating these complex conditions.

It is of utmost importance that the proper terminology is used to describe a given condition so as to avoid confusion during evaluation, counseling, and treatment. (Table 1)*

### Table 1*

<table>
<thead>
<tr>
<th>Vascular Tumors</th>
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<tr>
<td><strong>Simple Isolated Lesions</strong></td>
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<td>• Arteriovenous malformations and fistulas</td>
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<td><strong>Combined Lesions</strong></td>
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<td>• Parkes-Weber Syndrome</td>
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<td>• Sturge-Weber Syndrome</td>
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2. HEMANGIOMAS

The most important distinction one has to make when evaluating a vascular anomaly is to differentiate “hemangiomas” from “vascular malformations”. Hemangiomas are mostly benign endothelial tumors of infancy. They are the most common childhood tumor with a reported incidence of 2-10% and tend to more commonly affect Caucasian females of low birth weight. There are various subtypes, the most common of which (>80%) is the infantile hemangioma (IH) with its characteristic “strawberry birthmark” appearance. Other, rarer subtypes of hemangiomas exist such as congenital hemangiomas, kaposiform hemangioendothelioma, and tufted angioma. There are also certain syndromes that feature hemangiomas as a characteristic feature such as PHACES (Posterior fossa, Hemangiomas, Arterial, Cardiac, Eye, and Sternal anomalies) and LUMBAR (Lower body hemangiomas, Urogenital, Myelopathy, Bony deformities, Anorectal, Arterial, and Renal anomalies) Syndromes. Proper identification and diagnosis of the specific type of hemangioma is important as expected outcomes and potential treatment options can vary.

2.1 Infantile Hemangiomas

Various hypotheses exist as to the etiology of infantile hemangiomas though none of which has received substantial merit. IHs tend to occur more commonly in the head and neck area. The skin is by far the organ most commonly involved so most of these lesions are readily identifiable.
If the IH is located near a vital organ such as the airway or the eye, a much more aggressive treatment approach is sought so as to prevent problems with organ and functional development. IHs can also involve internal organs such as the liver, intestines, or the airway. These are much more difficult to identify and diagnose and can sometimes be incidentally discovered. Most, not all, internal hemangiomas tend to be problematic and are treated aggressively.

IH’s have a characteristic and predictable pattern of presentation, growth, and regression. They most commonly appear within 2 weeks to 2 months after birth and undergo a “proliferative phase” until about 12 months of age.

From there on out, they undergo a long, drawn-out regression or “involution phase” which can last as long as 7-9 years. Following involution, an “involved phase” begins, which mostly involves scarring and remodeling of the residual tumor. While most IHs can safely be observed, early evaluation and assessment of the depth and extent of the lesion - ideally at a dedicated, multi-disciplinary center of excellence - can minimize or correct potentially serious complications during the proliferation phase (such as visual, respiratory, or digestive problems, cavitation, ulceration, etc.) in certain, more extensive varieties. It can also be effective at reducing the need for extensive surgery later in the involution or involuted periods. Presence of 3 or more IH’s suggests presence of hemangiomatosis and necessitates dedicated imaging of the brain and viscerum to rule out internal involvement. In certain situations, early treatment can also minimize the inherent psychosocial complications associated with a disfiguring, readily apparent lesion during critical periods of development.

Available treatment options include simple observation, pharmacotherapy (steroids, beta-blockers [now FDA-approved], and/or immunomodulators), surgical excision with reconstruction, laser photocoagulation, and rarely, catheter-directed techniques such as angiography with or without embolization. Occasionally, a combination of these techniques is required for optimal results. Since its serendipitous discovery of efficacy in shrinking IH’s in 2008, oral propranolol therapy has revolutionized management of IH’s. Given its relatively limited short-term side effect profile, it has, in some instances, lowered the threshold for IH treatment. Administration does require close monitoring for tolerance, efficacy, and short-term complications (including but not limited to bradyarrhythmias, hypotension, and hypoglycemic episodes). Topical formulations are also available but tend not to be as efficacious as systemically delivered medication for larger, more aggressive IH’s. The largely unknown long-term complications of oral propranolol remain under investigation.

2.2 Congenital Hemangiomas

These are much rarer hemangiomas and have a different pattern of presentation than the classic IH. They have a predilection for the upper trunk and the extremities.

Unlike IH, they are present at birth and either undergo rapid (within 6-12 months) regression (termed rapidly involuting congenital hemangioma or RICH) or do not regress at all (termed non-involuting congenital hemangiomas or NICH). They characteristically do not respond to beta-blockade. Treatment is variable depending on location and associated symptomatology and can include surgical resection, embolization, pulsed dye laser photocoagulation, and steroid therapy. Early evaluation and identification is key in management.

2.3 Kaposiform Hemangioendothelioma/Tufted Angioma

These are extremely rare hemangiomas that have a much more aggressive pattern of growth and can invade multiple tissue planes. Given their aggressive nature, they can be associated with the potentially lethal consumptive coagulopathy termed Kasabach-Merritt Phenomenon, which requires immediate medical attention. Early referral, timely diagnosis, and a multi-disciplinary collaborative approach to treatment can be life-saving.

3. VASCULAR MALFORMATIONS

Vascular malformations do not represent a neoplastic process but are rather manifestations of developmental errors of angiogenesis that occur in utero due most commonly to focal sporadic gene mutations. While congenital, they typically do not become symptomatic until later on in life when environmental triggers such as puberty, pregnancy, and trauma stimulate more aggressive growth. Vascular malformations never regress and generally will continue to grow throughout the lifetime of the patient. Depending on which types of blood vessels are involved, associated symptoms and patterns of development vary widely. Some vascular malformations will require multiple treatments over the patient’s lifetime. As a result, regular follow-up is essential at minimizing recurrent symptoms and associated complications. It is of utmost importance to identify which type of blood vessel is involved as treatment options vary widely for each type of malformation. Broadly speaking, vascular malformations are categorized based on their flow characteristics and include (Table 1 on Page 6)*:

1. Capillary malformations; Also known as, port-wine stains.
2. Slow-flow venous and lymphatic malformations
3. High-flow arteriovenous malformations (AVMs) and arteriovenous fistulas (AVF)

continued on page 8
3.1 Capillary Malformations (Port-Wine Stains)

Capillary malformations, better known as port-wine stains (PWS), present as erythematous to purple patches and can occur nearly anywhere on the body, but have a predilection for the head and neck (Figure 2)*. Like all other vascular malformations, these are congenital and will never regress spontaneously\(^{37}\). Chronic local inflammatory changes and angiokeratomas are typical superimposed features and can lead to thickening of the affected portion of the skin and darkening of the primary color\(^{28,29}\). PWS can either be isolated or associated with other, more extensive syndromes, particularly when a specific pattern of distribution is noted. Syndromes associated with PWS include Klippel-Trenaunay Syndrome, Parkes-Weber Syndrome, and Sturge-Weber Syndrome. When encountered in these specific patterns of distribution, a dedicated search to identify underlying vascular malformations is necessary so as to prevent potentially devastating complications of untreated lesions.

The first-line of treatment for problematic PWSs is laser photocoagulation most commonly via a pulsed dye laser. Multiple treatments are often needed. Results vary depending on location of the malformation with the general rule of thumb being that central lesions (face, head, neck) fare better than more peripheral lesions (hands and feet) with laser therapy. Early treatment is encouraged to optimize results prior to more extensive chronic local inflammatory changes take place. These are relatively well-tolerated with minimal complications; the most common of which is scarring from multiple treatments. Treatment does not eliminate the lesion completely. In other words, laser therapy will not eliminate the associated discoloration, but significant improvement is frequently achieved. Regular follow-up and maintenance therapy is recommended for optimal results\(^{38–40}\).

3.2 Slow-Flow Venous Malformations

Malformations affecting the venous circulation are, by far, the most common comprising nearly 75% of all vascular malformations\(^7\). Venous malformations (VM) can either be isolated or part of a syndrome, most commonly Klippel-Trenaunay Syndrome (KTS) – a disorder featuring the clinical triad of PWS, VMs, and often unilateral limb overgrowth\(^{24,28,29,41}\) (Figure 3)*. The cause is unknown although somatic mutations in the TIE-II receptor tyrosine kinase – an important endothelial cell receptor involved in recruitment of mesenchymal cells during vasculogenesis - have been implicated in certain sporadic and syndromic cases\(^13,41–43\).

VMs are congenital, but do not become apparent until later in life when factors such as activity, injury, puberty, pregnancy, surgery, etc. trigger symptomatic exacerbation\(^{28,29}\). They can happen nearly anywhere in the body at any depth. Symptoms range from cosmetic disfigurements to minor aches and pains to severe, debilitating symptoms affecting ambulation and function (Figure 4-6)*.

Recurrent hemorrhage, clotting disorders, and organ damage, mostly within bones, joints, and skeletal muscles can also be encountered\(^{28,29,42,44}\).

VMs are readily identified on properly conducted MRI studies\(^{29,36,42,45}\) (Figure 7-8)*. Treatment primarily consists of Direct Stick Embolization (DSE) which involves injection of a detergent-type compound directly into the VM after delineation under ultrasound or x-ray\(^{28,29,46}\).

This treatment is generally well-tolerated if performed judiciously with focal treatments performed in multiple sessions with appropriate length intervals in between sessions. Aggressive treatment of large areas can cause local skin and nerve damage, and systemic cardiopulmonary complications. Surgical excision best serves as an adjunctive therapeutic modality in conjunction with sclerotherapy\(^{28,36,44,47}\) as with all other vascular malformations, treatment is geared towards controlling and minimizing symptoms. In general, focal, superficial lesions respond more favorably to DSE than widespread, deeper lesions\(^29\).

