Pinnacle Pediatrics

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Welcome to Spring! The days are getting warmer, and longer.The birds are starting to chirp in your backyard. And vegetation is starting to grow and bloom. Which means, it is the start of Spring allergy season. About 20% of children have environmental allergies.

Tree pollen is actually the usual initial source of discomfort, followed in several weeks by grass pollen. Typical environmental allergy symptoms consist of sneezing (especially in the morning, when pollen counts are highest), runny nose, congestion and itchy, watery eyes. In children, the eye symptoms provoke the most complaints, followed by congestion. Sneezing and runny nose tend to bother the parents more than the child. Fever indicates infection, not allergy. Sore throat and cough are more commonly due to infection than allergy.

If a child exhibits runny nose and sneezing only, no treatment is usually necessary. If a child does express discomfort, particularly if they have congestion and/or eye symptoms, first-line treatment is a non-sedating antihistamine. The Big Three products are Zyrtec (Cetirizine), Claritin (Loratidine), and Allegra (Fexofenadine). All three are effective, with Zyrtec proving to be slightly more effective in head-to-head studies, although some children may experience drowsiness with Zyrtec. Older antihistamines, such as Benadryl, are not as effective, and do cause sedation (which may be desirable in the pre-school aged child). Zyrtec is over-the-counter, comes as a liquid and a small tablet, and is given just once per day. The dose is 5 mg. for children age 2-6 years, and 10 mg, for children age 6 and up. The oral decongestant Pseudoephedrine may be added to an oral antihistamine, as in Zyrtec-D or Claritin-D. The other commonly used oral decongestant, Phenylephrine, is no more effective than placebo, so is not recommended.

Nasal antihistamines may also provide relief. Azelastine (Astepro) is also OTC, dose is 1 spray per nostril twice per day. It is approved for children over 5 years of age. Onset of action (15-30 minutes) is more rapid than an oral antihistamine (60 minutes).

If the antihistamine alone does not provide sufficient relief, a nasal-spray steroid can be added. This is particularly effective for congestion. These products were also recently made OTC. There are many products in this field -- Flonase (Fluticasone) appears to be the most effective. The usual dose is 1 spray in each nostril once per day. Although their onset of action typically occurs within 12 hours, maximal effect may not be achieved until 7 days.

Singulair (Montelukast) has commonly been prescribed for allergies. It is not very effective and is associated with neuropsychiatric side-effects, so I do not recommend its use.

Another option for congestion is a decongestant nasal spray, such as Afrin. However, these should only be used for 3 days due to rebound congestion. Nasal saline sprays and drops can be used to relieve nasal dryness and congestion. Nasal irrigation administered by neti pot or bulb syringe can help expel mucus and relieve congestion. Be certain to use sterile saline, or boiled and cooled water, as use of tap water has been associated with amoebic meningitis.

For itchy/watery eyes, antihistamine eye drops provide significant relief for those children who will allow their administration (Hint -- have the child look up, pull the lower lid down, and place the drop in the sulcus you have created. Hint #2 -- be certain your child is not holding sharp objects while you do this :). There are many OTC antihistamine eye drops, the most effective being Ketotifen (brand name Zaditor or Alaway) and Olopatadine (Pataday). The dose for Ketotifen is 1 drop in each eye twice per day, for Pataday it is 1 drop once per day. Onset of action is within minutes.

Although avoiding potential allergens is an oft-recommended strategy, in most instances this is not practical. Your child needs to go outside for fun and for exercise. Certainly, there are reasonable steps one can take, such as not asking the grass-allergic child to mow the lawn, avoiding hay rides, and whole-house air-conditioning so the windows can remain closed. Having the child immediately take off clothes upon coming indoors, and promptly taking a shower to remove any pollen also makes sense. Likewise, allergy testing is superfluous for most children, as knowing specifically what they are allergic to will usually not alter their management "Stay away from the Dutch Elm trees and perennial ryegrass dear!" is not likely to be an effective caveat.

If a child is on maximal medical therapy (oral antihistamine, nasal steroid, antihistamine eye drops) and is still miserable with allergy symptoms, then it is reasonable to see an Allergist for consideration of immunotherapy (usually given as injections, but now also available orally for certain allergens). Fortunately our allergy medications are effective enough currently that we see far fewer children requiring immunotherapy than previously. A recent option now available via an allergist is Xolair (Omalizumab). This is a monoclonal antibody which is given by injection every 2 - 4 weeks.

Spring allergy season generally lasts until mid-June, then Fall allergy season starts in mid-August. However, depending on exactly what the child is allergic to, some kids are symptomatic year-round. Fortunately, many of these children are not terribly uncomfortable, and our current medications provide significant relief for most others. As with many issues in pediatrics, the parents are often more bothered by the symptoms than the child. Recommended treatment is earplugs for the parents and a recording of "Gesundheit" that can be replayed on a continuous loop each morning.

For some (hopefully) useful information on additional pediatric topics, please read on.

