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# New treatment options target underlying causes of childhood obsessive-compulsive and Tourette's disorders

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Pediatric-onset obsessive compulsive disorder (OCD) and Tourette's disorder (TD) share similarities in their underlying genetic and environmental factors, psychiatric features, and treatment methods. Advances in understanding the neurobiological basis of these disorders and discovering new and more effective therapies are highlighted in a special issue on OCD and TD in *Journal of Child and Adolescent Psychopharmacology*.

Guest editors Barbara J. Coffey, MD, MS, from the New York University Child Study Center, and Judith Rapoport, MD Chief, Child Psychiatry Branch, National Institute of Mental Health, NIH describe the current reality of these challenging neuropsychiatric disorders in the editorial, "Obsessive-Compulsive Disorder and Tourette's Disorder: Where Are We Now?" They conclude that "studies are still few, and validated predictors, moderators and mediators of treatment response are still very much needed."

Riluzole, a drug approved for treating patients with the neurodegenerative disease amyotrophic lateral sclerosis (ALS), has shown promise in psychiatric conditions such as OCD in children and is currently being studied in a clinical trial that will assess its efficacy and side effects in young people who have not benefited from standard-of-care treatments. Paul Grant, Jane Song, and Susan Swedo from the National Institute of Mental Health (Bethesda, MD) describe the

potential for riluzole to help control OCD symptoms based on its ability to block the release of glutamate from nerve cells. Although the drug appears to be generally well tolerated at therapeutic doses, cases of pancreatitis in children, an uncommon adverse effect associated with riluzole use, are cause for concern, as the authors report in the article, "Review of the Use of the Glutamate Antagonist Riluzole in Psychiatric Disorders and a Description of Recent Use in Childhood Obsessive-Compulsive Disorder."

James Leckman, MD, and colleagues from Yale University (New Haven, CT) and University of Groningen (The Netherlands) present a review of the literature describing the current understanding of how various brain circuits, neural networks, and chemical neurotransmitters are involved in causing the motor and vocal tics associated with Tourette's disorder. In the article, "Neurobiological Substrates of Tourette's Disorder," the authors propose that improved imaging technology will help identify specific brain circuits that might be targets for new drug development.

Tanya Murphy, MD, Roger Kurlan, MD, and James Leckman, MD, from University of South Florida (Tampa), Overlook Hospital (Summit, NJ), and Yale University School of Medicine, explore the suspected role of infectious agents and, in particular, Group A Streptococcus, in OCD and TD. In the article "The Immunobiology of Tourette's Disorder, Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcus, and Related Disorders: A Way Forward," they review the evidence that points to pediatric autoimmune neuropsychiatric disorders associated with Streptococcus, called PANDAS, discuss the ongoing controversy regarding infectious triggers of these disorders, and call for the National Institutes of Health to convene a panel of experts to explore new treatment opportunities based on an infectious disease mechanism.

"We are proud that two of our Associate Editors and two of the nation's leading experts, Drs. Judy Rapoport and Barbara Coffey, have edited

this important issue on disorders that affect millions of children and adolescents in our country today," says Harold S. Koplewicz, MD, Editor-in-Chief of *Journal of Child and Adolescent Psychopharmacology*, and President, Child Mind Institute, New York, NY, and Director of the Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY.

**More information:** The entire issue is available free online at www.liebertpub.com/cap

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