

Pediatric Emergency Medicine-Connect

(Future Publications title shortened to PEM-Connect)

A newsletter of the Pediatric Emergency Medicine Department-Egleston and Hughes Spalding

Who are we? Community Outreach

A group of physicians dedicated to improving our communication with General Pediatricians, Community (Referring) Emergency Departments and Urgent Care Facilities. We currently have 11 physicians, about 25% of our department as members of this dynamic group. We are visiting pediatric offices, offering hot topic lectures to Emergency Departments and helping to facilitate the care of your patients at our hospital system. The division of Pediatric Emergency Medicine at Egleston and Hughes Spalding is proud to announce this inaugural newsletter. This newsletter is one of the many tools we will use to keep you informed of what is going on in the Emergency Department and to improve the care of your patients. We are Dedicated to All Better.

In this Issue

Introductions-Meet Us

Introduction to ED
Guidelines

Flu

Cough and Cold

CHOA Bronchiolitis
Guideline



Meet Our Group-pictures and bios dispersed throughout this newsletter will tell you more about us and help you to connect with our group.

ED Bronchiolitis Guideline

By Kiesha Fraser Doh and Shabnam Jain

We are well into bronchiolitis season so it is timely to address this topic. The AAP recently released an updated clinical practice guideline on the diagnosis, management, and prevention of bronchiolitis. Shortly before Children's implemented its own revised guideline for both ED and inpatient bronchiolitis patients. For the most part, both the AAP and Children's guidelines are similar and have some important changes from previous recommendations. The CHOA ED bronchiolitis guideline recommends initial suctioning followed by assignment of a clinical respiratory score (CRS) to assess respiratory status. Components of the clinical respiratory score include dyspnea, hypoxia, respiratory rate and coughing. Management decisions are based on the patient's severity of illness (CRS); no additional intervention is recommended in mild illness (CRS 0-2). An important change in the current guideline is that trial of albuterol is recommended only if the child is at risk for asthma (age >12 mo with wheeze plus history of atopy or family history of atopy or asthma). Children who respond to albuterol may be managed further as per asthma guidelines. For patients who are not at risk for asthma, a trial of albuterol is not recommended. Further management for this group includes nasal suctioning as needed and ensuring hydration.



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Continued on page 5

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We are happy to talk with you! Tips on using the Children's Transfer Center

1. The Transfer Center specialist will happily connect you to the physician working in the Emergency Department if you want advice or need to give specific instructions. You just need to ask.
2. If you want to be called back with results or plans please give the Transfer Center Specialist a direct phone number to reach you within the next 6-8 hours (seems long but it covers the time it takes the patient to arrive and for us to complete the work-up). Once again specifically ask for a call back.
3. NEVER HESITATE TO CALL US. WE ARE HERE TO HELP. EVERY CHILD DESERVES CHILDREN'S AND WE ARE DEDICATED TO MAKING ALL CHILDREN BETTER



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Influenza

By Mark Griffiths

Influenza season is here, but its not the only bug in town. Besides Influenza A included on the list are RSV and rhino/ enterovirus. We are seeing lower then expected immunization rates against Influenza and the antigenic drift in the H3N2 strain of influenza A has made immunized children susceptible. Regardless, most of our patient will have their symptoms that resolve with supportive care like oral rehydration and antipyretics/ analgesics.

With this in mind and to preserve the effectiveness of antiviral medications, the American Academy of Pediatrics and the Center for Disease Control (CDC) make the following recommendations. Anti-virals should be used for the treatment of confirmed or suspected influenza primarily in

- hospitalized patients
- patients with severe, complicated or progressive illnesses (including chronic pulmonary, hematological, metabolic and neuro-developmental conditions and immune-compromised hosts).
- Patients who are in close-contact with immune-compromised individuals

When considering treatment for influenza like illnesses, the Center for Disease Control also cautions practitioners that Rapid Influenza Diagnostic Tests (RIDT) are known to have more false negative results than false positives. In addition, false negative results are more common during the actual influenza season.

Continued to page 5



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Cough and Cold Preparation

By Sarah Gard Lazarus

Cough and cold medicines are commonly used, and can be dangerous. Per the FDA (Food and Drug Administration) website, these products include decongestants, expectorants, antihistamines, and anti-tussives. These medicines are often used in an attempt for parents to relieve their children's coughs, colds, and allergies.

Multiple studies have shown that there is little clinical advantage between the use of placebos (non-active medications) and cold and cough medicines in very young children. These studies have shown that cough and cold medicines do not improve sleep, or quiet cough and risk may outweigh any benefits.

