



MOTOR STEREOTYPY BEHAVIORAL THERAPY PROGRAM

THE CHALLENGE

Primary, or complex, motor stereotypies are the purposeless, rhythmic body, hand or arm movements made over and over by children who are otherwise developing normally. Primary motor stereotypies typically begin in early childhood and, although reduced in frequency and duration, persist at least through the teenage years. There is no established drug or other medical treatment for this condition.

THE SOLUTION

Johns Hopkins researchers have developed a behavioral therapy program for parents to use with their children between the ages of 7 and 17, which has been demonstrated to be helpful in reducing the severity of this condition.

COMPONENTS

- ▲ An instructional DVD (approximately 45 min. long)
- ▲ Parent instruction sheet

OUTCOMES

Results of a clinical trial showed that this parent-administered therapy is a safe and effective behavioral intervention for reducing the severity of primary motor stereotypy including a 15% reduction in SSS Motor, 24% reduction in SSS Impairment, and 20% reduction in SLAS scores and consistently favorable responses on post-treatment questionnaires.

DETAIL

Motor Stereotypies are divided into two major groups: “primary” indicating no other developmental abnormalities and “secondary” (associated with autism, developmental delay, sensory abnormalities, etc.)

In primary complex motor stereotypies, the movements typically persist (Harris 2008) and parents are often concerned about their possible negative impact on psychosocial development. In terms of treatment, there is no accepted stereotypy suppressing pharmacotherapy agent.

Small studies have previously demonstrated that a combined two-component habit reversal therapy (awareness training and competing response training) can be successful in

{MOTOR STEREOTYPY: a repetitive, non functional motor disorder which interferes with normal activities or results in injury. There is no established drug treatment for this condition.}

reducing movements. Motor stereotypies can disrupt an individual's routine activities and be the cause of social stigmatization. The underlying pathophysiological mechanism for motor stereotypies in both primary and secondary categories is unknown, with hypotheses ranging from psychological to neurobiological abnormalities.

Therapeutic options for stereotypies remain woefully limited. However, using the home-based DVD treatment developed by the Johns Hopkins Motor Stereotypies Initiative, patients showed significant reductions in several stereotypy severity scales, and maintained this improvement.

WHY JOHNS HOPKINS?

For more than 125 years, Johns Hopkins has led the way in both biomedical discovery and patient and population care. Faculty research most often leads to innovative protocols, programs and services, establishing the standard by which others follow and build upon. Our goal: make these innovations available beyond our walls to improve the health outcomes of individuals and populations—within our community and throughout the world.