Covid-19

Center for Disease Control. 3/1/2024

On March 1 the CDC issued revised recommendations on Covid prevention. They now state that this virus should be treated like all other respiratory viruses. Hence, the 5 day in-home quarantine recommendation has been lifted. This is due to the fact that the incidence of Covid is falling, as is the risk of severe Covid. However, Covid does certainly still remain in our environment and is still a common cause of hospitalization and death, particularly in susceptible populations.

The CDC does still strongly recommend vaccination against Covid, as well as treatment where indicated (not available in the pediatric population), and practicing good hygiene. Anyone with any respiratory disease is encouraged to try to avoid immunocompromised individuals and the elderly. The CDC states that other countries that have similarly relaxed Covid isolation restrictions have not seen an increase in hospitalizations and deaths due to Covid. Any facility does still maintain the right to issue their own regulations regarding Covid, particularly health care facilities.

I have been advocating for this change for several months now, as readers of my Newsletters and Updates are aware. I do believe this is very reasonable. This recommendation also indicates, again as I have been advising, that testing for Covid is not indicated in most situations. Covid, Influenza, RSV and other respiratory viruses are still common causes of morbidity and mortality in the population. We should do everything in our power to limit their impact, including vaccination, good hygiene and avoiding contact with susceptible individuals. But, with these precautions, most of us now consider these infections to be an acceptable risk to lead "normal" lives, for us and our children. I still would not recommend having your children hang out in a Pediatrician's germ-infested waiting room, however ☺.

Exercise in Adolescents

Burden, S. Intensity and Duration of Physical Activity and Cardiorespiratory Fitness. Pediatrics. Vol. 150:1, July, 2022.

LaBotz, M. Physical Activity Counseling: New Options and a Lighter Burden. Pediatrics. Vol. 150:1, July, 2022.

There is no clear guidance on the intensity and duration of physical activity that adolescents require to maximize cardiorespiratory fitness. These researchers studied 339 13 - 14 year olds at various levels of intensity and duration of physical activity. They found that greater duration of vigorous physical activity resulted in greater levels of cardiorespiratory fitness until around 20 minutes duration, after which the benefit plateaued. Moderate and light physical activity did not confer any cardiorespiratory benefit.

Current recommendations of 60 minutes of moderate to vigorous physical activity per day are challenging for many busy adolescents. The 2019 Youth Risk Behavior Survey found that only 23% of U.S. adolescents met this recommendation.

The good news is that the results of this study suggest that a much shorter duration of activity, 20 minutes, can achieve the desired result of increased cardiorespiratory fitness. The bad news is that moderate physical activity did not achieve this goal. Adolescents can be counseled that vigorous activity is when they start to sweat, their face turns red, they get short of breath and are unable to easily talk during the activity.

For children who are sedentary, or accustomed to lower levels of physical activity, they should work up to this level of activity. Also, this study focused on the benefit of physical activity only as it relates to cardiovascular fitness. It is important to recognize that other benefits of exercise, such as improved metabolic and mental health, may accrue at different levels of intensity and duration. Some exercise is better than none. Extrapolating from adult data, the biggest benefit of exercise likely occurs when the most sedentary and least fit adolescents become a bit more active, even if it falls short of the above recommendations.

One additional point not addressed by these authors is that exercise needs to be FUN. I discuss this with adolescents all the time. If they are participating in an activity that they do not enjoy, it will not last. This is often the biggest challenge – finding an exercise activity that the adolescent looks forward to. Often times this requires some creative thinking. Many teens enjoy group activities, some would rather exercise individually. Dancing is a fun activity for many adolescents, and can result in significant exertion. Besides team and individual sports, there are group exercise classes available. Some enjoy a vigorous hike. Sorry, a competitive game of Minecraft or Fortnite does not count (but some video games that do require vigorous physical participation can).

Toddler Formula

American Academy of Pediatrics, news release, 10/20/2023

Powdered drink mixes that are widely promoted as "toddler milks" for children age 1-3 years are unregulated, unnecessary and nutritionally incomplete the American Academy of Pediatrics stated in a news release. The drinks often contain added sugar and salt. The manufacturers claim the drinks are useful for filling "nutrition gaps" in kids' diets. They make unproven claims that these drinks boost kids' brains and immune systems. The AAP states that children this age should drink breast milk, cow's milk or water and eat a balanced diet.

Although these powdered drink mixes are often produced by the major infant formula manufacturers, they are not regulated by the FDA, as infant formula is. There are no federal regulations governing these products, so the ingredients can vary widely. They are also more expensive than cow's milk. Their sales have soared in recent years, from $39 million in 2006 to $92 million in 2015.

When asked about these products, I explain to parents that this is a marketing ploy by formula manufacturers, plain and simple. Their market ends when an infant turns 1 year old and we switch formula-fed babies to whole cow's milk. This is simply a way for them to create a new target customer. There is just no reason to feed your toddler this product, and it may in fact be less healthy for them. I realize I am casting aspersions, but these products are more beneficial to the companies' profit margins than your child's nutritional needs. If you want to boost the company's bottom line, just send them a check 🙂.

Rise in Vaccine-Preventable Illnesses

CDC News Release, 3/18/2024

Measles cases in the U.S. this year have already reached last year's total of 58, and most have been among unvaccinated children. There have been cases reported in 17 states, including Pennsylvania. There are currently outbreaks in Austria, the Philippines, Romania and the United Kingdom as well.

