Atoms

Howard Bauchner, Editor-in-Chief

Reinvigorated Global Child Health Series

I am delighted to highlight our reinvigorated global child health series under the direction of Dr Nick Brown. Nick has been an associate editor for the last four years and has extensive experience working in poor countries. Given his experience, energy, intellect, and commitment to improving the health of children living around the world, he is a perfect new editor for this section. As a reminder, the majority of papers that will appear under the banner of global health will be commissioned and peer-reviewed. Nick has already outlined a three year series of articles that should appear every other month. We have discussed that the papers should include subjects, such as child prostitution and the importance of water rights, but rarely appear in traditional medical journals. Original research articles that focus on children living in poor countries, which must meet the high standards that we impose on all of our papers, will continue to appear in the regular section of the Journal. See page 403

The influence of technology on diagnosis

The diagnosis of acute rheumatic fever (ARF) is based upon the 1992 Revised Jones Criteria (RJC). The five major criteria - carditis, polyarthritis, Sydenham's chorea, erythema marginatum, and subcutaneous nodules - changed little prior to 1980. However, by the early 1980s, echocardiography had become common and it enhanced our ability to diagnose carditis. However, what remains uncertain is if the course of rheumatic fever is the same whether carditis is diagnosed by physical examination or echocardiography. The introduction of echocardiography occurred at the same time that rheumatic fever became less common in developed countries - another important consideration in understanding the impact of echocardiography on the diagnosis and treatment of ARF. Cann et al. explore the impact of subclinical carditis and monoarthiris in an endemic area on the diagnosis of ARF. The authors conclude that the inclusion of these two criteria increase the number of patients that satisfy the RJC. In many regards the use of less rigid criteria to make a diagnosis of ARF is similar to how we interpret PPDs in children and diagnose tuberculosis. In high-risk patients, a smaller PPD reaction is considered diagnostic of tuberculosis in contrast to patients who are at low risk for disease, in whom a larger reaction is considered diagnostic. See page 455

Pain control in children

Adequate pain control is a central tenet of medicine. The advances in both the recognition as well as treatment of pain in the past few decades have been remarkable. The introduction of new drugs, such as midazolam and fentanyl, has certainly facilitated pain control. For children, the most common and repeated procedure that is associated with pain is immunisation. The increasing number of immunisations has made pain control a more important priority. Harrison et al from Toronto examine the effect of sweet solutions for analgesia in infants between 1 and 12 months of age during immunisation. Their conclusion - although not as effective as in newborn infants - both sucrose and glucose reduce pain during immunisation. See page 406

Randomised drug trials in children

A fascinating report from Aripin, Choonara, and Sammons provides a glimpse of paediatric randomised controlled trials involving drugs published in 2007. Of the 604 identified studies, only about 1 in 4 was performed in low and lower-middle income countries (LMIC). Since almost 90% of children under the age of five who die each year live in these countries, this number maybe inadequate. About 1/3 of the trials included inactive placebo as the comparative drug. Increasingly, ethical concerns have been raised about the appropriateness of using placebos. Often the important question is whether a new drug is superior to an old drug, not whether it is better than a placebo. Unfortunately, studies conducted in LMIC were of lower methodologic quality than studies conducted elsewhere. In addition, they were also less likely to report ethical approval. The latter issue is of great concern to journal editors. Obviously all RCTs require ethical approval. We

recognize that in some countries, formal committees that provide ethical approval may not be available. When this situation occurs we request detailed information from the investigators regarding the ethics of their study. Most importantly, researchers must never conclude that their own study is ethical – deciding if and how consent should be obtained for any study must be decided by a group that is independent of the research team. *See page 469*

DNA and race

In a brief, but important leading article Professor Anneke Lucassen et al from the University of Southampton explore the world of DNA ancestry, race, ethnicity, and adoption. A number of companies are willing to provide a racial profile of individuals based upon DNA. As these authors correctly point out, ethnicity is a social construct, and DNA profiles reveal little if anything about cultural, linguistic, or religious traits. Their conclusion about these tests: "They may be of interest to adults undertaking recreational genealogy but at present have no place in management decisions within the health and social care systems in the UK." See page 404

This month in E&P

- ▶ Drs Martin, Bates, and Whitehouse tackle an age old problem in pediatrics loss of consciousness and syncope. This presenting problem epitomizes the "art" of medicine, since the technological approach that is a great deal of laboratory and radiographic testing is readily available, but usually unhelpful.
- ► After a bit of an absence, Illumination reappears in this issue. Helen Williams has made some wonderful changes shorter, pithier stories which will be accompanied by questions (and answers). The goal ultimately is for this to lead to continuing professional development "credits."
- ▶ Our own evidence-based paediatrics debuts in this issue. My complements to Drs. Ian Wacogne, Bob Phillips, and Mark Coulthard. They have worked long and hard on this new section. The three editors and I have reviewed numerous drafts to ensure that these one-page summaries are clear, concise, and clinically relevant.

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