

# FUTURE OF PEDIATRICS

# TALKS!

A VIRTUAL SUMMER SERIES

Pediatric Health Network

 Children's National.



# A few notes about today's Webinar

- All lines are muted throughout the webinar.
- Please use the Q&A box to ask questions or make comments.
- Today's Webinar recording and slides will be posted to the PHN website following the presentation. You can find past FOP presentations on our website at <https://pediatrichealthnetwork.org/future-of-pediatrics/>

# Speakers



Amaziah Coleman, MD



Claire Boogaard, MD



Anna Kirkorian, MD

## No conflicts to disclose:

- No financial or business interest, arrangement or affiliation that could be perceived as a real or apparent conflict of interest in the subject (content) of their presentation.
- No unapproved or investigational use of any drugs, commercial products or devices.

# Upcoming FOP Talks!

DATE	TOPIC	SPEAKER
<b>August 12</b>	Obstructive Sleep Apnea: Primary Care Management and When to Refer	Claire Lawlor, MD
	Neuropsychological Evaluations: What are they, when are they needed and how can I get them for my patients?	Kristina Hardy, PhD Laura Kenealy, PhD
<b>August 26</b>	Meeting Teens Where They Are: the Contraception Discussion	Brooke Bokor, MD, MPH Natasha Ramsey, MD
	School's Out: Supporting School Attendance and Distance Learning Engagement	Asad Bandealy, MD Heidi Schumacher, MD

# Children's National Return to School Webinar Series

## Dr. Bear Is In: What Do the Tests Really Mean?

On **Friday, July 31, 2020 at 11:30 a.m.**, Children's National experts will discuss the tests available, how reliable they are, how to interpret the tests and what next steps are after results come back.

Meghan Delaney, D.O., Chief of Pediatric Laboratory Medicine will review the latest information on COVID-19 testing and answer your questions about how testing might play a role in the return to school.

**Register Here:**

<https://childrensnational.org/healthcare-providers/refer-a-patient/covid/covid-19-webinars>



# Managing ADHD, Anxiety and Depression: A PHN ECHO

PHN in partnership with DC MAP is launching our inaugural Project ECHO® Behavioral Health collaborative on **September 2, 2020**. During the 6 month project:

- Primary care providers will share cases from their practices to review and discuss with peers and behavioral health specialists.
- Specialists will guide primary care providers through: assessment, treatment and management of ADHD, anxiety and depression. They will also be addressing management and changes to caring for these patients during the pandemic.
- MOC part 4 and CME credit will be offered.

**Register online at**  
**<https://pediatrichealthnetwork.org/project-echo-information-sessions/>**

# PHN 2020 Annual Report Available Now!

Community matters. PHN's 2020 annual report highlights the network's commitment to community and the tremendous contributions of our physicians and care teams over the past year. The report summarizes key achievements pertaining to:

- Network growth, leadership and governance
- Quality improvement and information technology
- Network management and finance
- Value-added services, including the vaccine buying group and eCW EHR and data sharing
- COVID-19 response and recovery



To view the full report visit  
<https://annualreport.pediatrichealthnetwork.org/>

# Allergic Reactions: When to Refer?



Amaziah Coleman, MD

Claire Boogaard, MD, MPH



# Learning Objectives

- Determine effective management strategies for common allergic complaints in the primary care setting
- Understand the role of the allergist in diagnosing and treating common allergic reactions
- Apply our understanding of common allergic disease processes and referral guidelines to better educate families and offer appropriate anticipatory guidance

## Case 1:

4 month old ex FT breastfed infant presents for WCC with eczematous patches on her trunk and face that mom has been treating with hydrocortisone 2.5% with good compliance but with minimal improvement. Mom is frustrated with it cosmetically and mom thinks the associated pruritus is waking her up at night. Mom would like a stronger medication and is curious why her skin is so reactive.



# Management of Atopic Dermatitis

- Patient education
- Eliminate exacerbating factors
  - Irritants
  - Skin infections
  - Allergens
- Maintain skin hydration
  - Baths every day
  - Emollients/Moisturizers - Avoid lotions

# Management of Atopic Dermatitis

- Control pruritus
  - Non-pharmacologic interventions – wet wraps, bleach baths
- Topical corticosteroids
  - Lowest potency possible for the shortest amount of time (max 2 weeks at a time)
  - Hydrocortisone 2.5% cream, Hydrocortisone 2.5% ointment
  - Triamcinolone 0.1% ointment – do not apply to face
- Topical calcineurin inhibitors – pimecrolimus 1% cream, tacrolimus 0.03 – 0.1% ointment
  - Approved for  $\geq 2$  years
- Topical PDE<sub>4</sub> inhibitor – crisaborole
  - Approved for  $\geq 3$  months
- Oral antihistamines

## Case 2

2 yo male presenting with hives on trunk, face, and extremities. Patient was fine when dropped off at daycare, but daycare providers noted him scratching within the first hour of arrival. No vomiting, difficulty breathing, or altered mental status. No new foods or identified trigger. Dad wants to know what happened, how to treat it, and how to prevent it in the future.