3.3 Slow-Flow Lymphatic Malformations

Malformations affecting the lymphatic channels can be secondary to an obstruction or a congenital deformity of the walls of the lymphatic channels themselves. This results in stagnant lymphatic flow and pooling of the lymph fluid into cystic pockets of variable size. These cysts can bleed, become infected, or both\(^{24,48}\). If large enough, they can impinge upon adjacent organs such as nerves and the aerodigestive tract.
The lower limbs can be affected in a congenital manner as occurs in Milroy disease. Given that lymphangiogenesis is under less hormonal regulation than angiogenesis, lymphatic malformations (LMs) become manifest much earlier in life (during infancy and early childhood) than other types of vascular malformations.

Diagnosis is made by ultrasound, MRI, and rarely CT scans depending on location and pattern of presentation. Most commonly, the first-line treatment is catheter-directed drainage of the cysts followed by injection of the drained cyst cavity with a sclerosant (a detergent-like compound that causes irritation, inflammation, and gradual collapse of lymphatic cyst). This is most successful for macrocystic LMs (those greater than 2 cm). Microcystic LMs are more difficult to treat and may require laser photocoagulation with or without surgical excision for optimal therapy. Multiple treatment sessions may be required and recurrence is rare.

Surgery as first-line treatment is generally not recommended, as infectious complications, cystic rupture, and subsequent recurrence rates are frequently encountered. Surgery is best reserved for residual lesions after sclerotherapy or for smaller cysts not responding to sclerotherapy.

3.4 High-Flow Arteriovenous Malformations

Arteriovenous malformations (AVMs) represent an abnormal connection between arteries and veins anywhere upstream of capillary level. AVMs can be likened to a short-circuit of sorts wherein blood pumped from the heart is prematurely redirected away from the target organ back towards the heart. This can create a vicious, hyperdynamic cycle of blood flow resulting in venous hypertension within the affected organ, distal ischemia, and rarely congestive heart failure. As with all other vascular malformations, AVMs can be congenital but do not become symptomatic until later on in life as the malformation continues to grow with the patient and becomes affected by changes in the hormonal milieu as well as with activity and/or local trauma. By far, the most important factor in management of AVMs is early detection and delineation of hemodynamic pattern of flow.

Congenital AVMs can be present nearly anywhere in the body but have a predilection for the brain, spinal cord, and the extremities. Rarely, the renal, gastrointestinal, and pulmonary circulation can be affected. Under these circumstances, clinical suspicion is raised for the autosomal dominant disorder Rendu-Osler-Weber Syndrome with characteristic features of recurrent refractory epistaxis, acral telangiectasias, and AVMs within various vascular beds.

Diagnosis will require a series of imaging studies such as ultrasound, MRI, and angiography. Treatment is almost always indicated to minimize symptoms and decrease the likelihood of expansion and organ loss.

In some rare cases, the malformation has expanded severely enough such that treatment may provide little to no benefit and management is geared more towards palliation of associated symptoms.

The mainstay of treatment for AVMs is catheter-based embolization of the focus or “nidus” of the malformation thereby redirecting blood flow back into the distal capillaries and reducing chronic arterialization of the draining venous system. Most commonly, multiple treatment sessions will be required throughout the lifetime of the patient. Main goal of therapy is alleviation and control of symptoms and organ preservation. While angiographic cure is rarely attainable, symptom control and decreased rate of lesion progression is often achieved successfully.

Surgery by and large is not recommended as primary treatment of AVMs except in rare refractory cases or as a life-saving maneuver (ie, limb amputation).

4. Summary

Vascular malformations are congenital lesions that develop as a result of developmental errors during vasculogenesis. They must be distinguished from hemangiomas, which represent hamartomas of endothelial cell origin. Nomenclature and classification schemes are important because treatment options vary widely. Slow-flow vascular malformations include VMs and LMs that can occur sporadically or as part of a broader syndrome. Endovascular treatment by DSE has evolved into the first-line and often sole therapy for most VMs and LMs. Experience with technique and familiarity with various embolic agents are major determinants of clinical outcomes. Congenital high-flow AVMs are pathologic connections between arteries and veins anywhere upstream of capillary level. These can either be direct, fistulous connections or, more commonly, contain an intervening nidus - a convoluted network of blood vessels with poorly differentiated endothelial cells. Natural history and symptomatology largely depend on extent and location of the lesion. Venous hypertension as a result of chronic arterialization of the draining veins is a major source of early morbidity. Distal ischemia is a later manifestation. Endovascular treatment has evolved into a mainstay of treatment. Although direct arteriovenous fistulas can be cured by use of proximal occluding devices, AVMs with a nidus require infiltration with a liquid embolic agent delivered superselectively via a coaxial, microcatheter based system. Without this, all attempts at more proximal inflow control are futile. Given their convoluted and evolving angiarchitectute, AVMs readily render themselves to creativity and technical innovation during treatment. A collaborative, multidisciplinary approach within a dedicated center of excellence, is important for safe, comprehensive management of these complex lesions.
Figure/Table Legends

Table 1. Updated 2014 International Society for Study of Vascular Anomalies (ISSVA) classification for vascular anomalies.

References


CME Quiz on page 12

New Jersey Pediatrics


New Jersey Pediatrics is supported by an authoritative Editorial Board augmented by pediatric specialists and sub-specialists. Contributors to New Jersey Pediatrics benefit from fast and professional peer-review process. Following an initial screening and approval for general suitability, Editors, Indira Amato, MD, FAAP and Michael Weinstein, will assign submissions for external peer review. The journal will operate on a blind peer-review policy, and will aim to reach a first decision by two reviewers within six weeks of submission.

New Jersey Pediatrics is recruiting additional reviewers and new Editorial Board members. Interested? Please contact Michael Weinstein at mweinstein@aapnj.org.

Find Submission Guidelines at www.njaap.org
CME Quiz - Peripheral Vascular Anomalies

1. What is the pathologic process that results in hemangiomas?
   a. Neoplasm of endothelial cells
   b. Errors in vasculogenesis
   c. Metastasis of existing malignancies

2. What is the pathologic process that results in vascular malformations?
   a. Neoplasm of endothelial cells
   b. Errors in vasculogenesis
   c. Metastasis of existing malignancies

3. MRI is the gold standard imaging modality for the differentiation of vascular anomalies?
   a. True
   b. False

4. When do infantile hemangiomas usually present?
   a. At birth
   b. 2 weeks to 2 months after birth
   c. 6 months to 1 year after birth
   d. 2 years after birth

5. What is the best role of surgery in the treatment of vascular malformations?
   a. First line therapy
   b. Adjunct to sclerotherapy or embolization
   c. Surgical intervention is never indicated

6. Puberty, pregnancy, other hormonal changes, injury, activity, surgery are common factors that promote the growth of venous and arteriovenous malformations?
   a. False
   b. True

7. The primary goal of treatment in the management of vascular malformations is symptomatic control?
   a. False
   b. True

8. Which of the following vascular anomalies often undergo an “involution phase”?
   a. Infantile hemangiomas
   b. Arteriovenous malformations
   c. Non-involuting congenital hemangiomas (NICH)
   d. Capillary malformations
   e. Venous malformations

9. Which type of vascular malformation most commonly presents in early childhood?
   a. Arteriovenous malformations
   b. Venous malformations
   c. Lymphatic malformations

10. Which syndrome/vascular anomaly is characterized by venous malformations, port wine stains and often, unilateral limb overgrowth?
    a. Sturge Weber Syndrome
    b. Klippel Trenaunay Syndrome
    c. Blue Rubber Bleb Nevus Syndrome
    d. PHACES Syndrome

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NAME __________________________ PHONE __________________________

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It is with great excitement that the New Jersey Chapter, American Academy of Pediatrics (NJAAP) and the New Jersey Oral Health Coalition's Pediatric Health Home Subcommittee announce the launch of a new and improved website to support the Oral Health Wellness Campaign. We invite you to visit www.healthyteethnj.com and experience the site's simplicity of navigating and wealth of information and resources all wrapped in a rainbow of colors and highlighted by a newly designed, attention-grabbing logo. Take a Peek!

As recognized leaders in preventative oral health, it's imperative that we continue sharing our knowledge and expertise with a broader range of families, caregivers, providers, and community organizations.

This new website will support this objective by conveying the most accurate and up-to-date information and trends in a user-friendly setting.

We encourage you to visit www.healthyteethnj.com and acquaint yourself with the new design. We are quite proud of the new site, but understand it remains a work in progress. Over the coming months, we will continue efforts to improve the site even further to ensure it serves your needs. While visiting the website, feel free to submit any feedback here.

Help us spread the word. Please share this valuable resource with your colleagues.

NJAAP @ Work

On February 23, 2016, NJAAP staff member, Judie Grandjean, PCMH CCE and valued QI consultant, Ruth Gubernick, MPH, PCMH CCE, introduced the Patient Centered Medical Home and NCQA Recognition program to an enthusiastic practice team at University Pediatrics, PA, in Highland Park. This practice, like many others throughout New Jersey recognizes the importance and value to attaining NCQA (National Center on Quality Assurance) recognition.

Arranged at the request of Dr. Elliot Rubin, members from both the East Brunswick and Highland Park sites of University Pediatrics attend the presentation to learn about the process of transformation in the medical home and how it can lead to NCQA Recognition. In-depth information pertaining to documentation, dedication, necessity of team support, time requirements and an overall picture of the entire course of action was presented.

The NJAAP team provided the practices with a flash drive containing the NCQA Standards and Guidelines, giving practice team members the ability to print and review the materials to determine how their skills are best suited to assist with the process.

The presentation concluded with a lively discussion and a lengthy Q and A session.

The practice came away with a clearer understanding of the time and commitment required for the practice to obtain NCQA Recognition and the resources needed in order for the practice to succeed.

