



Ten Things Physicians and Patients Should Question

1

Antibiotics should not be used for viral respiratory illnesses (sinusitis, pharyngitis, bronchitis and bronchiolitis).

Antibiotics should not be used for upper respiratory illnesses characterized by congestion, cough, or pharyngeal pain unless criteria for bacterial sinusitis or Group A streptococcal pharyngitis are met. The vast majority of these infections are caused by viruses.

Respiratory infections account for the majority of antibiotic prescriptions for children, and it is estimated that 50% of antibiotic prescriptions for respiratory infections in children are unnecessary. Antibiotic use for viral respiratory illnesses not only leads to higher healthcare costs and more adverse events, but also can lead to antibiotic resistance.

2

Cough and cold medicines should not be prescribed, recommended or used for respiratory illnesses in young children.

Research has shown these products offer little benefit to young children and can have potentially serious side effects. Many cough and cold products for children have more than one ingredient, increasing the chance of accidental overdose if combined with another product.

3

Computed tomography (CT) scans are not necessary in the immediate evaluation of minor head injuries; clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine whether imaging is indicated.

Minor head injuries occur commonly in children and adolescents. Approximately 50% of children who visit hospital emergency departments with a head injury are given a CT scan, many of which may be unnecessary. Unnecessary exposure to x-rays poses considerable danger to children including increasing the lifetime risk of cancer because a child's brain tissue is more sensitive to ionizing radiation. Unnecessary CT scans impose undue costs to the health care system. Clinical observation prior to CT decision-making for children with minor head injuries is an effective approach.

4

Neuroimaging (CT, MRI) is not necessary in a child with simple febrile seizure.

Imaging, including head CT, brain MRI, and skull films are associated with some risk and do not help with diagnosis or treatment of simple febrile seizures. MRI is associated with risks from required sedation and high cost. Head CTs can slightly increase the long-term risk for cancer.

5

Computed tomography (CT) scans are not always necessary in the routine evaluation of abdominal pain.

CT imaging in the emergency department evaluation of children with abdominal pain is frequent and can be inconsistently used, including overused. While radiation is necessary to perform a CT scan, there is both misunderstanding and often concern about the radiation necessary and the debate over the potential long-term development of cancer from this radiation. There also is the potential for an unnecessary amount of radiation from inappropriately performed CT examinations, as there are unique approaches and considerations with CT examinations in children that allow for lower radiation doses. CT can be very valuable in the setting of pediatric abdominal pain, but only when it is the correct test to do at the time (as opposed to waiting, or using another test that does not depend on ionizing radiation especially ultrasound), and performed in the right way (child-sized CT techniques).



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6

Don't prescribe high-dose dexamethasone (0.5mg/kg per day) for the prevention or treatment of bronchopulmonary dysplasia in pre-term infants.

High-dose dexamethasone (0.5 mg/kg day) does not appear to confer additional therapeutic benefit over lower doses and is not recommended. High doses also have been associated with numerous short- and long-term adverse outcomes, including neurodevelopmental impairment.

7

Don't perform screening panels for food allergies without previous consideration of medical history.

Ordering screening panels (IgE tests) that test for a variety of food allergens without previous consideration of the medical history is not recommended. Sensitization (a positive test) without clinical allergy is common. For example, about 8% of the population tests positive to peanuts but only approximately 1% are truly allergic and exhibit symptoms upon ingestion. When symptoms suggest a food allergy, tests should be selected based upon a careful medical history.

8

Avoid using acid blockers and motility agents such as metoclopramide (generic) for physiologic gastroesophageal reflux (GER) that is effortless, painless and not affecting growth. Do not use medication in the so-called "happy-spitter."

There is scant evidence that gastroesophageal reflux (GER) is a causative agent in many conditions though reflux may be a common association. There is accumulating evidence that acid-blocking and motility agents such as metoclopramide (generic) are not effective in physiologic GER. Long-term sequelae of infant GER is rare, and there is little evidence that acid blockade reduces these sequelae. The routine performance of upper gastrointestinal (GI) tract radiographic imaging to diagnose GER or gastroesophageal disease (GERD) is not justified. Parents should be counseled that GER is normal in infants and not associated with anything but stained clothes. GER that is associated with poor growth or significant respiratory symptoms should be further evaluated.

9

Avoid the use of surveillance cultures for the screening and treatment of asymptomatic bacteriuria.

There is no evidence that surveillance urine cultures or treatment of asymptomatic bacteriuria is beneficial. Surveillance cultures are costly and produce both false positive and false negative results. Treatment of asymptomatic bacteriuria is harmful and increases exposure to antibiotics, which is a risk factor for subsequent infections with a resistant organism. This also results in the overall use of antibiotics in the community and may lead to unnecessary imaging.

10

Infant home apnea monitors should not be routinely used to prevent sudden infant death syndrome (SIDS).

There is no evidence that the use of infant home apnea monitors decreases the incidence of SIDS and should not be used routinely for this purpose; however, they might be of value for selected infants at risk for apnea or cardiovascular events after discharge.

How This List Was Created

The American Academy of Pediatrics (AAP) employed a three-stage process to develop its list. Using the Academy's varied online, print and social media communication vehicles, the first stage invited leadership of the Academy's 88 national clinical and health policy-driven committees, councils and sections to submit potential topics via an online survey. The second stage involved expert review and evaluation of the management groups that oversee the functions of the committees, councils and sections. Based on a set of criteria (evidence to document unproven clinical benefit, potential to cause harm, over-prescribed and utilized, and within the purview of pediatrics) a list of more than 100 topics was narrowed down to five. Finally, the list was reviewed and approved by the Academy's Board of Directors and Executive Committee.

AAP's disclosure and conflict of interest policy can be found at www.aap.org.

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