

Neurobehavioral Treatment of Aggressive Youth: A Neuropsychiatric Approach

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Neurobehavioral treatment is an evidenced-based, neuropsychiatric treatment approach designed specifically for youth with impulsive aggression (e.g.; irritable or explosive, not premeditated).

A vast scientific literature has shown that impulsive aggression is more biological than premeditated aggression and more responsive to medication (Volavka, 2002). “The distinction between impulsive and premeditated aggression appears to be a valid one” (Citrome, Nolan & Volavka, 2004).

What is Neuropsychiatry?

“The term *neuropsychiatry* has served as successor to the former term *organic psychiatry* and is contrasted with notions of psychodynamics...” (Oldham & Riba, 2004).

Neuropsychiatry has become a medical specialty committed to the care of individuals with neurologically-based disturbances of cognition, behavior, and mood (Coffey, Brumback & Rosenberg, Eds., (2005)). The American Neuropsychiatric Association now provides board examinations for certification in this specialty (www.anpaonline.org, 2006).

What is involved in a neuropsychiatric assessment?

A neuropsychiatric assessment includes a neuropsychiatric physical examination, neuropsychological assessment, and neurophysiological testing, with laboratory testing, genetic markers, and neuroimaging techniques as indicated by the initial assessment. “Over the last decade advances in key areas of basic and laboratory science--including molecular biology, cell biology, genetics, neuroscience, neuropathology, and neuroimaging--have helped to establish new and meaningful links between neurobiologic abnormalities and neuropsychiatric disorders” (Yudofsky & Kim, 2004).

Why is neuropsychiatric assessment needed for youth with impulsive aggression?

Individuals who show impulsive aggression are different in neurocognitive abilities and psychophysiology measures, and are unique in their response to pharmacological intervention (Barratt, Stanford, Kent & Felthous, 1997). “Consistent evidence supports a neurocognitive vulnerability in some youth with early-onset, chronic aggression” (Connor, 2002).

Inpatient neuropsychiatric treatment of impulsive aggression includes a Neurobehavioral Milieu (e.g.; positive discipline and a quiet, non-confrontational environment) to minimize aggressive responses and promote more positive social behaviors.

The likelihood of impulsive aggression can be decreased by environmental factors, and the proper social environment can discourage aggressive responding (Daffern & Howells, 2002). Therapeutic communities foster pro-social behaviors such as cooperation,

empathy, and responsibility, and result in reductions in the number of serious incidents in a facility (Dolan, 1998).

Neurobehavioral treatment follows the conventional wisdom that medications should be targeted to the underlying diagnosis and pathophysiology, and not just used for sedation.

A large number of case reports as well as randomized double-blind studies have supported the practice of targeting medication to a particular diagnosis. “Although sedation can be used to control acute agitation, sedation per se is suboptimal in reducing agitation in the long term because of its negative impact on overall functioning. Longer term management requires treatment of the underlying disorder” (Crome, Noland & Volavka, 2004).

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