CLIPPINGS

Diabetic retinopathy screening in children – Start later (*Ophthalmology. 2015;doi: 10.1016/j.ophtha.2015.07.010*)

Diabetes is the leading cause of blindness all over the world. It is well recognized that early detection and treatment of diabetic macular oedema and proliferative diabetic retinopathy reduces the risk for vision loss. The current guidelines of American Academy of Ophthalmology recommend annual screening for retinopathy in patients with type 1 diabetes to begin 5 years after diagnosis of diabetes, and the American Academy of Pediatrics guidelines suggest starting annual examinations 3 to 5 years after the diagnosis of diabetes in children, or after the age of 9 years, whichever occurs later. However, in children, the prevalence of severe diabetic retinopathy and the importance of its screening have not been clearly established.

This study aimed to investigate the prevalence and onset of ocular disease, and its risk factors, in children with diabetes, and consequently recommend a screening guideline for asymptomatic children. On the basis of this study results and review of the literature, researchers suggest that screening for ocular complications of diabetes could begin later than suggested by current guidelines. The screening examinations for retinopathy could begin at age 15 years, or after 5 years of diabetes mellitus duration, whichever occurs later, with an exception made for high-risk children and type 2 diabetic children.

Atropine 0.01% significantly reduces childhood myopic progression (*J AAPOS. 2015;doi:10.1016/j.jaapos.2015.07.049*)

Atropine and some other agents are known to have significant effect on reducing the progression of myopia in children. The practical problem is the side effects at the current recommended dosage. In this case-control study, atropine 0.01% significantly reduced the rate of myopic progression over one year with minimal side effects. Atropine in reduced dosage may have potential to reduce progression of myopia.

Severity of dehydration in children – New Canadian guideline (*https://news.brown.edu/articles/2015/08/dhaka*)

Diarrhea is one of the leading causes of death in developing world. Assessment of dehydration is crucial for proper treatment. Canadian researchers, working at International Centre for Diarrheal Disease Research in Bangladesh, have come out with a very simple approach to the diagnosis of severity of dehydration called DHAKA (Dehydration: Assessing Kids Accurately).

In this study, they tracked 10 symptoms to see which of them were accurately predictive of true dehydration severity. The analysis found that just a few were needed to produce the combination of high sensitivity (does it detect dehydration severity?) and high specificity (does it rule out other possible problems?) needed to provide an accurate diagnosis. This system includes both a simple scoring tool and a decision-tree that clinicians can quickly apply in their busy practice.

For the DHAKA Dehydration Score, these symptoms are the general appearance and demeanor of a child, how quickly skin returns to smooth after being pinched, whether breathing is unusually deep, and whether tears are absent or only barely present when the child is crying. For the DHAKA Dehydration decision-tree, a two-step flowchart process, the symptoms were general appearance, and depending on that, either the skin pinch or whether the child's eyes appeared sunken. This is a new simplified way to arrive at severity of the dehydration which needs validation in different settings.

Streptococcal pharyngitis – When can children return to school? (*Pediatric Infect Dis J. 2015;doi: 10.1097/INF.0000000000000883*)

Current recommendations suggest that children should not return to school for at least 24 hours after starting antibiotics for a confirmed group A streptococcal pharyngitis. This study found that even in the late afternoon, a full dose of amoxicillin (50 mg/Kg) administered after notification of positive rapid antigen detection test results for group A streptococcus (GAS), resulted in non-detection of GAS in 91% of children the next morning. Therefore, children treated with amoxicillin for streptococcal sore throat by 5 PM of day 1 may, if afebrile and improved, attend school on day 2. This can have implications for financial savings and improved school attendance.

Dexamethasone better for inpatient asthma treatment compared to prednisone (*J Pediatr. 2015;doi: 10.1016/j.jpeds.2015.06.038*)

We all know the importance of steroids in treatment of exacerbations of asthma. Conventionally, prednisone is used for inpatient use. This study suggested that dexamethasone is better for inpatient treatment, probably due to its longer duration of action, palatable taste and milder side effects. Dexamethasone therapy is shorter (2 days *vs* 5 days) than prednisone), and patient and family compliance is much better.

Overweight teens – Protein-rich breakfast prevents body fat gain (*Obesity. 2015;23:1761-4*)

Many young people frequently skip breakfast. Although breakfast is suggested as a strategy to reduce an individual's chance of obesity, little is known if the type of breakfast consumed plays a significant role in one's health and weight management. In this study, researchers compared the benefits of consuming a normal-protein breakfast to a high-protein breakfast and found the high-protein breakfast – which contained 35 grams of protein – prevented body fat gain, reduced daily food intake and feelings of hunger, and stabilized glucose levels among overweight teens who would normally skip breakfast.

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