Although Measles used to be a routine childhood disease before a vaccine was developed, it is far from benign. One in 20 children with Measles will develop pneumonia, and 1 in 1000 will develop encephalitis (brain inflammation), both of which can have devastating consequences. About 1 in 5 unvaccinated people in the U.S. who gets Measles is hospitalized. There is no anti-viral treatment for Measles. About 93% of kindergarteners in 2022 in the U.S. were fully vaccinated against Measles, ranging from 81% to 98% among the states (below the 95% considered necessary for herd immunity). Two doses of Measles vaccine is 98% effective at preventing disease.

Pennsylvania Department of Health Advisory 10/23/2023

Six cases of Pertussis (whooping cough) were identified in Cumberland county high school students. Health care providers were advised to be on the lookout for the typical symptoms of Pertussis.

Whooping cough in older children and adults is generally not a serious illness. However, it does produce a severe and prolonged cough ("100 day cough"). Most importantly, in infants it can cause serious illness and even death.

Vaccines have dramatically decreased the incidence of many infectious illnesses. However, the only disease that has been completely eliminated is Smallpox. All of the others still exist, which is why we still immunize against them. Throughout history, any time vaccination rates go down for any reason, the rates of illness go up. There has been a small but significant decrease in immunization rates during and following the Covid pandemic. "Those who cannot remember the past are condemned to repeat it" – George Santayana.

Acute Mental Health Care

Children's Hospital now has a pediatric behavioral health walk-in clinic. This is on the 3rd floor of the main hospital in Lawrenceville. It is staffed by therapists and psychologists Monday through Friday from 5 - 9 PM, and noon to 4 PM on Saturdays. They are available without an appointment to any child having an acute emotional/ behavioral/mental health issue. If a child is having a mental health emergency, they should still go to Western Psychiatric Hospital emergency room.

Acute Orthopedic Care

Children's Hospital has also opened a walk-in Orthopedic clinic at the main hospital. This is staffed Monday through Friday, 5 - 8:30 PM. No appointment necessary for any acute orthopedic injury.

AHN also has very convenient pediatric Orthopedic care available at the AHN Pediatric Orthopedic Institute. This office is located on Perry Hwy in Wexford, across from the new AHN hospital and Health and Wellness Pavilion. This is staffed by outstanding pediatric Orthopedic surgeons. Call 724-933-6699 for an appointment.

National Charity League

The National Charity League is an organization of mothers and daughters (6th - 12th grade), dedicated to philanthropy. They volunteer nearly 3 million hours annually to over 6,000 charities nationwide. A mother/daughter in our practice recently opened the first chapter in Pittsburgh, and third in Pa. If you would like more information, go to nationalcharityleague.org.

Ok, I need to go watch my NCAA bracket picks go down in flames. One of my daughters just concluded her college basketball career, so this year's tournament serves as solace. Not to brag (says everyone who is about to brag), but her team made its 2nd consecutive D-III NCAA tournament. She was named an All-American and 2-time conference Player of the Year. In her honor, this issue's Back Page pokes fun at athletes. To all the professional athletes in our practice, please do not take offense – I poke fun at doctors, lawyers and everyone else here. Everyone keep smiling and enjoying your kiddos – I promise it will go way too fast.

1. Frank Layden, Utah Jazz president, on a former player: "I asked him, 'Son, what is it with you? Is it ignorance or apathy?' He said, 'Coach, I don't know and I don't care.

2. Shelby Metcalf, basketball coach at Texas A&M, recounting what he told a player who received four F's and one D: "Son, looks to me like you're spending too much time on one subject."

3. In the words of NC State great Charles Shackleford: "I can go to my left or right, I am amphibious."

4. New Orleans Saint RB George Rogers when asked about the upcoming season: "I want to rush for 1,000 or 1,500 yards, whichever comes first.."

5. And, upon hearing Joe Jacobi say: "I'd run over my own mother to win the Super Bowl," Matt Miller of the Raiders said: "To win, I'd run over Joe's Mom, too."

6. Football commentator and former player Joe Theismann: "Nobody in football should be called a genius. A genius is a guy like Norman Einstein."

7. Senior basketball player at the University of Pittsburgh: "I'm going to graduate on time, no matter how long it takes.."

8. Bill Peterson, a Florida State football coach: "You guys line up alphabetically by height.." And, "you guys pair up in groups of three, and then line up in a circle."

9. Lou Duva, veteran boxing trainer, on the Spartan training regimen of heavyweight Andrew Golota: "He's a guy who gets up at six o'clock in the morning, regardless of what time it is."

10. Chuck Nevitt, North Carolina State basketball player, explaining to Coach Jim Valvano why he appeared nervous at practice: "My sister's expecting a baby, and I don't know if I'm going to be an uncle or an aunt.

11. Yogi Berra, "The future ain't what it used to be."

12. A classic: When one team fell short in a college basketball championship game, a reporter asked the frustrated looking coach, "What about your team's execution?", he replied: "I think it would be a good idea!"