Thousands of children are treated in emergency departments every year due to

Continued on page 6

Bronchiolitis Guidelines Continued from Page 2

In children with severe disease ($\text{CRS} \geq 7$), high flow nasal canula and racemic epinephrine nebs may be considered. As in the previous guideline, evidence continues to show the lack of benefit from routinely obtaining blood counts, chest X-ray, RSV tests, antibiotics, serial aerosols, steroids and/or chest percussion therapy. Patients who continue to have significant work of breathing, are unable to handle secretions, maintain oxygen saturations or cannot feed, need to be admitted. Note that for the latter situation, the guideline suggests nasogastric tube feeds as an option instead of IV fluids

Since there are few definitively helpful interventions for bronchiolitis and routine albuterol nebs are no longer recommended, patients who are maintaining saturations $\geq 90\%$ on room air ($\geq 88\%$ when asleep), are able to handle secretions, and maintain activity and hydration can be discharged if the parent is comfortable and can follow up. You may have already seen some of your patients referred back for an evaluation 1-2 days after being discharged from the Emergency Department. Please feel free to use CHOA access to determine your patient's condition and vital signs during their ED visit to compare with the condition at that time of the follow up. If there are any questions about the guideline, feel free to contact Shabnam Jain, MD at sjain@emory.edu

Influenza Continued from Page 3

Therefore providers should keep in mind that a negative RIDT or immunofluorescence test does not exclude a diagnosis of influenza in a patient with suspected influenza. Children's does not offer the rapid flu test, as it has not been found to be an accurate diagnostic tool for our patient population. Children's offers an advanced molecular respiratory panel, including influenza, when clinical management or medication could be impacted by test results. Over the last few weeks we have seen declining numbers of influenza positive results from this panel. Our peak of influenza A cases appears to have been in December but we are now seeing an increase in Influenza B. Last week we had a total of 10 positive Influenza viral panels (4-Influenza A and 6 Influenza B) and 50 RSV positive samples. In December those numbers were 10x higher for Influenza. Each week our virometer report is provided by Dr. Jerris of the Microbiology Department at CHOA. For more information about influenza activity in the United States, visit the Weekly U.S. Surveillance Report (Flu View) @ <http://www.cdc.gov/flu/weekly/>

CHOA ED Guidelines

Three (3) ways to contact us

(ED Community Outreach Team)

1. Our web page
<http://www.pediatrics.emory.edu/divisions/emergencymedicine/Community%20Outreach/index.html>
2. Email addresses listed in this newsletter
3. Contact Kiesha Fraser Doh-Coordinator of Community Outreach Group at 404-785-7924 or email Kiesha.fraser@emory.edu

At Children's Healthcare of Atlanta we have adopted many guidelines to facilitate care of our patients. A committee of physicians, nursing and subspecialist has reviewed these guidelines. They are based on current literature and best practice guidelines. Each issue we intend to introduce a guideline to you. Many of the guidelines and pathways will be familiar to you. Our hope is that this will help you understand the management decisions that are made when your patient visits one of our Emergency Departments.

Cough and Cold Medicine-Continued from page 4

due to secondary side effects from cough medicines. Ingredients such as pseudoephedrine have even been linked to a number of deaths. Reasons why children may experience side effects from these medications may include receiving too much medication, receiving medication too frequently, or receiving multiple cough medications containing the same ingredient.

The FDA recommends (also stated as warnings per their website) that over-the-counter cough and cold products not be used in infants or children under the age of two years. In 2008, manufacturers voluntarily re-labeled cough and cold products to state “do not use in children under four years of age”.

Unfortunately, parents of children in this age range still report use of this medication. In a study done at Children’s Healthcare of Atlanta in conjunction with Emory University, the authors found that out of 65 caregivers of children under the age of six surveyed in an urban pediatric emergency department, 82% stated they would treat their children’s current symptoms with cough or cold medicines. In the demonstration portion of the study, 70% of caregivers chose medicines containing phenylephrine and 58% of caregivers would have dosed medications inappropriately per dosing recommendation labels in spite of having the bottles with associated instructions readily available. Interestingly, 20% of caregivers stated that they had previously received recommendations to give cough or cold medicines from health care providers (pediatricians, nurses and pharmacists). The majority of the potential dosing errors that were made involved giving these medications to children who were younger than the label’s recommended age for the product.

Parents and caregivers should follow the directions on labels closely regarding the indications, use and delivery of these medicines. It is important that parents and caregivers only use the measuring spoons or cups that come with the medicine. Often, parents will use a teaspoon, tablespoon or other household object to measure out these medications, and it is important to note that these are not calibrated measuring devices and may deliver inaccurate or inappropriate amounts of these

medicines. Also, it is important for parents to be aware that these medications do not quiet cough, do not improve sleep, and are not any better than a placebo (non-active medicine) for children in the improvement of cough and cold symptoms. Per the American Academy of Pediatrics, other alternatives to cold and cough medicines include honey (2-5 ml as needed by mouth) for children over the age of twelve months. Under twelve months, honey is not considered safe (due to risk of botulism). Using a bulb suction with or without saline drops, may also help with congestion in children even younger than 12 months. Very often, viruses cause cold and cough symptoms, so symptoms should improve in about 5-7 days without any medications.



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Image Gently

In an effort to reduce radiation risk in children we are happy to accept transfers from referring ED's without a prior CT scan for those with a history or exam concerning for appendicitis. We base our management on physical exam and if needed an ultrasound and/or pediatric surgery consult.