For more information on the Patient-Centered Medical Home Technical Assistance Program, contact Judie Grandjean at jgrandjean@aapnj.org.
The Zika Virus

Zika virus is a flavivirus which is transmitted by Aedes mosquitoes, primarily *Aedes aegypti*. These mosquitoes bite both day and night, indoors and outside. The mosquitoes are widely present in the tropics and subtropics. As of February 4, 2016, Zika infection has been reported from more than 25 countries in South America, Central America and the Caribbean: Aruba, Barbados, Bolivia, Bonaire, Brazil, Colombia, Commonwealth of Puerto Rico, Costa Rica, Curacao, Dominican Republic, Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Saint Martin, Suriname, Trinidad and Tobago, and US Virgin Islands. Note that new areas have been added weekly so in my mind, it is likely the virus will spread throughout the area. It is less likely that there will be local transmission within the United States although it is possible in the southern states; these are within the range of the A. aegypti mosquitoes. Since late January, pregnant women have been advised not to travel to areas with Zika virus transmission.

While it seems likely that the vast majority of people are infected by the bite of a mosquito, there is evidence of sexual transmission. On February 5, 2016, the CDC released interim guidelines for prevention of sexual transmission of Zika virus. These recommendations followed the findings in 3 cases: one of sexual transmission of the virus to a female partner, a second case still under investigation and a third case in which virus was detected in semen at least 2 weeks following symptoms and possibly up to 10 weeks after illness onset. Although the data are limited, the risk for sexual transmission appears real. The recommendation for men who reside in or have traveled to an area of active Zika virus transmission and who have a pregnant partner is to abstain from sexual activity or consistently and correctly use condoms during sex for the duration of the pregnancy. Men whose partners are not pregnant might consider abstaining from sexual activity or using condoms consistently and correctly during sex. We do not know how long the virus stays in semen or how common transmission occurs. Currently, Zika virus testing for the assessment of risk for sexual transmission is considered to be of uncertain value. There is no doubt that these recommendations will be updated as more information becomes available.

**Why do pediatricians need to know about this flavivirus?**

First, you will see returning travelers who may have symptoms and likely, you will be asked for your advice about traveling to the affected areas. Remember that only one of five infected patients, adult or child, will develop symptoms. The symptoms are mild and nonspecific: fever, rash, arthralgia and conjunctivitis. The illness is self-limited. Currently, it is recommended to test travelers who develop symptoms within 2 weeks of travel. The differential diagnosis in travelers includes dengue, Chikungunya, leptospirosis, influenza, rickettsia, parvovirus, adenovirus, enteroviruses, rubella and measles.

Zika virus was first recognized in 1947, when it was identified as the cause of an illness in a rhesus monkey in the Zika Forrest in Uganda. Sporadic reports diagnosed by serology were reported from Africa and Asia over the next several decades. The first major outbreak of Zika virus infection occurred in 2007 in the Federal States of Micronesia. Illness was generally mild and self-limited: fever, maculopapular rash, arthralgia and conjunctivitis lasting for a few days to a week. Another outbreak was reported in French Polynesia in 2013; during this outbreak there were increased reports of Guillain-Barre syndrome.

Zika was recognized in the Western Hemisphere in 2014 with local transmission reported on Easter Island. The 2015 outbreak in Brazil brought world-wide attention to the infection, largely because of the association of microcephaly in babies born to mothers who were infected. Over 4000 cases of microcephaly have been reported; background rates of microcephaly are estimated to be 150 to 250 cases per year. While there have been questions about the definition of microcephaly, it seems clear that there is a major increase in reported cases. Two articles, which documented Zika virus in the brains of affected fetuses and newborns, were published in early February 2016: Miakar J, Korva M, Tul N et al. Zika virus associated with microcephaly. NEJM 2016 DOI:10.1056/NEJMoia1600651 and Martines RB, Bhatnagar J, Keating MK et al. Evidence of Zika virus infection in brain and placental tissues from two congenitally infected newborns and two fetal losses – Brazil, 2015. MMWR 65(06);159–160, available at www.cdc.gov/mmwr/volumes/65/ wr/mm6506e1er.htm . I believe that these two articles confirm the association of Zika virus infection with fetal brain destruction and microcephaly. It is not clear why microcephaly has not been recognized previously.

As of February 2016, all 84 confirmed cases in the United States have occurred in travelers. However, in two US territories, Puerto Rico and US Virgin Islands, there have been locally acquired cases. New information is being reported almost daily and new guidelines released as the Centers for Disease Control and Prevention (CDC) receives more data and more input from experts. The American Academy of Pediatrics (AAP) has an excellent working relationship with the CDC; experts in disaster medicine, pediatric infectious disease, child neurology and neonatology as well as general pediatricians, have been on conference calls with the CDC to provide input regarding each of the guidelines related to children.

The illness is self-limited. Currently, it is recommended to test patients, adult or child, will develop symptoms. The symptoms are mild and nonspecific: fever, rash, arthralgia and conjunctivitis. The illness is self-limited. Currently, it is recommended to test travelers who develop symptoms within 2 weeks of travel. The differential diagnosis in travelers includes dengue, Chikungunya, leptospirosis, influenza, rickettsia, parvovirus, adenovirus, enteroviruses, rubella and measles.

Yes, Zika virus infection has arrived in New Jersey - and in many other states as well.
There are no commercially available tests for Zika virus. All specimens must be submitted to the state health department who will send them on to the CDC. Two types of testing can be performed: for active infection, a reverse transcription-polymerase chain reaction test to detect virus in the blood and for past infection, serology to detect IgM and IgG. Note that the virus is present in the blood for a limited time, probably a week. Immunoglobin is detected within 2 to 3 weeks of infection; however, the antibodies cross react with dengue and yellow fever virus. There is a plaque-reduction neutralization test that can be performed to discriminate between Zika neutralizing antibodies and cross-reacting antibodies. The Department of Health of the State of New Jersey released instructions for Zika testing. Current criteria for testing (as of 2/5/16) include the following:

1. pregnant women, both symptomatic and asymptomatic, with a history of travel to an area with ongoing Zika transmission,
2. infants with microcephaly or intracranial calcifications detected prenatally or at birth, whose mother traveled to or resided in an area with Zika transmission while pregnant,
3. infants born to mothers who traveled to or resided in an area with Zika while pregnant, where the mother had a confirmed positive or inconclusive test result for Zika virus disease while pregnant, and
4. non-pregnant persons, regardless of gender, who are currently symptomatic with two or more symptoms (fever, maculopapular rash, arthralgia, conjunctivitis), and traveled within two weeks of symptom onset to an area with ongoing Zika transmission.

If you are considering testing a patient for Zika, call your local health department or the NJ Department of Health (609-826-5964). You should be ready to supply the following information regarding your patient: travel history (dates and specific location), pregnancy status including gestation at time of travel, symptom onset date and list of symptoms, vaccination history for Japanese encephalitis, tickborne encephalitis and yellow fever including year vaccinated, history of past flavivirus infection (Dengue, West Nile, St Louis encephalitis virus), and relevant prenatal or postnatal testing. The CDC website notes that the expected turn-around time for results is 4 to 14 days; results will go to the state, not to the physician. The CDC will not accept specimens directly.

RESOURCES

Zika Virus: What Parents Need to Know from

www.healthychildren.org/English/ages-stages/prenatal/Pages/Zika-Virus.aspx#sthash.tFZMZQSk.dpuf

CME QUIZ on next page
1. As of February 2016, all confirmed cases of Zika in the United States and US Territories occurred in travelers and none was reported as being a locally acquired case.
   True
   False

2. The 2015 outbreak in Brazil brought world-wide attention to the infection largely because of:
   a. The association of microcephaly in babies born to infected mothers
   b. The high number of infections among rhesus monkey in the Zika Forrest
   c. An Increase in reports of Guillain-Barre syndrome
   d. None of the above

3. As of February 4, 2016, Zika infection has been reported in fewer than 25 countries across South America, Central America and the Caribbean.
   True
   False

4. While the likelihood of local transmission within the United States is low, a possibility of local transmission in the southern states exists due to:
   a. High numbers of immigrants
   b. Insufficient mosquito control measures
   c. Popular tourist destination
   d. They are within the flying range of the A. aegypti mosquito.

5. While the majority of Zika infections are the result of a mosquito bite, there is evidence that infection through sexual transmission is also possible.
   True
   False

6. Zika symptoms include:
   a. Fever
   b. Rash
   c. arthralgia and conjunctivitis
   d. All the above

7. On average, how many Zika- infected children/adults will develop symptoms?
   a. One in Seven
   b. Two in Six
   c. One in Five
   d. Three in Five

8. The recommendation for men residing in or having traveled to an area of active Zika virus transmission AND who have a pregnant partner is to abstain from sexual activity or consistently and correctly use condoms during sex for the duration of the pregnancy.
   True
   False

9. The differential diagnosis in travelers includes:
   a. Dengue and Chikungunya
   b. Leptospirosis, influenza, malaria and rickettsia,
   c. Parvovirus, adenovirus, enteroviruses, rubella and measles
   d. All the above

10. If you are considering testing a patient for Zika, you should contact:
    a. The CDC
    b. The World Health Organization
    c. Your local health department or the New Jersey Department of Health
    d. Margaret C. Fisher, MD, FAAP

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Resident Voice: Beyond the Chart

Our thoughts transcend the SOAP note, the admission orders, and the discharge summaries. They give patients their essence, a quality that cannot easily be conveyed in the objective nature of medical documentation. Beyond the chart is where the story lies, giving character and life to those who touch our lives.

“How are you feeling today?” He shrugged his shoulders. “Looks like a fun game you’re playing, is that your favorite?” He nodded. “Are you having any pain?” He shook his head. I had no point of comparison. I didn’t know him prior to his relapse. But from my interactions with him, I knew he was an intelligent boy who truly understood his illness and with that came a level of fear. His sense of worry was drawn across his expressionless face, filled his eyes that fixated on the wall, and took the form of shrugs and nods that effortlessly replaced undesired speech. Objective: general appearance- no acute painful distress, flat affect.

