

Aggression

Assessment

- ☐ **Psychiatric Diagnostic Assessment**
- ☐ **Characterize Behavior**
 - ◆ **Pattern/Circumstances**
 - ◆ **Precursors**
 - ◆ **Mediating/promoting factors**
- ☐ **Contributing Risk Factors**
 - ◆ **Psychiatric Evaluation**
 - ◆ **Psychosocial Assessment**
- ☐ **Functional Behavioral Analysis**

Aggression

- **Reactive**

- Aggressive behavior in response to actual or perceived threat or situation
- Most aggressive outbursts described as unprovoked actually have some perceived precursor
- Accounts for most of aggressive behavior

- **Predatory**

- Planned purposeful behavior, generally goal directed
- Worse prognosis
- Difficult to treat

Aggression

Psychiatric/Medical Illnesses

- **Disruptive Behavioral Disorders**
 - ADHD
 - Oppositional Defiant Disorder
 - Conduct Disorder
- **Mood Disorders**
 - Irritability Common Symptom of Depression in Youth
 - ?bipolar disorder versus behavior disorder
- **Developmental Disorders**
- **Psychotic Illnesses**
- **Neurologic Conditions**
 - Head Injury
 - Seizure Disorders

Aggression

Psychiatric Factors that contribute to risk for aggression

- ◆ **Behavioral**
 - ▣ Poor Impulse Control
 - ▣ Decreased Frustration Tolerance
 - ▣ Increased Reactivity
- ◆ **Increased Arousal**
- ◆ **Irritability**
- ◆ **Paranoia**
- ◆ **Cognitive Styles**
 - ▣ Externalizing Frame of Reference
 - ▣ Poor Verbal Mediation Skills

Aggression

Contributing Factors

- **Constitutional Factors**
 - Gender
 - Temperament
- **Social/Environmental Factors**
 - Social Norms
 - Modeling
 - Child Maltreatment
 - Chaotic/Disruptive Environments
 - Drugs/Alcohol
 - Media/Violence

Aggression

Treatment Strategies

- ☐ **Treat Underlying Psychiatric and/or Neurological Illness**
- ☐ **Address contributing psychosocial factors and comorbid conditions**
- ☐ **Behavioral Planning**
 - ◆ Include Focus on promoting strengths
- ☐ **Medication Strategies**
- ☐ **System Interventions**
 - ◆ Intensive Community Support/Multisystemic Therapy

Functional Behavioral Analysis

- ❑ Characterize Behavior**
- ❑ Function of Behavior and Reinforcement Value**
- ❑ Define Desired Alternative Behavior**
- ❑ Develop Competing Reinforcers**

Multisystemic Therapy

Evidence-Based Intervention for Youth with Conduct Disorder

- ☐ Provision of Intensive Community Services and Case Management
- ☐ Seeks to Empower Family and Natural Support Systems
- ☐ Demonstrated in Controlled Trials to Reduce Need for Hospitalization and/or Incarceration
- ☐ Model requires Organized Community Approach and Resource Allocation
 - Potential Problems with Generalization
 - Not Readily Available to Primary Care Settings
 - Expensive, but justifiable given alternatives

Aggression

Psychopharmacology

■ Impulse Control

- ◆ Stimulants
- ◆ Clonidine/Guanfacine

■ Mood/Behavioral Regulation

- ◆ Lithium
- ◆ Anticonvulsants
- ◆ Antipsychotics
- ◆ ?Antidepressants

■ Other Agents

- ◆ Beta-Blockers
- ◆ Naltrexone

Psychopharmacology of Aggression

Stimulant Medications

- Methylphenidate decreases antisocial behavior and aggression in boys with ADHD/Conduct Disorder (AACAP, 2002)
- Stimulants plus Intensive Behavioral & Psychosocial Interventions significantly better for ADHD plus aggression than stimulants alone (MTA Study, 1999)

Psychopharmacology of Aggression

Alpha – 2 - Agonists

- ❑ Case reports suggest that Clonidine and Guanfacine are helpful for aggression, but controlled studies needed
- ❑ Clonidine as an adjunct to stimulants significantly reduced conduct problems in children with ADHD plus ODD or conduct disorder (Hazell et al., 2003)

