



CONTACT DR. FRIEDMAN TO:

- refine a diagnosis
- get an expert second opinion
- determine an underlying condition that contributes to behavioral issues
- identify a child's strengths and roadblocks to maximize their abilities and get support for their limitations
- obtain quantified data which is required to qualify a child for any special academic services
- address parental concerns about academic performance and behavior issues that cannot otherwise be fully determined
- provide treatment planning consultation regarding the condition(s)

BAY AREA CHILD ASSESSMENT CLINIC

DR. HOWARD J. FRIEDMAN, Director, is board certified in clinical neuropsychology. In addition to providing his expertise in private practice, he serves as Director of Psychological Assessment Services for The Wright Institute and has also served as the Director of Psychological Services for Walnut Creek Hospital and consulting neuropsychologist for the Adolescent Treatment Center at John Muir Medical Center.

Comprehensive assessments for:

- Attention-Deficit Hyperactivity Disorder (ADHD)
- Learning Disability/Dyslexia
- Autistic Spectrum Disorders
- Testing for school accommodations/IEP consultations
- Second opinions for complex cases
- Screening for brain injuries such as sports or accident related concussions
- Behavior changes following serious illness or emotional problems such as depression, aggression, or anxiety

INSIDE:

Physiological/Psychological Issues in Children with ADHD

Concussion Overtreatment

Impact of Type 1 Diabetes on Neuropsychological Functioning





Co-Morbidity of PHYSIOLOGICAL/PSYCHOLOGICAL Issues in Children with ADHD

As we look at the relative contributions of physiological and psychological issues to devise effective treatment, we know that getting hold of one area improves the other. If you ignore the psychological issues, for example, and focus only on the presenting physiological problems, the ignored or neglected area will act as an anchor for the other, and will prevent overall improvement in the area you are treating.

Obviously, there are both physiological and psychological aspects of ADHD, and what we see superficially are the behavioral problems, such as the inattention driven by physiology that develops an emotional component. A child who can't manage his or her behavior looks to adults to provide additional structure, and may act immaturely so adults will intervene. This immaturity is a psychological/emotional by-product of ADHD. As we treat ADHD physiologically with medicine, and the child can pay attention, the emotional aspect, or immaturity, remains in place unless we address it simultaneously. **What originates from physiological deficits generates a psychological component that takes on a life of its own.**

Combining Medication with a Behavioral Approach

As part of psychological treatment, we need to enhance the child's independent decision-making skills and capacity to generate their own structure. Indeed, evaluating these children generally reveals psychological deficits of this nature, allowing for comprehensive treatment planning. Research suggests that using medication and a behavioral approach simultaneously has the most impact.



If we only treat a child with ADHD with medication, we have an immature child who can pay attention

but lacks the ability to function independently, i.e. organize, reason, or make mature decisions. In this scenario, educational achievement and social/familial issues would likely remain problematic. We often find that these children have not learned how to organize for writing, effective reading comprehension, or learning in general. In addition, they often lack academic competence across the board, rather than in a specific subject, such as occurs with children who have a learning disability. This achievement gap tends to widen as they advance in grade levels, to the point where they may give up trying in school. In the social/familial spheres, they may display poor judgment, impulsivity, and increasingly risky behavior as they get older, without considering the consequences.

Conversely, if we treat these children psychologically, without medication, the situation becomes akin to Sisyphus rolling a stone uphill, and the stone rolls right back down. When we try to improve a child's behavior without harnessing their attention, nothing consistently resolves, and unfortunately, the same ineffective treatments are often repeated over and over, or parents may give up on treatments because they've been ineffective.

Sometimes, cognitive difficulties and social immaturity are not visible through a brief interview in the doctor's office, and effective assessment and treatment planning may require a more extensive evaluation. This would entail measuring the child's intellectual ability, achievement, and skills that are delayed as a result of ADHD. This type of evaluation enables us to develop a treatment plan to address both the cognitive and behavioral issues. Of course, these areas are only adequately treated when appropriate medication is also doing its job.

The Impact of TYPE I DIABETES ON Neuropsychological Functioning



In reviewing the clinical literature, I often find comments that children and adolescents with Type I Diabetes have more psychosocial cognitive problems than youngsters without other chronic medical conditions.

However, various long-term studies have found that children and adolescents with Type I Diabetes, in fact, have considerable psychological resilience, and cognitive problems are generally quite limited and associated with a very specific age of onset. Some studies showed that children have a substantial ability to deal with the chronic illness aspects of diabetes and in managing their condition; instead, some increases of psychopathology and emotional disturbance seem to occur in adulthood, and are associated with the chronic burden of managing a long-term disease. The risk of developing mild cognitive problems is primarily increased when the onset is between four to six years of age.

In those situations, diabetes can impact elements of nonverbal intellectual ability, motor speed and sustaining attention, and can carry over with some verbal tasks, such as writing and reading. In fact, the slow motor speed in children is thought to be equivalent to the slow mental ability and reduced mental flexibility seen in adults with diabetes. Thus, the roots of that limitation may first appear in childhood.

Hypoglycemic episodes have also been speculated as having some effect on cognition, but meta-analysis has not found this to be significant, with one exception: severe hypoglycemic attacks have been found to affect short-term memory. On a physical basis, researchers have also found that children diagnosed with diabetes at an earlier age - between five and six - are more likely to show EEG abnormalities consistent with a high vulnerability of a developing brain. They also found that the impact of diabetes on cognitive function does not seem to be related to school absences, which are more frequent in this population.

It's important to point out that children with early onset diabetes can benefit from neuropsychological evaluations of their cognitive strengths and limits, in order to determine whether they need special educational enhancements. Children with later onset of

diabetes are not expected to have cognitive difficulties specifically related to diabetes, and if there are complaints about their school performance, other possible etiologies should be investigated.

Psychological Functioning and Type I Diabetes in Children and Adolescents

As mentioned above, children are quite resilient psychologically. Approximately one-third of them develop some psychological difficulties within a few months of disease onset - usually an adjustment disorder with features of anxiety and depression described in some literature as a "mourning" process that might be present with any chronic illness. Recovery is usually rapid, as patients have a remission of the psychological symptoms within approximately nine months.

Psychotherapy is helpful in reducing the distress and can focus predominantly on empathy. Additionally, therapeutic input helps children and adolescents manage their disease, which reduces the potential for physiological difficulties. Support for adjusting to diabetes also can be provided through child and parent participation in peer support groups.



FOLLOW-UP NOTE: Overtreatment of Concussions

Recently, there has been increasing media coverage regarding sports injuries, and I have received information from neuropsychological list serves about professionals overtreating and over-restricting youths due to the misperception that all sports injuries are extremely serious. Because of this focus in the media and the potential overreaction of some parents, it's important to keep in perspective the realities on the ground. **Brief neuropsychological screenings can clear students for return to play.** Establishing restrictions should be solidly based on actual impairment, rather than overreactions to media hype.

