

The Source of Aggression Determines Treatment

BY BETSY BATES
Los Angeles Bureau

VANCOUVER, B.C. — Aggression isn't a diagnosis, it's a symptom. It may be secondary to a psychiatric diagnosis, or unrelated. It may be a temporary response to the environment, or deeply woven into a child's personality, said Dr. Susan Lomax at a conference sponsored by the North Pacific Pediatric Society.

You need to know the whys of aggression before you can devise a plan to help. "What is driving the aggression makes a difference with the intervention," said Dr. Lomax, an adolescent psychiatrist at British Columbia Children's Hospital and a faculty member at the University of British Columbia in Vancouver.

It may be helpful to look at aggression in the context of a child's other traits.

► **The Aggressive Child.** You may see deliberate, proactive, or predatory aggression in an antisocial child. In this context, aggression isn't explosive, but controlled, goal-oriented, and often planned. It's rewarding to the child in some way, perhaps as a release from boredom. This type of aggression is seen when a child methodically injures animals or other children. It is the most difficult form of aggression to treat.

When contemplating a treatment plan, keep in mind that antisocial children want to know "what's in it for me?" Therefore, concrete, reward-based therapy within a highly structured program makes sense.

One-on-one psychotherapy is rarely useful because these children "often don't have the ability to talk through problems internally," said Dr. Lomax. Group therapy may be more helpful because these children may be sensitive to peer approval or disapproval. Because their aggression may arise from a desire for stimulation, encourage time-consuming, prosocial activ-

ities such as organized sports, "where they can reinforce skills ... and acquire skills they can feel good about."

► **The Anxious Child.** In sharp contrast to an antisocial child, aggression in a jittery child erupts as a fear reaction. Blowups in the morning before school represent avoidant behavior. These children may have an anxiety disorder, posttraumatic stress disorder, depression, or, rarely, psychosis. Treatment of the psychosis may reduce the high level of arousal that leads to aggressive behavior, Dr. Lomax said.

► **The Rigid Child.** "These kids want things their way or no way," she explained. They may become infuriated at having to leave the computer to come to dinner. "They think they're

picked on, that there's no justice." Rigid children "habitually misinterpret cues" from parents, teachers, and peers. As a result, they fly off the handle in anger.

Associated diagnoses may include: oppositional defiant disorder, the autism spectrum, obsessive-compulsive disorder (when anger arises from interference with rituals), and nonverbal learning disabilities. Their temperaments tend to be inflexible and stubborn.

► **The Impulsive Child.** Frontal lobe dysfunction plays a role in the aggression of a child who becomes very angry very fast and cannot self-calm. Beyond their inability to inhibit their impulses, "these children have a hard time planning or envisioning consequences," said Dr. Lomax.

Possibly associated diagnoses might include ADHD, fetal alcohol syndrome, brain injury, or substance abuse.

► **The Dysregulated Child.** Irritability, agitation, volatility, and mood instability underlie aggression in dysregulated children. Developmental or genetic issues should be explored. For example, dysregulated aggression is common in children who experienced few nurturing, calming

experiences in the first years of life.

Dysregulation may be an early sign of bipolar disorder, even if classic adult signs of euphoria and grandiosity are not present. In children, aggression and sleeplessness may alternate with depression and lethargy in a pattern of rapid cycling.

► **The Abused or Traumatized Child.** Aggressive behaviors in such children make sense within the context of their lives, because the "fight" response to a survival threat naturally requires quick and decisive action.

"Their autonomic system is on overdrive. They become panicked if someone tries to control them," said Dr. Lomax.

They are hypervigilant, distrustful, and show diminished cognition and a loss of impulse control when they perceive a threat. Seemingly "minor" events may precipitate catastrophic reactions in these children, she said.

► **Children Whose Lives Are in Flux.** It is also important to remember that aggression may be symptomatic of a situational upheaval in a child's life: a parent's divorce, for example, or a serious illness.

Consider, too, the family context in which aggression occurs.

Aggression may be a learned behavior, modeled by parents with their own history of violence and/or Axis I diagnoses.

Be forewarned; parents may take "deep and grievous offense" at the notion that the family dynamic may be a contributor to the child's aggressive behavior. Dr. Lomax suggested a careful assessment of whether they are intellectually capable of insight and stable enough to accept suggestions about how to learn and practice anger management and training in parenting skills such as boundary and limit setting.