Psychopharmacology of Aggression

Mood Stabilizers

- ☐ Mood Stabilizers include
 - Lithium
 - Anticonvulsants (most often valproate)
 - Atypical Antipsychotics
- ☐ Case Reports and a few Controlled Trials support their Efficacy
- ☐ Positive Response Does Not Confirm a Diagnosis of Mania

Psychopharmacology of Aggression

Lithium

- ❑ Two placebo-controlled studies (Campbell et al., 1984, 1995) found that lithium decreased explosive outbursts in conduct disordered boys
 - Effect appears separate from ADHD effect
 - Case reports also suggest for aggression in youth with mental retardation and/or neurological disorders
- ❑ Two other small controlled studies did not replicate Campbell et al.'s findings (Rifkin et al., 1997; Silva et al., 1991)

Psychopharmacology of Aggression

Anticonvulsants

Despite wide-spread use, controlled studies generally lacking

- ❑ Valproate – One double-blind placebo controlled study for Youth with ODD or Conduct Disorder plus Explosive Temper and Mood Lability**
 - 12 of 15 adolescents had a positive response (Donavan et al: 2000)**

Psychopharmacology of Aggression

Anticonvulsants

- ❑ Mixed Findings as to whether carbamazepine helpful for aggression (some of which was associated with nonspecific neurologic deficits/abnormal EEG's) (see Ryan et al., 1999)
- ❑ No controlled studies yet supporting the use of gabapentin, lamotrigine, or oxcarbazepine

Psychopharmacology of Aggression

Antipsychotics

- ❑ Atypical antipsychotics increasingly used for behavioral dyscontrol due to side-effect profile
 - ◆ Weight gain may be significant limitation
- ❑ Traditional neuroleptics have been found to improve symptoms of conduct disorder
 - ◆ Generally considered a tranquilizer effect
 - ◆ Potential Side-effects generally limit use, especially long-term
 - ◆ Historically overused for aggression, especially in individuals with developmental delays

Psychopharmacology of Aggression

Atypical Antipsychotics

- **One placebo-controlled trial found risperidone helpful for conduct disorder (Findling et al., 2000)**
- **Multisite placebo-controlled trial found Risperidone helpful for aggressive and self-injurious behaviors in Autism (RUPPS, 2002)**

Psychopharmacology of Aggression

SSRI's

- ❑ SSRI's may help behavioral and mood dysregulation in adults with borderline personality disorder or PTSD
- ❑ Reports suggest that effectively treating depression in boys with comorbid conduct disorder also improves their behavior

However

- SSRI's may cause irritability, dysinhibition, or hypomania, thus worsening aggression
- FDA warnings regarding risk for increased suicidality in youth

Psychopharmacology of Aggression

Beta-blockers

- ☐ **Case-reports, primarily in individuals with developmental disabilities and/or organic brain dysfunction, suggest beta-blockers may decrease violent outbursts**
- ☐ **Wide range of dosages used, 50 - 1600 mg/day**
- ☐ **Controlled trials are needed**

Psychopharmacology of Aggression

Naltrexone

- ❑ Four controlled trials suggest Naltrexone decreased hyperactivity in youth with autism**
- ❑ Case-reports suggest naltrexone may decrease self-injurious behaviors in youth with autism, but controlled studies have not yet shown this**
- ❑ Controlled trials are needed**

Aggression

Treatment Planning

- **First Identify and Treat Associated Psychiatric or Psychosocial Issues**
- **Implement Behavioral and/or Psychosocial Therapies**
- **Medication Strategies**
 - **Stimulants generally first treatment, especially when ADHD symptoms are present**
 - **Alpha-2-agonists, Mood Stabilizers and Atypical Antipsychotics second line options**
 - **Medication Strategy based on side effect profile, treatment history and comorbid problems**
 - **Avoid Polypharmacy**
- **Medication Strategies are best combined with behavioral and/or system interventions for optimal outcomes**