Weeks and months passed. He had multiple admissions. I saw the start and completion of numerous puzzles that he worked on day and night with his dad. I loved seeing the progression of his pieces; it was an attainable goal that he could grasp in the midst of all that was yet so unattainable.

Time was progressing, we were going deeper into the fall and the air was developing a chill; things were changing.

This particular night had a steady chaos to it. The usual sounds of the doors opening and closing in unison braced the floor, along with occasional beeps of the monitors. I sat down for a moment as the familiar sounds buzzed around my ears. Seconds later, my tumultuous sense of serenity abruptly disintegrated. “He’s in pain, can you go in to see him?” yelled one of the nurses. I heard him cry out. I quickened my steps. As I walked in, there he was like I had never seen him before. He was lying in bed, restless. Tears streamed down his face. “My legs! Make the pain stop!” he screamed. “Why does this hurt so bad?” he cried out. His mom put her hand on his leg and he pushed it away. She looked at me. The corners of her lips were upturned so very slightly and her eyes were downcast. It was a look of worry yet acceptance. My heart sank. He continued to writh in pain. I felt as if the second hands on the clock were making laps and for each second he was in pain was a second too much. Objective: general appearance- severe painful distress, tearful.

The following morning imaging revealed that his body was succumbing to his disease. He packed up his puzzles, his games, and his clothes. He walked with his belongings and his parents, who never left his side, through the double doors that swung open in unison and similarly closed behind him. Objective: general appearance- comfortable. Assessment: 12 year-old boy s/p the fight of his life, who defined strength and courage, and for whom the opportunity to care for was a gift in itself.

Strength Courage

This article was originally written for a “Parallel Charts” session

Katie Parisio, second year resident Goryeb Children’s Hospital.
My name is David Levine and I am a practicing pediatrician in Westfield, NJ. I have committed my life to caring for children and helping people navigate their new lives as parents. I consider myself to be a capable pediatrician. But, when it came time for me to be a parent, I collapsed.

I suffered severely from postpartum depression.

When most people think of postpartum depression (PPD), they automatically assume it is a condition that afflicts moms exclusively. Our practice routinely screens moms for PPD. We’ve heard the many and horrific stories describing women suffering and the sometimes unimaginable impact it inflicts upon their kids. But, we hear very little about fathers and their struggles with PPD. The undeniable truth is dads coping with PPD miss out on the joy of parenting just as much as moms. However, we are more likely to suffer in silence, and therefore, most people are unaware that we are suffering at all. In fact, most people don’t realize that fathers can suffer from postpartum depression.

We all know that the fantasy of parenthood is a lie. Our culture has gone too far in making people believe that you can have it all; work, family, and a life of your own. This is a fallacy, and we as pediatricians should know this more than most, seeing parents and listening to their questions on a daily basis.

Which brings me to me.

I was excited to be a parent, and even happier when I found out we were having a boy. I already knew there would be challenges, but deep down, I believed I would have an easier time adjusting to our new situation because as a pediatrician, I already knew the pitfalls.

Then the baby arrived.

It was while my son was still in the hospital that the unexpected thoughts and feelings started creeping into my head. My new son was very cranky (read: normal baby), and almost immediately, I began fearing the worst — first Autism, and then other crazy diseases. It didn’t matter, I thought it and the fears intensified. My son’s pediatrician did her best to help alleviate my concerns, telling me he was well and that he was gaining weight and feeding satisfactorily. Exactly the same things I always told moms and dads in my office.

I took two weeks off from work so that I could help out at home. During that time my state of mind worsened. I began feeling more anger toward the baby and started saying mean things about him to my wife. I also began having thoughts about hurting him. These thoughts would surface whenever I was at my wits end. In week three, I returned to work and while I was in the office, I felt better. No one suspected anything was wrong. I was sleeping, eating and still joking around, but in hindsight, the jokes were a bit meaner.

By week four, I knew I was in trouble. I didn't want to hold my son and I was saying increasingly more hateful things about him. It was then that I began searching the internet for information on paternal postpartum depression. Not surprisingly, I found very little. I also started looking for and eventually found a therapist, but resisted making the call. Finally, on my way into work one day, I snapped and broke down crying during a phone call with my wife. I expressed how I was convinced that I had ruined our marriage with all the negative things I had said about our son. Reassuring me that I had not, she pointed out that I was in need of help.

It is estimated that 5% of fathers will suffer postpartum depression.

Acting swiftly, my wife made arrangements for a night nurse to come into our home for a couple of weeks, providing us with the much needed time to find help and catch up on our sleep. Later, when I arrived at work, I called a good friend, who helped me settle down and put things into perspective. It was after that I finally contacted the therapist and set up my initial visit. The thing I remember most was my friend sharing with me that he too suffered from depression and felt like parenting came more naturally to his wife than it did for him. That was exactly what I was thinking!

Thankfully, with the help of my therapist and cognitive behavioral therapy, along with my son maturing and getting through those horrible first 3 months, things got much better. I took a month off when my wife's maternity leave ended, and bonded with my son in ways I could not possibly have imagined. Soon thereafter, I realized it was now my responsibility to being educating people about this illness, especially my fellow pediatricians.

Sadly, as pediatricians, we only see one parent during most newborn visits. 50-80% of women will suffer from postpartum blues 10-14 days after delivery, and then it will resolve. 10-15% will suffer depression. This is a major public health problem and the most common complication of childbirth. In NJ, we are required to screen women, often with the Edinburgh Postnatal Depression Scale.

continued on next page
Postpartum Depression is a Family Affair

New Jersey Pediatrics  Spring 2016

They display less verbal and behavioral stimulation during interactions with their infants. And without help, this poor dynamic can lead to insecure attachments, impaired cognitive abilities and behavioral impairments in the child as they grow.

Most of what we do as pediatricians is prevention. Prevention of infectious diseases, obesity, etc... But we come up short when it comes to screening and preventing mental illness. Some of this is just because it is very complicated and time consuming, but part of it is we are afraid to ask. Or worse, we don't know how or what to ask. But now we do.

There are places for men to turn now. Websites, such as www.postpartumsupportinternational.com can connect men to others who have experienced and overcome the suffering. We need to become more proactive in initiating the conversation. Make it a standard practice to encourage both parents to come to newborn visits and engage them in a direct and honest manner.

Most of all, don’t be afraid to ask – mom AND dad.

The New Jersey Immunization Network

Protecting health through immunization

Increasing immunization rates in New Jersey is a goal that requires participation from virtually everyone – from the NJ Department of Health to individuals making decisions about their own health. The New Jersey Immunization Network is a program of the NJAAP that leverages the knowledge and expertise of its nearly 450 members to help protect the health of New Jersey residents.

This past year, NJIN undertook a state-wide cultural-competency training initiative for pediatric and family medicine residents; partnered with the American College of Physicians to launch a multi-hub adult-immunization improvement project called I Raise the Rates; and educated hundreds of health care providers and other professionals on topics ranging from the burden of Human Papilloma Virus (HPV) infection and disease, to overcoming vaccine hesitancy. In addition, NJIN disseminated useful information and sparked meaningful dialogue around immunization issues at its monthly membership meetings, and elsewhere throughout the state.

In 2016, NJIN welcomes its new Chair, Pediatric Infectious Disease specialist Peter Wenger, MD. NJIN will continue working on the I Raise the Rates Initiative, as the network begins to train and coach participating internists from health networks throughout the state on quality improvement efforts to increase vaccination rates for Pneumonia, Herpes Zoster, Hepatitis B, Pertussis, and Influenza among adults.

With help from statewide cancer coalitions, NJIN has successfully recruited 22 pediatric practices and 25 physicians to participate in the CDC-funded project Improving HPV Immunization Coverage. The project is a collaboration between the National Improvement Partnership Network (NIPN) and the Academic Pediatric Association, led by the Vermont Child Health Improvement Program.

NJIN is also refining its communication with members and key stakeholders with a monthly newsletter, Immunization News. Subscribers receive the latest information on what’s happening locally and nationally around immunization and vaccine-preventable diseases. NJIN’s website (www.immunizenj.org) serves as a hub for members and the public to stay informed on important information, NJIN meeting updates, and key projects and activities.

Thanks to NJIN, providers and the general public are becoming more aware of the importance of vaccines as a simple, cost-effective method of preventing disease. NJIN continues to seek input from knowledgeable professionals, and welcomes new members. If you would like to get involved, or attend one of the network’s monthly meetings, contact NJIN Director, Diane Carroll at dcarroll@aapnj.org, or visit the website www.immunizenj.org to find out about our upcoming meetings.
Legal Update: Integrating Telemedicine into your Practice

Health care providers are increasingly adopting the use of technology to evaluate and treat patients in both traditional and non-traditional settings. Telemedicine technologies are being used to improve access to quality care. The Centers for Medicare and Medicaid Services (CMS) define telemedicine to include two-way, real-time interactive communication between the patient and the distant site physician or practitioner but not communication via telephone, email or fax. Simply put, telemedicine is the practice of medicine through secure video conferencing between a physician at a distant site and a patient at the originating site.

It is the location of the patient (the originating site) that defines where the care has been delivered and the jurisdiction of applicable regulations. Therefore, the physician must be licensed in the state where the patient is located. Physicians who practice or engage in any physician-patient relationship in New Jersey must be licensed in New Jersey.

It is required that the physician form a physician-patient relationship when engaging in the practice of telemedicine. Some states institute a higher standard for physicians when using telemedicine. For instance, some states require an in-person visit prior to any clinical examination performed via telemedicine assuming that the knowledge of the patient’s prior history may provide for better patient evaluation and treatment.

Physicians treating patients through telemedicine are held to the same standard of care as those who administer health care services in a traditional in-person office setting. Just like a traditional office-based physician, a physician practicing through telemedicine has a duty to be available for care when it is needed. Patients should be able to seek follow-up care from the physician who conducted the telemedicine encounter.

