## TREATMENT OF AGGRESSIVE BEHAVIOR IN CHILDREN AND ADOLESCENTS WITH FXS

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<u>Editor's Note</u>: This article follows the one written by Dr. Randi Hagerman and is intended to address behavioral remedies that can augment the use of medication.

Aggressive behavior is often associated with individuals with FXS. [Hagerman et al 1996b] Although fairly common, it is often misunderstood. The aggressive behavior is usually described as being violent and unpredictable. This reactionary and impulsive behavior frequently results in serious infractions. In order to address a behavioral remedy, it is important to understand the function the behavior plays in the sequence of the episode. [Braden 1997]

Most behaviors serve a purpose. The aggressive behavior may provide an escape from something that is frightening or threatening. The individual with FXS quickly learns that aggressive behavior is a powerful way to signal a desire to be left alone, moved away, or timed out. In other words, if one wants to escape a situation and lacks the ability to communicate that need, it works to become aggressive.

The employment of a functional behavior assessment is beneficial in understanding the behavior and creating an appropriate behavioral plan. A functional behavior assessment requires observing the behavior and then collecting data related to the behavior across settings. [Romanczy 1996] In the case of individuals with FXS the events that lead up to the actual behavioral episode (antecedents) are the most important in remediating the behavior, because the individual with FXS is often unable to verbalize or clearly explain what has precipitated the behavior. If the person with FXS is school aged and has an IEP and the behavior impedes learning or that of others, a Behavior Intervention Plan (BIP) is required. [Bateman & Linden 1998] The Behavior Intervention Plan should always be developed using proactive strategies to reduce the frequency of the targeted behavior.

A variety of antecedents can trigger an aggressive reaction. Dr. Hagerman discussed (Foundation Quarterly, Winter 2000) agitation, fear or anxiety and impulsivity as possible causes for aggressive behavior. In addition, situations or environmental conditions can promote confusion and uncertainty resulting in agitation and fear. As the behavioral assessment unfolds, a sequence of events will emerge. The antecedent triggers a reaction (behavior) and a consequence follows. The chart below offers examples of the ABC model.

ANTECEDENT F	<u>EMOTIONAL</u>	BEHAVIOR =	
-	<b>BYPRODUCTS</b>		CONSEQUENCE
Transition	Agitation	Aggression	Redirection
Loss of privilege	Impulsivity	Aggression	Response cost
Loud, noisy environment	Anxiety	Aggression	Removal

Frequently, the aggressive behavior is exacerbated by poor impulse control. After the aggressive episode, the child or adolescent quickly retreats into feelings of guilt and remorse. The reaction is simply a response to a situation that has become overwhelming. Intervening at the antecedent level and teaching coping skills as a consequence can effectively reduce and ultimately eliminate the aggressive behavior.

If the antecedent is closely examined, it is then possible to modify the chain of events. In other words, if the reason for the reaction is removed, the frequency of the aggressive behavior will decrease.

The purpose of this article is to invite the reader to consider a proactive approach to behavior management. Using resources to identify those factors that may be setting up the behavior, is a much more productive way to manage behavior. Increasing prosocial behaviors, while reducing maladaptive behavior is the ultimate goal in this process.

It is also important to assess the reaction to the aggressive behavior. It is difficult not to overreact when physical violence ensues. Remember that the aggression is usually reactionary and rarely premeditated. If the aggressive behavior is a direct result of being overwhelmed, anxious or agitated, overreacting may only exacerbate the symptoms and cause the behavior to escalate. Calm and indirect intervention strategies are always more conducive to successful treatment. The chart below lists a number of behavioral strategies that can be employed at the antecedent level.

PROACTIVE BEHAVIORAL STRATEGIES		
Provide small group instruction		
Allow seating in the back section of a room		
Allow seating near an exit		
Provide structure and predictability		
Reduce the level of environmental noise/sound		
Allow additional processing time		
Use natural lighting whenever possible		
Avoid crowded areas		
Predict transitions and signal with visual cues		
Provide nonverbal cues and feedback		
Role play behavioral consequences		
Provide calming activities (S.I. intervention)		
Encourage physical activity		
Allow removal from stressful events		
Encourage breaks and "down time"		

Clinical experience has taught us that the aggressive behavior can escalate if attempts to signal a need go unheeded. If the individual with FXS attempts to communicate uneasiness and the adult present continues to ignore it, the behavioral ante is increased until it can no longer go unnoticed.

Behavior therapy is usually warranted whenever aggressive behavior persists. [Brown et al, 1991] Again, it is important to address in its earliest stage so that the behavioral chain does not habituate. The use of medication can also help stabilize the disposition so that behavioral intervention can be more effective. With proper remediation the problematic element of aggression can be managed in a proactive manner. Once the behavior is understood and intervention is offered at the antecedent level, the individual with FXS can become reassured and begin the process of behavior self-management.

## **REFERENCES**

Bateman, BD and Linden, MA (1998): Better  $\overline{IEP's} - 3^{rd} Ed$ . Longmont, Colorado 80504: Sapris West, 119-123

Braden, ML (1997): *Fragile, Handle with Care: Understanding Fragile X Syndrome, 2<sup>nd</sup> Ed.* 100 E. St. Vrain #200, Colorado Springs, Colorado 80903.

Hagerman, RJ (1996b) Physical and Behavioral Phenotype. In Hagerman, RJ and Cronister, A (eds): *Fragile X Syndrome: Diagnosis, Treatment and Research, 2<sup>nd</sup> ed.* Baltimore: The Johns Hopkins University Press, 3-87

Romanczy, RG (1996): Behavioral Analysis and Assessment. In Maurice, C, Green, G, Luce, S.C. (eds) *Behavioral Intervention for Young Children with Autism*. Austin, Texas: Pro-Ed, 195-203

Table 1

Multidisciplinary team evaluations

Specialty	Focus of evaluation	
Speech & Language	<ul> <li>oral motor: praxis, rhythm, rate, &amp; articulation</li> <li>receptive &amp; expressive language</li> <li>pragmatics (perseveration, topic maintenance)</li> <li>augmentative communication evaluation if indicated</li> <li>attention to effect of sensory integration problems on language</li> </ul>	
Audiology	hearing tests tympanogram	
Psychology	intellectual evaluation     achievement evaluation     adaptive behavior assessment     social/emotional screening     behavioral assessment and behavior modification plan for parents     attentional evaluation     evaluate need for individual or family therapy	
Occupational therapy	fine & gross motor assessment sensory integration assessment motor planning self care calming techniques (self regulation, self monitoring) assessment of tone adaptive equipment	

Pediatrics	measure growth parameters physical & neurological examination behavior assessment assess psychopharmacology needs assessment of connective tissue problems review pedigree & DNA testing	
Genetic Counseling	review genetic technology prenatal diagnosis review inheritance pattern document family tree review who needs DNA testing support family	
LD/educational specialist	academic testing characterization of special education needs & programs to be utilized behavior modification techniques for the classroom	
Assistive Technology evaluation	investigate access methods and software augmentative communication evaluation if necessary	