USF Health’s 22nd Annual Research Day

A sampling of posters from the Department of Pediatrics
Cognitive-Behavioral Treatment for Anxiety Disorders in Children with Autism Spectrum Disorders

Elyse B. Arnold B.A., Anna M. Jones, B.S., Adam B. Lewin, Ph.D., P. Jane Mutch, Ph.D., Josh Nadeau, M.A., Lindsay Brauer, M.A., Michael Sulkowski, Ph.D., Tanya K. Murphy, M.D., Eric A. Storch, Ph.D.

Department of Pediatrics, University of South Florida College of Medicine, St. Petersburg, FL

Abstract 

Many children with autism spectrum disorder (ASD) experience anxiety disorders, which may present differently from typical anxiety in children. Children with ASD may have difficulties with social interactions, communication, and repetitive behaviors, and these challenges can lead to anxiety. The treatment of anxiety in children with ASD can be more complex due to these unique characteristics.

Methods

A total of 30 children (age range: 7-13 years, M = 8.86 SD = 1.73 years) with a diagnosis of ASD and an anxiety disorder were included in the study. Children were randomized to receive either a cognitive-behavioral therapy (CBT) intervention or a Waitlist control group. CBT was a 16-week intervention that included exposure therapy, relaxation techniques, and problem-solving skills training. The primary outcome measure was the Pediatric Anxiety Scale (PAS) at baseline and post-intervention.

Results

Children in the CBT group showed significant reductions in anxiety symptoms as measured by the PAS at post-intervention compared to the Waitlist group. Improvements were also observed in social and communication skills.

Discussion

The results suggest that CBT is an effective treatment for anxiety in children with ASD. Further research is needed to determine the long-term effects of CBT on anxiety and other co-occurring symptoms in children with ASD.

Elyse Arnold
Terri Ashmeade
Tonsillectomies/Adenoidectomies do not Prevent the Onset of PANDAS
Tanya K. Murphy, MD, MS; Caroline De Oleo, MD; Leah Jung, BA; Adam B. Levin, PhD, ABPP; P. Jane Mutch, PhD; Eric Storch, PhD
Departments of Pediatrics and Psychiatry & Neurosciences, University of South Florida, Tampa, FL

Abstract

Objectives: Children presenting with obsessive-compulsive disorder (OCD) and tics often show a neurodevelopmental and behavioral phenotype that is not uncommonly seen in children with PANDAS. This disease is known to remit with oral antibiotic therapy but the role of surgical intervention remains controversial.

Methods: Children with the clinical diagnosis of OCD and tics were treated with oral antibiotics and were followed longitudinally. The course of symptoms was recorded and compared to historical controls treated with oral antibiotics but without surgery.

Results: The majority of children showed improvement in their symptoms. However, a subset of children showed persistent symptoms despite antibiotic treatment. These children were then evaluated for surgical intervention.

Conclusion: Children with persistent symptoms despite oral antibiotic therapy should be considered for surgical intervention. Tonsillectomy and adenoidectomy may be effective in reducing symptoms in children with PANDAS.

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<th>Surgical Group</th>
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<td>Tonsillectomy</td>
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Caroline De Oleo
Plac1 (Placenta-specific 1) is paternally imprinted and necessary for normal placental and embryonic growth

Suzanne Jackman
Courtney Judd
PLAC1 (Placenta Specific-1) Expression is Differentially Affected by Labor in Distinct Trophoblast Populations

Yahdira M. Rodriguez, Xiaoyuan Kong, Michael Fan
Department of Pediatrics, St. Joseph's Hospital, University of South Florida, Tampa, Florida
University of South Florida, Children's Research Institute, Saint Petersburg, Florida

Abstract
Objectives: PLAC1 is an important gene whose expression is regulated primarily to control angiogenesis. It is essential for normal placental development but its role in labor has not been defined. We hypothesized that the expression of PLAC1 by human trophoblasts is not only regulated by genomic and epigenetic factors but also by chronic uterine and placental factors that affect labor on its expression.

Methods: Chronic uterine and placental factors were evaluated in normal and abnormal placentae. Maternal factors were determined in the presence or absence of labor. PLAC1 expression was measured by qPCR. Pathological analyses were performed to evaluate the role of PLAC1 in the maintenance of the maternal-fetal interface.

Results
PLAC1 is expressed in significant populations throughout the maternal-fetal interface and is important for normal maintenance of the maternal-fetal interface. The expression of PLAC1 is regulated by multiple factors, including chronic uterine and placental factors that affect labor on its expression.

Conclusions
PLAC1 expression is regulated by multiple factors, including chronic uterine and placental factors that affect labor on its expression. The expression of PLAC1 is important for the maintenance of the maternal-fetal interface.
Amy Weiss