The standard of care also requires that all physicians satisfy legal and regulatory requirements for maintaining a record for each patient encounter that accurately reflects the patient’s presenting symptoms and the evaluation and treatment of the patient. Telemedicine encounters must be documented as with any other meeting or appointment between a physician and a patient.

Concerning the prescribing of medications via telemedicine, again, the same standard applies to telemedicine physicians. Prescribing may be done at the professional discretion of the physician so long as it is in accordance with current standards of medical practice.

The physician may exercise good medical judgment and prescribe medications as part of the telemedicine encounter. However, the law in most states requires an in-person physical examination to issue a prescription for controlled substances. New Jersey regulation N.J.A.C. 13:35-7.1A requires, with some limited exceptions, physicians to perform an appropriate history and physical examination prior to dispensing drugs or issuing prescriptions.

Also, in certain situations, an emergency plan may be required and should be provided to the patient when the care indicates that a hospital visit is necessary. It is important to note that treatment via telemedicine does not substitute the function of a physician in a traditional in-person setting for worsening medical conditions.

While the use of technology offers opportunities to improve the delivery of health care, it may also present certain privacy and security risks. Before patients virtually connect with their doctor via telemedicine, physicians must guarantee the same level of privacy expected during a traditional office visit.

Patients must be aware of and consent to the potential benefits and risks associated with telemedicine, including delays, failure of equipment and potential security breaches. Patients must review consent forms for the inclusion of patient informed authorization for telemedicine services.

Nationwide, state legislatures are enacting telemedicine reimbursement laws stating that private insurers and Medicaid plans are required to provide coverage for telemedicine services to the same extent they cover in-person medical services. The law states that deductibles, co-insurance or other conditions for coverage of telemedicine must be consistent with those of in-person visits.

New Jersey does not have a specific law regulating telemedicine, outside the requirement that the physician be licensed in the state where the patient is located. Two bills have been introduced in the New Jersey Legislature, which would regulate the practice of telemedicine, A1464 and S291. Both of these bills were introduced last session, but were voted on in committee. Both bills were reintroduced this legislative session.

The advent of new technologies, including telemedicine technologies, is changing the dynamics of the physician-patient relationship and making it more convenient for patients to obtain quality care. Yet, the use of an electronic medium for contact between parties does not change the standards of care and the existing principals of professional conduct can be applied to the practice of telemedicine.

For more information regarding the use of telemedicine technologies and electronic medical records, please contact Charles H. Newman, Esq. at (800) 445-0954 or info@drlaw.com
The 217th Legislature commenced on January 12, 2016. The Senate is at the mid-way point in their four-year term. Democrats continue to control the Senate by a 24-16 majority. After November’s election, Democrats control the Assembly by a 52-28 majority. Ten new members will be sworn in; Democrats Bruce Land, District 1; Arthur Barclay, District 5; Joann Downey and Eric Houghtaling, District 11; Andrew Zwicker, District 16; James Kennedy, District 22; Angela McKnight and Nicholas Chiaravalloti District 31; Annette Chaparro, District 33 and Republican Joe Haworth, District 8.

Legislative leadership remains identical to the previous session - Senate President Stephen Sweeney, Senate Majority Leader Loretta Weinberg and Senate Minority Leader Thomas Kean, Jr. and Assembly Speaker Vincent Prieto, Majority Leader Louis Greenwald and Minority Leader Jon Bramnick.

As we write this update, Governor Christie proposed a $34.8 billion Fiscal year 2017 state budget to a joint session of the Legislature.

Since the Governor’s decision to expand NJ FamilyCare in 2014, an additional 434,000 uninsured New Jersey residents have gained coverage under NJ FamilyCare. The fiscal 2016 budget included $45 million in State and federal funds to increase reimbursement rates for certain primary and specialty care services offered through NJ FamilyCare beginning January 2016. The Department of Human Services determined that these funds would be focused on three specific types of services: Primary Care Services; Preventative Care and Screening Services and Postpartum Services. The fiscal 2017 budget adds an additional $45 million in funding to annualize this rate increase, providing a total fiscal 2017 investment of $90 million.

The legislative update also speaks to the Children’s System of Care (CSOC) which is designed to address the holistic needs and concerns of families with children with multiple needs, including behavioral health, substance use and intellectual and developmental disabilities. The fiscal 2017 budget includes a total of $554.1 million in State and federal funds for the operations and services provided by this Division, an increase of $25.8 million over the fiscal 2016 Appropriations Act.

The Legislature will begin its review of the Governor’s proposed budget next month. The budget must be passed by the Legislature and signed by the Governor by July 1, 2016.

On the legislative front, the Assembly’s first set of committee meetings focused on issues of poverty in New Jersey. Drs. Amato, Rubin and Weller testified in front of the Assembly Women and Children’s Committee which focused its meeting on issues faced by children living in poverty.

Dr. Radhakrishnan testified in front of the Assembly Health Committee during its hearing on the health consequences of water quality and lead contamination.

NJAAP supported legislation, S359/A2320, which raises the minimum age for purchasing tobacco and electronic smoking devices from 19 to 21 years, and raises the minimum age from 19 to 21 years of a person to whom a vendor may sell, offer for sale, distribute, give or furnish such products in New Jersey.

Finally, NJAAP secured amendments to A1452, legislation designated the “Lactation Consultants Licensing Act”, which provides for the licensure of lactation consultants in this State. The amendments clarified that nothing in the bill is to be construed as prohibiting, or reducing the ability of, a physician, nurse, or other medical professional to provide lactation services that are within their scope of practice and that nothing in the bill is to be construed as prohibiting a medical student, medical resident, or nursing student from providing breastfeeding education and support services that are necessary to the student’s course of study.
Case Study: **Congenital Hyperthyroidism**

Sridiva Naganathan, MD, FAAP  
Clinical Associate Professor, Pediatric  
Clerkship site director, Rutgers RWJ Medical School  
Chief, Division of General Pediatrics, K Hovnanian Children’s Hospital,  
Jersey Shore University Medical Center  
Samantha Heisler, DO  
Jersey Shore University Medical Center  
K. Hovnanian Children’s Hospital

**Wide Eyed Wasted Neonate... What’s Going On?**

**Case Presentation**

A 2-week-old female presents to her pediatrician with a 5% weight loss from birth. Her birth history was significant for a full-term infant born via spontaneous vaginal delivery without complications. The maternal history was significant for hyperthyroidism for which mom was treated with Methimazole 10mg twice daily. Her neonatal and nursery course were unremarkable. She was exclusively breastfed for 20 minutes every 2-3 hours with urine output of 4-5 wet diapers and 8-10 loose stools daily.

Vital signs were within normal limits. Growth parameters demonstrated microcephaly with a head circumference < 3rd percentile, weight < 3rd percentile, and length 3rd-15th percentile (Figures 1-2)*.

Physical exam revealed a fussy but consolable newborn, who was hyper-alert, anxious appearing, and restless with a lack of subcutaneous fat (Figure 3)*.

Her eyes were open abnormally wide without exophthalmos.

The rest of her exam was negative. Differential diagnosis of failure to thrive in a neonate is vast and is summarized in Table 1.*

<table>
<thead>
<tr>
<th>Inadequate Caloric Intake / Loss</th>
<th>Impaired Caloric Absorption</th>
<th>Excessive Caloric Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Breastfeeding Problems</td>
<td>- Milk protein allergy</td>
<td>- Hyperthyroidism</td>
</tr>
<tr>
<td>- Improper formula preparation</td>
<td>- Gastroesophageal reflux</td>
<td>- Chronic infection or immunodeficiency</td>
</tr>
<tr>
<td>- Caregiver depression</td>
<td>- Malabsorption</td>
<td>- Chronic hypoxemia or pulmonary disease</td>
</tr>
<tr>
<td>- Child neglect</td>
<td>- Pyloric Stenosis</td>
<td>- Congenital heart failure</td>
</tr>
<tr>
<td>- Lack of food availability</td>
<td>- Gastrointestinal atresia or malformation</td>
<td>- Malignancy</td>
</tr>
<tr>
<td>- Craniofacial abnormalities</td>
<td>- Inborn error of metabolism</td>
<td>- Metabolic Disorders</td>
</tr>
<tr>
<td>- Hypotonia</td>
<td>- Infectious diarrhea</td>
<td></td>
</tr>
<tr>
<td>- Prenatal Infections</td>
<td>- Chromosomal disorders</td>
<td></td>
</tr>
<tr>
<td>- Teratogenic exposure</td>
<td>- Chronic cholestasis</td>
<td></td>
</tr>
</tbody>
</table>

Based on the physical findings and maternal history, diagnosis of congenital hyperthyroidism was suspected and confirmed by lab data as shown in Table 2*. Her thyroid panel near normalized by six weeks of age and her growth parameters normalized by two months of age.

continued on next page
<table>
<thead>
<tr>
<th>Day of Life</th>
<th>Day of Life 19</th>
<th>Day of Life 46</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSH</td>
<td>0.013 (0.6-10)</td>
<td>0.024 (0.6-8)</td>
</tr>
<tr>
<td>Free T4</td>
<td>2.01 (0.7-1.7)</td>
<td>0.68 (0.48-2.3)</td>
</tr>
<tr>
<td>Total T3</td>
<td>1.73 (0.64-1.57)</td>
<td>1.77 (0.64-1.57)</td>
</tr>
</tbody>
</table>

TABLE 2

Discussion

Clinical hyperthyroidism in pregnancy is the second most common endocrine disorder during pregnancy, second only to diabetes, and is reported to have a prevalence between 0.1-0.4%. Mothers of these infants can have active Graves disease, Graves disease in remission, or rarely, hypothyroidism with a history of lymphocytic thyroiditis. The pathophysiology includes the transplacental passage of TSHR-Ab (Thyroid Stimulating Hormone Receptor Antibodies), which then stimulate the thyroid by binding thyrotropin receptors leading to TSH suppression with free T4 elevation. In utero, the symptoms include heart rate greater than 160 and IUGR in the 3rd trimester. Diagnosis should be suspected in neonates with goiter, tachycardia, restlessness, hyperexcitability, exophthalmos, unusual alertness, microcephaly, ventricular enlargement, craniosynostosis, and poor weight gain. Without treatment, the symptoms can progress to hepatosplenomegaly with concurrent jaundice, hypertension, thrombocytopenia, weight loss despite a ravenous appetite, and cardiac decompensation leading to heart failure and eventual death.