# Acute Urticaria

- Causes:
  - Infections
  - IgE-mediated allergic reactions
  - NSAIDs
  - Direct mast cell activation
  - Physical triggers – cold, pressure, vibration
- History, Physical Exam
- Allergy Testing?

# Acute Urticaria

## Treatment:

- H<sub>1</sub> antihistamines
  - Second generation – first line therapy
    - cetirizine, fexofenadine, loratadine, levocetirizine
  - First generation (diphenhydramine)
- Oral steroids – not generally recommended
- 1/3 of all patients will have persistent symptoms for several weeks

## When to refer?

- Suspected allergic etiology

## Case 3

Dad of a 3yo boy with current BL AOM is calling because his son has developed a rash. He is being treated with amoxicillin for 5 days and now has a red, bumpy rash on his arms and back. Dad says he's also been outside at grandma's house (in rural MD) for the last few days. He's had one AOM in the past, diagnosed at 8mo and treated successfully with amoxicillin.





# Drug Hypersensitivity Reactions

- Classification:
  - Type I
  - Type II
  - Type III
  - Type IV
    - Maculopapular/morbilliform eruptions
    - Contact dermatitis
    - Stevens-Johnson syndrome, TEN
    - DRESS

# Drug Hypersensitivity Reactions

- Association with viral infections
- History is considered low risk if:
  - Reaction observed directly by clinician or well-documented
  - Reaction limited to skin and consistent with maculopapular rash
  - No mucous membrane involvement, blistering or peeling skin, joint involvement
  - Oral steroids not needed to control symptoms
- When to refer?
  - History is unclear
  - If reaction involves urticaria or angioedema

## Case 4

6 month old ex-FT infant male with moderate atopic dermatitis presents for WCC and wants to discuss food introduction. Both dad and older sister have peanut allergies. Mom is worried about exposing him to peanuts because she is worried he might react (plus, it's logistically hard given that they are a peanut free household).



# Early Peanut Introduction

- Risk factors for peanut allergy:
  - Other atopic disease (severe atopic dermatitis, egg allergy)
  - Family history of atopy/ peanut allergy (7% risk in sibling)
  - Genetic factors (loss of function mutation in filaggrin)
  - *Delayed oral exposure to peanut*
- Introduction of peanut protein in infancy
  - Peanut butter – 1 gram protein thinned with small amount of water (consider mixing with previously tolerated food such as oatmeal or banana)
  - Peanut powder – 1 gram protein
  - Peanut puffs – 1 gram protein
  - Goal dose: 5 grams peanut protein at least 3 times per week

# Early Peanut Introduction

- How to keep other family members safe:
  - Consider introduction at relative or friend's home
  - Ensure proper hand washing, using specific utensils to avoid cross-contamination, minimizing kissing, touching, etc after eating
- What about introduction of other highly allergenic foods
  - Avoidance not recommended
- When to refer?
  - Refer if patient is high-risk and family hesitant to introduce

## Case 5

8 yo male with moderate persistent asthma with triggers of weather change, heat, stress/emotions, smoke, and colds presenting after 2<sup>nd</sup> exacerbation this year requiring OCS. At home he is exposed to dust, strong odors, and “water bugs.” His school recently had to close for a burst pipe. He has good compliance with ICS and uses the spacer consistently with good technique.



# Moderate Persistent Asthma

- Allergy or Pulmonology Referral?
- Environmental Allergy Testing
  - Help determine sensitization
  - Can be unreliable in younger ages (< 3-5 years old)
  - Help guide avoidance recommendations
  - History is important as well
- Consider IMPACT DC Referral

## Case 6

13 year old female with year round rhinitis and itchy/runny red eyes that fluctuate in intensity but never resolve. They have made her miss events because the symptoms are so frustrating. She takes fluticasone nasal spray 2 sprays BID and is on cetirizine 10mg daily.





# Allergic Rhinitis

- Is this acute or protracted tolerance?
- **Management**
  - Second generation oral antihistamine
    - cetirizine, fexofenadine, loratadine, levocetirizine
  - Glucocorticoid nasal spray
    - fluticasone, mometasone, triamcinolone nasal sprays
  - Antihistamine nasal spray
    - azelastine nasal spray
- **Allergic conjunctivitis**
  - Ophthalmic drops
    - ketotifen, cromolyn, olopatadine eye drops

# Allergic Rhinitis

- Allergen Immunotherapy
  - Does the patient have an indicated history?
    - Allergic rhinitis, Allergic conjunctivitis. Allergic asthma
  - Does patient have symptoms with exposure and sensitization?
  - Currently maximizing medical management?
  - Are symptoms controlled with current management?
- Special patients:
  - Severe or unstable asthma
  - Beta blockers
  - Immune disorders
- Other considerations: age, cost, duration, monitoring, adherence

# Conclusions

- Pediatricians encounter multiple atopic conditions in childhood.
- Understanding when to refer to an allergy subspecialist is helpful for improving patient outcomes.
- Preparing patients and their families for the visit by offering appropriate anticipatory guidance that does not add unrealistic expectations is helpful.
- Understand that the allergist is a resource for the primary care provider. If in doubt, please call or refer.