Sometimes, it may be necessary to go outside the immediate family for help, to grandparents or spouse equivalents, she said. Psychoeducation, enhancing attachment, marital therapy, and parent support groups are all helpful adjuncts for parents of aggressive children.

"These families are often held hostage to their child's behavior," she said.

The treatment of a child with impulsive or affective aggression may be successful in one-on-one sessions or in group therapy. Principles include anxiety management, correction of cognitive distortions, assertiveness training, impulse control strategies, stress reduction, and, if applicable, therapy to address trauma.

In extreme cases, medications may be both necessary and helpful.

Treat any primary psychiatric disorder first, then consider risperidone in very low doses (0.5-2 mg/day); a mood stabilizer if the child is irritable and volatile; or a β -blocker in the context of hyperarousal, said Dr. Lomax.

She cautioned that antidepressants can sometimes have activating effects that exacerbate aggression in some children. Lorazepam should be avoided for this reason in aggressive children, and children prescribed other antidepressants should be monitored very closely early in therapy for signs of akathisia, sleep problems, and out-of-character "rage reactions." ■

When a Child Is Aggressive, Ask:

- When did the behavior start? What was the context? What is the child's age?
- Is the child capable of empathy and/or real regret? Does he/she laugh when confronted with the consequences of aggressive behavior?
- Is the aggression situation specific?
- How is the child's general tolerance for frustration?
- Has the child had a traumatic experience? Was he/she nurtured early in life?
- Do other children in the family have problems with aggression?
- How readily does the child adjust to changes in routine?

Source: Dr. Lomax

Genetic Variation Linked to Aggression in Healthy Males

BY PATRICE WENDLING
Chicago Bureau

PITTSBURGH — The same genetic variation that has been associated with aggressive behaviors in certain psychiatric and criminal populations may predict confrontational and antagonistic behavior among men, Stephen B. Manuck, Ph.D., reported at the International Congress of Neuroendocrinology.

Men who reported a history of fights, conflicts with authority figures, or breaking objects in bouts of anger are more likely to carry the 3-repeat or "low-activity" monoamine oxidase A (MAOA) allele, Dr. Manuck and his colleagues found. MAOA is an enzyme that inactivates serotonin, a neurotransmitter thought to exert largely inhibitory effects.

Most white men possess either the 3-

repeat or 4-repeat (high-activity) allele, at a frequency of about 35% and 60%, respectively. But this does not mean that all men with the 3-repeat allele are genetically wired to be aggressive.

The allele appears to be predictive of aggression only among men who have generally cynical and hostile attitudes, whose fathers never completed high school, and who report unaffectionate parenting in childhood, said Dr. Manuck of the department of psychology, University of Pittsburgh.

The study involved 531 white men of European ancestry in good general health who were selected from the university's Adult Health and Behavior registry. Their mean age was 44 years (range 30-54 years); 67% were married; and 86% were employed either full or part time. They were well educated, with a mean of 16.2 years

of education. Incomes varied across a range from less than \$25,000 to more than \$80,000 per year. DNA available on registry participants was used for genotyping. The Life History of Aggression interview and personality measurements with multiple informants were used to assess behavioral attributes.

Overall, 188 men had a high lifetime history of aggression, and 192 had a low history of aggression. Forty-three percent of men in the high-aggressive group carried the 3-repeat allele, compared with 32% in the low-aggressive group. The 3-repeat allele was associated with lifetime histories of aggressive and antisocial behavior in the overall sample—even when excluding the most aggressive 20% of the study participants and after adjusting for variation in socioeconomic indicators, Dr. Manuck said at the meeting, which was sponsored

by the University of Pittsburgh and the American Neuroendocrine Society.

Socioeconomic status in childhood did not significantly differ between more and less aggressive men. But both educational attainment and income among high-aggressive men were significantly lower than in their less-aggressive counterparts.

Men with the 3-repeat allele who had a less-hostile disposition and those whose fathers had attained a higher level of education were no more aggressive than were men carrying the 4-repeat allele. Among men with the 4-repeat allele, hostile attitudes and a low level of parental education were unrelated to histories of aggression. "These findings suggest that MAOA variation is associated with expressed aggression, but only in individuals whose beliefs and attitudes give license to such behavior," Dr. Manuck said. ■