Management

The mainstay of treatment involves consulting endocrinology and close monitoring of thyroid function. The condition, usually spontaneously resolves in asymptomatic infants. Propylthiouracil is used for symptoms of hyperthyroidism. Propranolol and Lugol’s solution are the drugs of choice for secondary symptoms. Once euthyroid state is reached, only antithyroid medication is needed and can be tapered. Most cases remit by 3-4 months of age. In the rare cases of hyperthyroidism persisting into childhood, kids are treated with radioiodine or surgery. With delay of treatment initiation, infants can develop advanced osseous maturation, microcephaly, and mental retardation. If treatment is initiated in the appropriate time period, prognosis is excellent with full recovery.

Learning Points for the Clinician

- The failure to thrive differential is broad, making it important to focus on the history and physical to narrow patient’s workup
- Congenital hyperthyroidism should be suspected in a neonate with failure to thrive and suggestive maternal history
- Congenital hyperthyroidism has an excellent prognosis with full recovery when early treatment is initiated

References

Children with Obesity and Essential Hypertension: Does education impact outcome?

Shefali Vyas, MD, FAAP
Isabel Roberti MD, PhD
Barnabas Health Children’s Kidney Center

Study was supported by the H.E.Nussbaum Research Institute 
Grant from Saint Barnabas Medical Center

Abstract

Rising trends of obesity and hypertension (HTN) in children have been noted in the past 2 decades, which portend a very high risk for long term cardiovascular complications. In our previous retrospective study of 285 children with Essential Hypertension (EH), which is currently under publication, we noted that 75% of our patients were obese or overweight at presentation. However, with monitoring there was significant improvement of blood pressures, but the follow up was poor (22%) and there was no change in BMI. All the patients had received some information about importance of weight loss, low sodium diet and regular exercises. Hence, we designed this prospective study to improve on our dismal outcomes of children with EH and obesity. In this prospective study we provided patients with various tools and aggressive education in an attempt to impact not only their blood pressure (BP) but also improve the body mass index (BMI) and end organ damage. A total of 60 children were included in this study. They all had extensive evaluation to exclude secondary causes of HTN and received our standard of care. All children also received multi prong approach for therapeutic life style changes like access to local fitness facility, educational materials using brochures, DVD and and/or videos with nutritional counseling by a registered dietician.

At last follow up, we noted significant improvement of the BP, LVH rate and increased follow-up rates of 76%. Mean follow-up was 24 months and 33% had weight loss with 10% reaching normal BMI.

Our multi educational approach was successful when compared to historical outcomes at our institution. Patient and family education are key determinants to successful management of obesity and EH in children.

Key words: nutrition; pediatrics; high blood pressure; exercise; LVH

Abbreviations: Hypertension, HTN; Left ventricular hypertrophy, LVH; Body mass index, BMI; Microalbuminuria, MA; Essential hypertension, EH; Angiotensin converting enzyme inhibitor, ACEi; Angiotensin receptor blocker, ARB; Blood Pressure, BP.

Introduction:

The incidence of Essential Hypertension (EH) continues to rise, coincident with burgeoning problem of obesity in children. It is estimated that in the USA alone, 1.1-2.6 million children have hypertension (HTN). We had previously reported 65% of the children seen for HTN at our center had EH and that was associated with significant obesity and overweight (75%) and very low follow-up rate at 12 months (22%). Currently, New Jersey has one of the highest rates of childhood obesity at 24%. HTN is a known risk factor for cardiovascular and/or renal diseases. The purpose of this study was to educate the patients and the family about obesity, healthy nutritional options to effectively help in managing their obesity and HTN by providing user friendly tools. We also wanted to evaluate if these aggressive educational interventions had any impact on BMI, control of HTN and reversal of end organ damage. We used a variety of educational tools (videos and DVDs), brochures, local resources like access to gym and YMCA, nutritional and dietary counseling and healthy life style behavioral modification tools, such as pedometer and sliding food scale, to motivate while educating these patients.

Methods:

All children referred to our center for evaluation of HTN were screened for inclusion in the study. Overweight or obesity patients with the diagnosis of EH were included in this prospective study.

Blood pressures (BP) were obtained in a calm setting, multiple times to rule out white coat effect. Ambulatory blood pressure monitoring (24 hours) was done if white coat hypertension was suspected or variable BP’s were noted.

We reviewed age at presentation, gender, race, grade of HTN, birth history, body mass index (BMI) and medication use. Patients were usually treated with ace inhibitors (ACEi) as the first line of therapy. Angiotensin receptor blockers (ARBs), diuretics, calcium channel blockers or beta blockers were added depending on individual patient characteristics. EH was defined after an extensive work-up which included blood chemistries, thyroid function tests, lipid panel, urinalysis, urine microalbumin/creatinine, serum aldosterone and plasma renin levels, renal sonogram with vascular doppler sonogram of renal vessels and echocardiogram; MRA of the kidneys and 24 hour urine catecholamines were done if clinically indicated. All patients with secondary HTN were excluded from the study after initial work up.

continued on next page
All patients were provided with educational materials in a folder, including brochures with dietary guidelines (DASH diet, benefits of regular exercise, food pyramid, and nutritional information), local YMCA contact information for securing a discounted membership, pedometer to keep track of physical activity, a guide to read nutritional labels disc and informative video tapes on healthy food choices and ways to balance the plate. A healthy food sliding scale with portion sizes as per age, gender and activity level was provided in the package and portion sizes were educated at length. The education to read nutritional labels was provided through a DVD titled, Nutrition Detectives by Dr. David Katz from Yale University. The DVD’s provided were Eat Smart, Personalizing my plate, Eat Less- upside of downsizing, Get off the SoFAS (avoid solid fats and added sugars), and Smart Nutrition. These DVD’s were obtained with grant money from the Learning Seed Company.

Nutritional consultations were completed at the time of enrollment in the study and at subsequent follow-up visits.

Patients were followed monthly until BP control was achieved and every 3 months thereafter. Life style modification was assessed by self-reporting of interventions (such as attending local gym, exercising regularly and/or dietary changes) and by parental reports.

We compared BMI, weight loss, HTN stage, LVH, microalbuminuria and dyslipidemia at the time of presentation and final follow-up visit.

Educational tools, YMCA membership, videos were supported by a Nussbaum Grant provided by Saint Barnabas Medical Center.

Definitions:

BP values were defined as per the fourth National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents (8). BP target was defined by BP below the 90th age-sex and height specific percentile.

HTN Stages: Pre-hypertension: SBP and/or DBP between 90-95th percentile or > 120/80 mmHg; Stage I: between 95-99th + 5 mmHg; Stage II >99th percentile + 5 mmHg (8).

BMI: age and gender percentiles were used to define obesity. Normal BMI: BMI between 5-85th percentiles; overweight: BMI between 85-95th percentiles; obese: BMI >95th percentile.

Microalbuminuria (MA): first AM urine with albumin/creatinine ratio > 30mcg/g creatinine.

Left Ventricular hypertrophy (LVH) was defined by left ventricular mass index to height of 38.6 g/m² or LVMI > 51.7 g/m² for severe LVH.

Dyslipidemia was defined by persistent LDL-C>130 mg/dl and total cholesterol of >200 mg/dl (9).

Prediabetes was defined by HbA1c 5.7-6.5 and Diabetes by HbA1c >6.5.

Results:

A total of 60 patients were enrolled from January 1, 2012 through July 2014.

As noted in Table 1*: The median age at presentation was 13 years; 62% were male and 45% were African Americans (this ethnic group was the predominant in our study). We also noted that 22% (11) had a history of prematurity. BMI ≥ grade II was seen in 95% of the children at presentation. HTN stage I and II was seen in 92% of the children.

At presentation, all patients were overweight or obese and 33% were pre-diabetic or diabetic. Initially, 70% of the children required antihypertensive therapy and at last follow-up, that rate had increased to 88%. No medications were used in 12% (5), 60% (24) were on only one medication, 23% (9) were on 2 medications and 5% (2) on 3 medications.

Patients were followed for a mean period of 24 months (1-109 months) and as of last follow-up 46 (76%) patients were returning to scheduled visits; Forty children (66%) were followed for at least ≥12 months.

---

*Table 1: Demographic characteristics of children with obesity and Essential Hypertension

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Children with EH (N=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at presentation</td>
<td>5-19 years (median= 13)</td>
</tr>
<tr>
<td>Gender: Male (%)</td>
<td>37 (62%)</td>
</tr>
<tr>
<td>Race: AA/Hisp/C/other</td>
<td>27/18/12/3</td>
</tr>
<tr>
<td>Birth History: FT/PT/NA</td>
<td>39/11/10</td>
</tr>
<tr>
<td>BMI grades: I/II/III</td>
<td>3/6/51</td>
</tr>
<tr>
<td>HTN stages: pre/I/II</td>
<td>5/37/18</td>
</tr>
<tr>
<td>Medications prescribed</td>
<td>42 (70%)</td>
</tr>
<tr>
<td>Pre-diabetes / Diabetes</td>
<td>17/3 (33%)</td>
</tr>
</tbody>
</table>

FT= full term, PT= Preterm, NA= not available.
BMI grades: I= 85%, II= 85-95%, III= >95%
HTN stages: pre, I= stage I HTN and II= stage II HTN.

At presentation, all patients were overweight or obese and 33% were pre-diabetic or diabetic. Initially, 70% of the children required antihypertensive therapy and at last follow-up, that rate had increased to 88%. No medications were used in 12% (5), 60% (24) were on only one medication, 23% (9) were on 2 medications and 5% (2) on 3 medications.

