This Month In The JOURNAL of PEDIATRICS

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The Journal meets Android

— Monica L. Helton, BA

Since 2013, *The Journal* has been pleased to offer readers two useful mobile apps for their iPhone and iPad (available through the Apple App Store)—one provides individual access to *The Journal* and the other provides institutional access to *The Journal* and Elsevier's 500+ health science journals through ScienceDirect.

If you are one of the many (majority, in fact) Android users, you may be thinking something along the lines of "great for them, but what about non-Apple users?". We are now pleased to offer *The Journal of Pediatrics* app for Android smartphone and tablets, available in Google Play.

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Good news about doxycycline and dental staining

— Sarah S. Long, MD

Due to the history of association of use of tetracycline-class antibiotics in young children with staining and enamel hypoplasia of developing teeth, doxycycline labeling includes caution against unnecessary use in children younger than 8 years. Although observations of many physicians and a few reports have not found adverse effects associated with doxycycline use, the shadow of caution is long.

Rocky Mountain spotted fever (RMSF) is a serious rickettsial disease which frequently is fatal if untreated. Therapy is empiric, and doxycycline is the only effective drug available. Doxycycline is recommended by the Centers for Disease Control and Prevention (CDC) and the American Academy of Pediatrics for empiric therapy for all ages. Children under 10 years of age have RMSF case-fatality rates 5 times greater than older individuals. Fatality rate in RMSF is associated with time after symptom onset to commencement of therapy. Zientek et al reported a survey showing that although 80% of US healthcare providers correctly identified doxycycline as the treatment for RMSF, a frightening 65% would not use doxycycline for a suspected case in a child under 8 years of age (*J Pediatr* 2014;164:416-8).

In this issue of *The Journal*, investigators from the Divisions of Vectorborne Diseases and Oral Health at the CDC, the Indian Health Service, and the White Apache Tribe performed a study with results that should change practice. By abstraction of medical and pharmacy records, children who lived on an American Indian reservation in eastern Arizona (where there occurs a high incidence of RMSF) were classified as having been exposed or to doxycycline or not prior to the age of 8 years. Consenting subjects (mean age of 9.8 years for 58 exposed subjects, and mean age of 11.8 years for 213 unexposed subjects) were examined by licensed, trained dentists. Dentists evaluated visible staining patterns and enamel hypoplasia, and measured tooth color

objectively using a spectrophotometer. Exposed children had received a mean 1.8 courses of doxycycline of average duration of 7.3 days each.

No visible tetracycline-like staining pattern was observed on any teeth. With the study adequately powered to detect relevant/small differences, children exposed to doxycycline were not more likely to have enamel hypoplasia, fluorosis-like hypomineralization, or a darker shade of tooth color. The authors conclude that "healthcare provider confidence in use of doxycycline for suspected RMSF in children may be improved by modifying the drug's label."

The longstanding, lifesaving recommendation for the appropriate use of doxycycline in young children, bolstered by the removal of concern for adverse dental effects that the current study provides, should correct surveyed providers' "answer to the question," and more importantly, impact the correct use of doxycycline for suspected RMSF at all ages by the 65% of providers who checked the life-threateningly wrong answer—post haste.

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Do we practice what we preach about concussion?

— Paul G. Fisher, MD

Today's professional societies and ad hoc working groups posit seemingly endless guidelines, practice parameters, and consensus statements. Do we and should we adhere to these statements?

Concussion provides a case in point. With about 250 000 US children annually visiting emergency departments for "concussion," we should reflect on how physician diagnosis compares with "standard criteria." The 4th International Conference on Concussion in Sport, held in Zurich in 2012, put forth a consensus statement on the diagnosis and management of concussion. In this issue of *The Journal*, Boutis et al report a single tertiary-institution, cross-sectional study of 495 school-age children diagnosed with head trauma. Two-hundred were diagnosed by pediatric emergency department physicians as having concussion, yet 443 fulfilled the Zurich criteria as determined by a research assistant onsite at the time of the encounter. Physicians were more likely to diagnose a concussion versus a minor head injury if the child was over age 10 years, presented more than one day from onset of injury, sustained the injury during collision sports, and/or presented with headache or amnesia. In contrast, just under one-half of the concussions diagnosed by physicians were unrelated to sports, and well more than one-half of concussions determined by Zurich criteria were unrelated to sports.

Are these consensus criteria too inclusive, or are some physicians underdiagnosing concussion? As frequently happens, the truth could be in the middle. We might have to clarify and validate diagnostic criteria for concussion while also raising physician awareness of this diagnosis. We will likely see an abundance of continued research on childhood concussion.

Article page 1214 ▶

Diet may lessen heart disease as SGA infants grow up

— Reginald L. Washington, MD

The fact that people born small for gestational age (SGA) have increased risk of having cardiovascular disease is well described. Advances in the care of these infants have resulted in the majority of them surviving into adulthood only to suffer from premature atherosclerosis and elevations in blood pressure. Currently little is known about prevention strategies that may be helpful in reducing this increased risk. Dietary omega-3 fatty acids may be useful in reducing this problem in SGA people as the age but studies to date have been limited by size and design.

In this issue of *The Journal*, Skilton et al report the results of the STRIP study which followed 115 infants who were born SGA and recorded their food records, blood pressure, and aortic intima-media wall thickness every 3-12 months for 19 years. The results suggest that long-term dietary alpha-linolenic acid intake during