The Many Faces of Autism

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This month we turn our attention to a hot topic in both the medical and the lay press: autism. The complex disorder — now termed autism spectrum disorder — has achieved great prominence, with steadily increasing numbers of affected individuals. The spectrum includes classical autism, Asperger’s syndrome, Rett syndrome, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified.

Estimates now are that 3 million are affected in the US with autism spectrum disorder (ASD), with incidence rates ranging from 3-6 per 1,000 to a recent Centers for Disease Control and Prevention (CDC) estimate of 1:88 children (about 12/1,000) and 1:58 boys (about 17/1,000). Prevalence rates seemingly have increased 10% to 17% annually in recent years. How much of this reflects an actual increase in disease incidence rates, better diagnosis, or the effect of changes in definition isn’t completely clear.

The articles in this issue, guest edited by W. David Lohr, MD, and Peter Tanguay, MD, and written by Lohr and Jennifer Le, MD, all of the University of Louisville, are extremely practical, using case histories for discussion of key clinical information, including various therapies.

WAKEFIELD’S IMPACT

It is hard to overstate the damage wrought by Andrew Wakefield, MD, the British surgeon who is responsible for fraudulently linking autism to vaccines in 1998. Numerous exhaustive and compelling scientific studies have debunked any link to vaccines, and five of his papers have been retracted or withdrawn.

In January 2010, a five-member tribunal of the UK’s General Medical Council ruled that Wakefield was guilty of 36 charges, including four counts of dishonesty and 12 counts related to abuse of developmentally challenged children. Ultimately, Wakefield was barred from practicing medicine in the UK.

I believe the tide may have turned in this battle. Ten years ago, if one “Googled” the term autism, most hits were anti-vaccine sites of one kind or another. Today, an Internet search of the same term leads predominantly to websites of prominent organizations with little or no mention of any vaccine connection: this is great progress.

There is often prominent mention of the growing evidence of very important roles in ASD for genetic factors and structural and functional abnormalities of the brain, with possible modulation by as-yet-undefined environmental factors. High rates of comorbid conditions such as epilepsy, anxiety, depression, Fragile X, tuberous sclerosis, Tourette’s, and attention-deficit/hyperactivity disorder, are well documented among individuals with ASD.

For more about what pediatricians should be aware is on the horizon regarding ASD, as well as other mental disorders, be sure to read my conversation with Thomas R. Insel, MD, the director of the National Mental Institutes of Health (NIMH). He has some sobering thoughts about how practice is changing as general pediatricians are ever more on the front lines of the diagnosis and treatment of mental health-related issues.

IMPORTANT DIAGNOSTIC TOOL

On a completely different note, also included in this issue is a Case Challenge that — spoiler alert! — highlights the very important entity known as incomplete or atypical Kawasaki disease.

This is important because these patients (often very young infants) are at...
substantial risk for developing coronary artery abnormalities if the diagnosis is not considered and therapy with intravenous immunoglobulin and aspirin is not started by the tenth illness day.

The American Heart Association Committee on Rheumatic Fever, Endocarditis, and Kawasaki disease developed an algorithm (endorsed by the American Academy of Pediatrics) to aid physicians in managing those children with ≥ 5 days of fever and some of the five classic clinical features of Kawasaki disease, but not the four of those features required for the diagnosis of typical Kawasaki disease. All clinicians who care for children should have a readily available copy of this algorithm for quick reference.

**THIS MONTH’S STAMPS**

The four stamps accompanying this column were issued by the United Nations on April 2, 2012 to celebrate World Autism Awareness Day. Note that two of the stamps are in English and two in German. Another pair, in French, were also issued and will accompany a later column. The four stamps here represent artwork by four different autism-affected individuals, two from the US (the English language stamps) and one each from Ireland and Canada (the German language stamps).

**REFERENCE**