Patients were followed for a mean period of 24 months (1-109 months) and as of last follow-up 46 (76%) patients were returning to scheduled visits; Forty children (66%) were followed for at least ≥12 months.
Table 2* shows the various outcome markers of the hypertensive children with at least 12 months of follow up. Five patients were successfully discharged from our clinic and 7 lost to follow-up; 40 patients were followed for at least 1 year. On follow up the BP was normal in 91% of the children; LVH rate decreased from 20 to 7%, \( P=\text{NS} \).

Table 2*. Outcomes of Children with Obesity and Essential Hypertension at last follow-up

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Initial visit (N=60)</th>
<th>Follow up &gt;12 months(N=40)#</th>
</tr>
</thead>
<tbody>
<tr>
<td>On BP Medications</td>
<td>42 (70%)</td>
<td>35 (88%)</td>
</tr>
<tr>
<td>HTN stage pre/I/II</td>
<td>5 /37/18 *</td>
<td>31/9/0</td>
</tr>
<tr>
<td>LVH</td>
<td>8/40 (20%)</td>
<td>1/14 (7%)</td>
</tr>
<tr>
<td>Microalbuminuria</td>
<td>8/51 (16%)</td>
<td>3/18 (16%)</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>8/40 (20%)</td>
<td>5/26 (19%)</td>
</tr>
</tbody>
</table>

*92% had HTN stages I or II vs 22% at f/u, \( P=0.0001 \)
#9 patients lost to follow up as of last follow up.

Microalbuminuria and dyslipidemia rates remained unchanged. Overall, 32% (13/40) had lost weight of ≥ 5 pounds from the initial encounter, 4 (10%) had normal BMI percentiles (<85th% for age), 18(45%) gained weight and 9 (23%) had no change in weight.

Discussion:

Antecedents of obesity in adult, tracks from childhood and is a predictor of type 2 diabetes, hypertension, dyslipidemia and carotid intimal thickness in adulthood 10.

Juonala et al 10 noted that overweight or obese children after weight reduction had a cardiovascular risk profile similar to individuals who were never obese as children.

Hence, there is an urgent need for early intervention and diagnosis of obesity and HTN in children to decrease their long term cardiovascular morbidity and mortality. In our earlier retrospective study of children with EH, we noted that HTN was well controlled, but patients continued to gain weight and we had very poor follow-up rates of only 22% at 1 year. The purpose of the current study was to use a variety of strategies to engage, motivate and educate patients with obesity and EH and their parents and evaluate its impact on BP, BMI and reversal of end organ damage markers.

Litwin et al 11 in their study of 86 children, remarked that standard HTN therapy led to significant lowering of BP (74% normal BP), regression of target organ damage, carotid intimal artery thickness, increase in insulin sensitivity, decrease in inflammatory markers, LVH, waist circumference and metabolic syndrome after 1 year of follow-up.

They didn't observe significant decrease in BMI but noted redistribution of fat mass with reduction in waist circumference. LVH was initially present in 46.5% of the children and reduced to 31% after BP controlled. Similarly, we observed significant reduction in severity of HTN with normalization of BP in 78% of the children with long-term follow-up; however, 88% of them were on anti-hypertensive medications. Litwin et al 11 reported in their study anti-hypertensive therapy prescribed to 57% patients at presentation.

Target organ damage in EH such as, LVH and MA are well known risk factors for long term cardiovascular morbidity and mortality, but paucity of data exists in pediatric literature 12, 13.

Emerging evidence notes that for normalization of LVH in obese children with EH, both normal BP and weight loss are required 14. The rate of LVH on our study patients at 1 year follow-up declined from 20% to 7% and we noted some weight loss in 33% of our patients with 10% achieving normal BMI. The improvement in LVH was likely due to improved BP control in conjunction with the observed weight loss. Our aggressive educational intervention allowed achieving our goals when we compare to our previous data wherein we didn't observe weight loss or improvement of LVH.

Ippisch et al 15 reported their experience of 38 morbidly obese adolescents who underwent bariatric surgery and had significant mean weight loss of 59 kgs. The most dramatic effect of weight loss was change in LVMI from 34gm/m² to 42 gm/m² again emphasizing the independent role of obesity in development of LVH irrespective of BP control.

The rates of MA and dyslipidemia were not significantly different at last follow-up. A longer period of sustained weight loss and BP control maybe required to establish their impact on MA and dyslipidemia.

We observed 22% children were premature/ low birth weight in our cohort with EH. This is slightly higher than expected as the preterm/LBW rate in US is 12.3% (16) potentiating the concept that children born with low nephron mass are at increased risk of late onset hypertension (17).

The limitations of this study were the small number of patients’ enrolled and short follow up time with a mean of 24 months.
In summary, in our prospective study of 60 patients with EH and obesity the aggressive educational tools and resources provided much improved our follow up rates to 76% (from previously reported 22%), had definite impact in BP control and there was some impact on weight loss and LVH. We did not see any impact on microalbuminuria which may be secondary to short follow up period.

Long term prospective studies are needed to follow children with obesity and EH for cardiovascular and renal morbidity and mortality in order to define the effective prevention strategies required for such patients.

A multidisciplinary effort involving the local community (local YMCA, policy makers, educators), nutritionists with clinicians is imperative to have better long-term outcomes of these children with obesity and EHT.

References:


[4] Vyas S, Roberti I. Are we achieving our goals of minimizing end organ damage in children with essential hypertension? Accepted for publication in JCPN.


The NJ Parent Link website (www.nj.gov/njparentlink) highlights NJ State services and resources as well as Federal and community resources are also included.

The focus of NJ Parent Link is to meet the information and resource needs of expectant parents, families with young children (newborns to children entering kindergarten) and professional stakeholders vested in the health & well-being of New Jersey’s children & families.

The goals of NJ Parent Link are to improve the accessibility, coordination and delivery of information and services to expectant parents and families with young children; to improve the communication capabilities between the public and private sectors; and to provide the IT foundation for interagency service collaborations and policy development.

The Parent Link website content includes early childhood health, development, early learning, parenting and family support resources. Family milestone topics include pre-conceptual/prenatal health, kindergarten readiness, back to work/staying at home and parenting older siblings.

Website linkages are quite comprehensive and are designed to facilitate parents’ and professionals’ ease of use and engagement with government services and stakeholder resources.

Most Recent Updates to NJ Parent Link Webpages

http://www.nj.gov/njparentlink/espanol.html
http://www.nj.gov/njparentlink/health/before/
http://www.nj.gov/njparentlink/health/safety/
http://www.nj.gov/njparentlink/health/nutrition/
http://www.nj.gov/njparentlink/health/emergency/
http://www.state.nj.us/njparentlink/highlights/seasonal.html
http://www.state.nj.us/njparentlink/central/readiness.html

Professional Resources

NJ DOH
NJLINCS (New Jersey’s Health Alert/Health Services Portal)

CDC
http://emergency.cdc.gov/coca/index.asp
THEY'RE CALLED ESSENTIAL FOR A REASON.

AN 8-OUNCE SERVING OF MILK, FLAVORED OR NOT, GIVES KIDS AS MUCH...

Milk's nine essential nutrients can help kids and teens grow healthy and strong.

1. Calcium 300 mg, 30% DV
   Helps build and maintain strong bones and teeth. It helps reduce the risk of stress fractures and osteoporosis later in life. Plays a role in promoting normal blood pressure.

2. Vitamin D 100 IU, 25% DV
   Helps absorb calcium for healthy bones.

3. Phosphorus 245 mg, 20% DV
   Works with calcium and vitamin D to help keep bones strong.

4. Riboflavin 0.46 mg, 20% DV
   Helps convert food into energy. Plays a vital role in the development of the central nervous system.

5. Protein 8 g, 16% DV
   Helps build and maintain lean muscle. Contains all the essential amino acids (the building blocks for protein).

6. Vitamin B-12 1.2 mcg, 13% DV
   Helps build red blood cells and helps maintain the central nervous system.

7. Potassium 370 mg, 11% DV
   Helps regulate the balance of fluids in the body and plays a role in maintaining a normal blood pressure.

8. Vitamin A 490 IU, 10% DV
   Important for good vision, healthy skin, and a healthy immune system.

9. Niacin 2 mg, 10% DV**
   Helps the body's enzymes function normally by converting nutrients into energy.

USDA National Nutrient Database for Standard Reference, Release 25. Percent Daily Value reflect current nutrition recommendations for a 2,000 calorie per day diet.

**As niacin equivalents.
Research indicates that parental involvement improves outcomes for children whether the topic is healthcare, mental health or education. The Statewide Parent Advocacy Network (SPAN) has been involved in various medical home initiatives which include parent partners – trained parents of children with special healthcare needs who serve as part of the medical home quality improvement team. SPAN educates and engages parents to be involved at all levels as partners in our medical home activities. This article includes lessons learned, best practices and suggested ways pediatricians can foster these partnerships to enhance outcomes for the children they care for and their families.

It is important to note that SPAN’s medical home projects focus on the Maternal/Child Health Core Outcomes for Children and Youth with Special Health Care Needs which are:

1. Early/continuous screening to identify all needs
2. Access to a medical home to coordinate needed services
3. Adequate healthcare financing to cover needed services
4. Community based services
5. Family engagement and satisfaction with services
6. Transition to adult healthcare and other systems of care

This work is conducted in collaboration with partners such as the New Jersey Chapter, American Academy of Pediatrics, the NJ Department of Health Title V program, and many other state, local, disability, medical/health, and community-based organizations.

An effective medical home is:
- family-centered
- continuous
- comprehensive
- coordinated
- compassionate
- culturally competent

Keeping the core outcomes and tenets of the medical home in mind, practices are able to collaborate with parent partners to improve outcomes for children with special health care needs and their families.

Effective Parent Partners
What are the qualities that pediatricians should look for in partnering with parents in their practice?

Experience: Parents should have a child with a disability or special health care need(s) and some experience with navigating across systems such as health, mental health and education. Parents should be comfortable working as a team and speaking in a group setting.

Input: Parent partners should be able to share their story in a way that will have a positive impact on practice level changes. Their input is on behalf of all families, not just their own. Parent partners should recognize that this isn’t a support group and if a parent is looking only to benefit their child, they aren’t ready to be a parent partner. Pediatricians must value the input of their parent partners so parents feel their contributions are valuable.

Representation: Besides speaking on behalf of other families, parent partners should represent the diversity of the families in the practice. Cultural and linguistic competency on the part of the practices are essential for effective medical home implementation. Parent partners can also ensure that the practice has the necessary resources available and translated for their non-English speaking families.

Commitment: In addition to being committed to help other families, parent partners should ensure that they have adequate time to participate as a member of the medical home team. There may be times when a parent may not be able to participate if they are dealing with their child’s own medical crisis so practices should identify more than one parent partner to allow for more flexibility and support more family participation as well as ensure broader representation of their patient base.

Training: Parent partners and practice staff can receive training from family organizations such as Family to Family Health Information Centers or Family Voices State Affiliates on the core outcomes to improve the effectiveness of their Medical Home. Additional training topics can include health advocacy, family support, and community resources. Providing compensation to parent partners for their time such as stipends, mileage and/or childcare reimbursement, etc., is greatly appreciated, and helps make them feel more respected. This will also enhance the opportunity for underserved and low-income families to participate.

Ongoing Communication: Parent partners and practices should discuss how often they will communicate throughout the process and the type of communication they will use. Team meetings should be scheduled to include parent partners, address concerns and improve quality of services that would lead to overall satisfaction of families in the practice. Ongoing open communication will lead to continuous improvement throughout the process. These are some of the lessons learned to enhance pediatric/parent partnership during SPAN’s Medical Home implementation projects.

continued on next page
The benefits of partnering with parents in the medical home far outweigh any temporary disruption of the practice routine. The practice, their families, and most importantly the children and youth with special health care needs will benefit from these best practices for developing and building on pediatric/parent partnerships.

“Families are key to promoting medical homes at the practice, policy, and practical level and accomplishing our goal of a medical home for every child. Families are best able to communicate with other families about the benefits of a medical home and most effective in advocating for the needs of their children. They also have an important role to play in educating healthcare professionals around the changes in attitudes, behaviors, practices, and procedures that are needed to truly implement medical homes.” In order to ensure that all families feel welcome and comfortable in medical homes, a diversity of families need to be involved in this effort.” -Merle McPherson, MD-

“Our parent partner has offered to speak with other parents in our practice for support. It is extremely invaluable. We have a wide range of experience with our parent partners to refer other parents to.” - A NJ medical home learning collaborative practice about the value of a parent partner “They wanted my feedback and perspective. It made me feel important that they reached out to me to assist them. After working with them it was great to see that the practice wanted to improve for all families.” - NJ medical home parent partner

Resources
Family Voices National Center for Family/Professional Partnerships (list of state family groups)
http://www.fv-ncfpp.org/
http://www.fv-ncfpp.org/activities/fcca/ (nationally validated Family Centered Care Assessment)

Medical Home - Information for Providers
http://www.spannj.org/cyshcn/core_outcome_2/Medical_Home_Provider_Brochure.pdf

Medical Home - Information for Families
http://www.thefamilymatterswebsite.org/PDF/MedicalHomeFAMILYBrochure.pdf

National Center for Medical Home Implementation – Family Engagement in the Medical Home
https://medicalhomeinfo.aap.org/about/Pages/May-2015.aspx

Lauren Agoratus M.A. Counseling is the parent of a youth with multiple disabilities and is the NJ Coordinator of Family Voices, the national network that “works to keep families at the center of children’s health care.” She also serves as the Central/Southern Coordinator for the NJ Family-to-Family Health Information Center (F2FHC). In NJ, Family Voices and F2FHC are housed at the Statewide Parent Advocacy Network (SPAN), www.spanadvocacy.org. Malia Corde is SPAN’s Parent to Parent Coordinator, and Improving Pregnancy and Birth Outcomes Program Manager, and Director of Medical Home Initiatives. Deepa Srinivasavaradan is CDC’s Act Early Ambassador to NJ housed at SPAN and SPAN Family Resource Specialist.

1 Slides 19-31 www.signetwork.org/file_attachments/433/download

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Collaborative Mental Health Program

Pediatricians play an increasing role in the identification of mental health disorders among their patient population. To better support pediatric practices in screening and care management of children, youth and adolescents with mental/behavioral health concerns, NJAAP is working with Meridian Health to implement the Pediatric Psychiatric Collaborative, a partnership among leading pediatric and behavioral health systems of care, to develop and execute an integrated child mental health delivery system. The pilot program, which started in July 2015 and is funded by the New Jersey Department of Children and Families (DCF), is modeled after the Massachusetts Child Psychiatry Access Project (MCPAP).

As part of this overall initiative, NJAAP is conducting an ABP approved MOC Part 4 quality improvement Learning Collaborative for pediatricians in Burlington, Camden, Gloucester, Monmouth and Ocean Counties. The Collaborative institutionalizes the use of prevention strategies, interventions, and office procedures by participating practices, their physicians, and staff to increase timely use of age appropriate standardized mental and behavioral health screening tools, mental health anticipatory guidance, and referral and care coordination to support early detection and treatment of mental health issues within the primary care setting.

Providers receive 25 American Board of Pediatrics Maintenance of Certification (MOC Part 4) credits for participating. Addition benefits include the receipt of an AAP Mental Health Toolkit, behavioral health screening tools, templates for making a referral to community-based mental health services, and resources on how to finance preventive mental and behavioral care.

Forty-five pediatric practices are currently participating in the Pediatric Psychiatric Collaborative. Thirty-four pediatricians in 20 of those practices are participating in the MOC Part 4 program. In addition to submitting quantitative and qualitative reports on their practice team’s progress and challenges in implementing age appropriate mental/behavioral health screenings during the well visit, MOC participants attend two ½ day Learning Sessions to support their Quality Improvement initiatives. Representatives from state and local community support organizations are invited to exhibit at the Learning Sessions to share resources and initiate/strengthen partnerships with the pediatric practices. Monthly content-based technical assistance calls are also conducted as part of the MOC program. Topics presented on these calls include: Anxiety Treatment in Primary Care; Identification and Initial Management of Substance Abuse; and ADHD: Diagnostic Assessment and Evidence-Informed Pharmacology, among others.

What the practices are saying about the Collaborative:

‘This is a great process that will allow us to offer services earlier to patients, and more thoroughly.’

‘It helps to foster communication and better action between providers and staff, and therefore improve patient care’.

‘We hope that this enables us to better delineate the mental health concerns of our patients and take measures to find them resources.’

‘As a team, we feel that this process will improve the quality of care that we are providing and help us provide interventions if necessary and educate parents on resources that are available to them.’

NJAAP is excited about the success of the Learning Collaborative thus far. We look forward to the opportunity to expand the program and to provide additional practices with more tools to help identify, screen and diagnose mental/behavioral health concerns in New Jersey’s children.

MOC Part 4 Program Objectives

- Improve screening of children 0 – 6 years of age to identify mental health and behavioral concerns using the Survey of Well-being of Young Children (SWYC)
- Improve screening of children 6-18 years of age to identify mental health and behavioral concerns using the Pediatric Symptom Checklist (PSC-35)
- Improve assessment of children identified via screening
- Improve anticipatory guidance provided by pediatricians and their practice staff with parents and caregivers to address mental health and behavioral concerns
- Improve care management of children with identified mental health and behavioral concerns

For more information about the Collaborative, please contact the NJAAP Mental Health team at MHC@aapnj.org.
Critical Congenital Heart Disease Screening

NJAAP representative, Regina GrazeL, MSN, RN, BC, APN-C presenting Critical Congenital Heart Disease Screening (CCHD) poster on results at the American Public Health Laboratories Newborn Screening Symposium in St Louis, Missouri - February 29th - March 3rd

Jean Regina GrazeL, MSN, RN, BC, APN-C
NJAAP Project Coordinator, NJ DOH Critical Congenital Heart Disease Screening Program,
President, National Association of Neonatal Nurses (NANN)
CDC’s “Track your Child’s Developmental Milestones” Brochures, customized by SPAN in collaboration with NJ DCF, with NJ-specific information. Download these brochures from www.aapnj.org today.
THE NEW JERSEY CHAPTER, AMERICAN ACADEMY OF PEDIATRICS PRESENTS

THE SIXTH ANNUAL New Jersey CHILDREN’S Ball

SPOTLIGHT ON CHILDREN PROGRAM

WEDNESDAY, APRIL 20, 2016

SILENT AUCTION AND COCKTAILS: 6:15 PM
DINNER TIME: 7:15 PM

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NJAAP Annual Conference & Exhibition
Re-Stock Your Pediatric Toolbox
Wednesday, May 11, 2016 - The Palace at Somerset Park, Somerset, NJ

Speakers to Include:
Benard Dreyer, MD, FAAP, AAP President
Robert Murray, MD, FAAP | Anthony Mancini, MD, FAAP, FAAD
Lawrence Newman, MD, FAHS | Binita Shah, MD, FAAP
Warren Seigel, MD, MBA, FAAP, FSAHM
Nathan Blum, MD, FAAP | Stephen Ludwig, MD, FAAP
Margaret ‘Meg’ Fisher, MD, FAAP | Scott Sicherer, MD, FAAP

Topics to Include:
Poverty | Food Allergy | Infectious Disease | HPV
Behavior Management | GLBTQ | Chronic Headaches | Sleep Problems
Visual Diagnosis | The Irritable Child | Dermatology

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Stay tuned for additional details