

Re-Framing the Approach to the Diagnosis and Treatment of Borderline Personality in Adolescents

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Presentation Outline



A. Overview of the Problem:

- 1) Review of the literature sources over the past 20 years regarding Borderline Personality Disorder (BPD) with especial emphasis on functional and structural brain abnormalities found in both disorders.
- 2) Review of the literature sources in regard to the current state of knowledge about the neurological dysfunctions associated with the cognitive and behavioral dysfunctions that are present in BPD.
- 3) Review of the previous, and current, approaches to diagnosing BPD in adolescents.

Presentation Outline

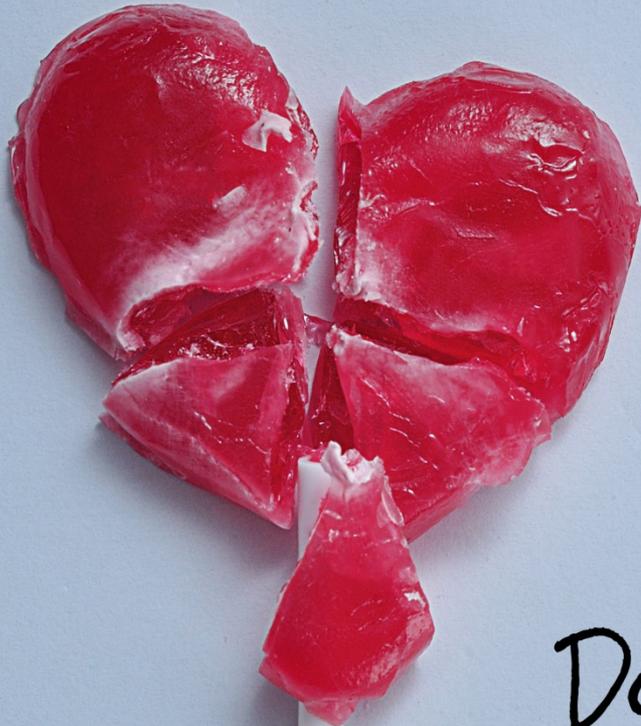


B. Application of Neurobehavioral understanding of the identified brain dysfunctions to enhance treatment efficacy of combinations of psychotherapeutic and pharmacologic therapeutic interventions for BPD:

- 1) Potential neuropsychopharmacological interventions to address the specific brain dysfunctions and their specific related symptoms within BPD.
- 2) Potential modifications of Cognitive Behavioral and other psychotherapeutic interventions to compensate for or, where necessary, to circumvent neurocognitive deficits resultant from specific brain dysfunctions which impair effective participation in therapy.
- 3) A brief review of currently available functional neurological testing, several semi-structured interviews and self report measures that are validated for the assessment of BPD in adolescents.



I HATE YOU!



DON'T GO!

BPD

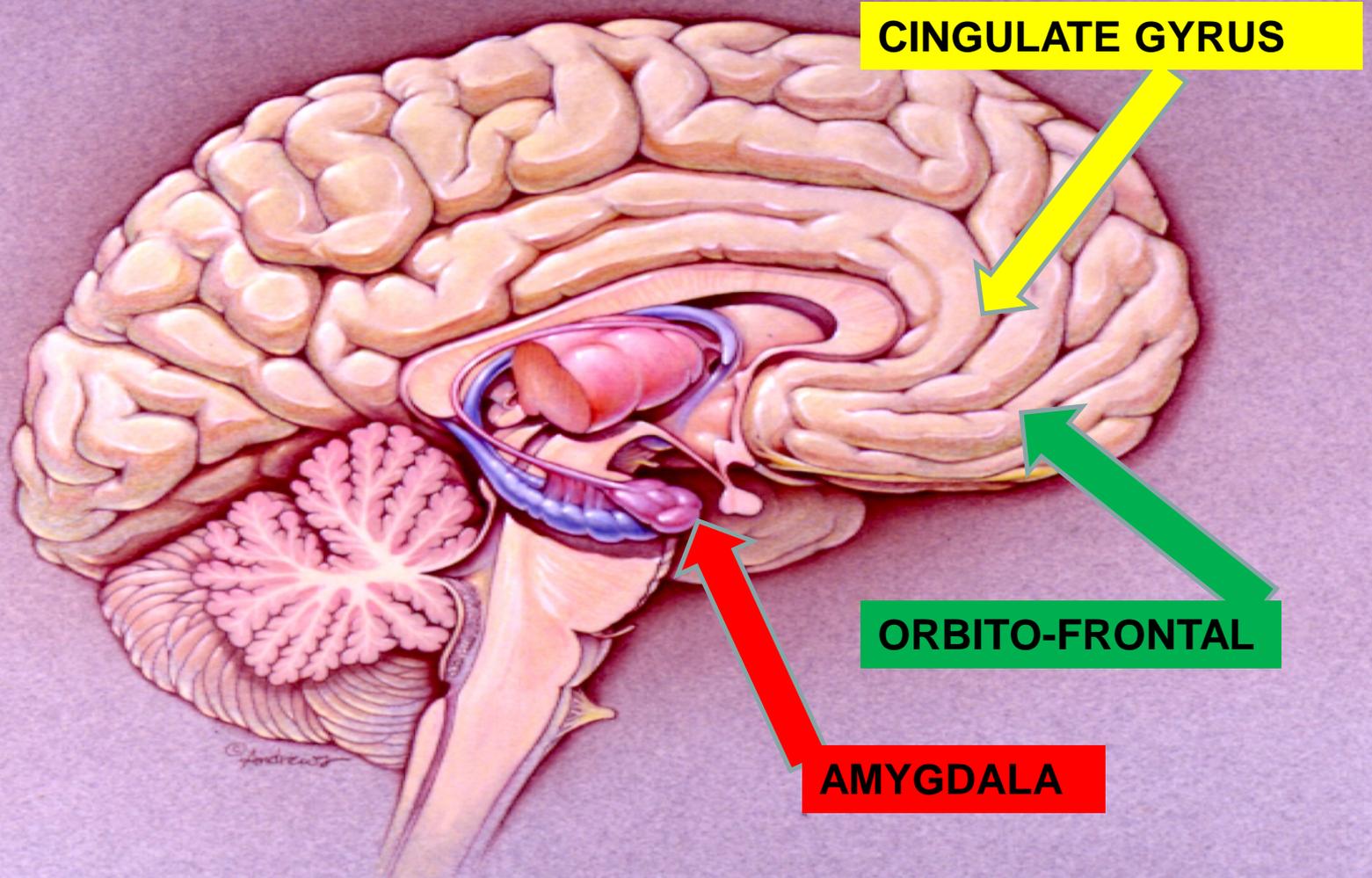
Review of impact of Borderline Personality Disorder



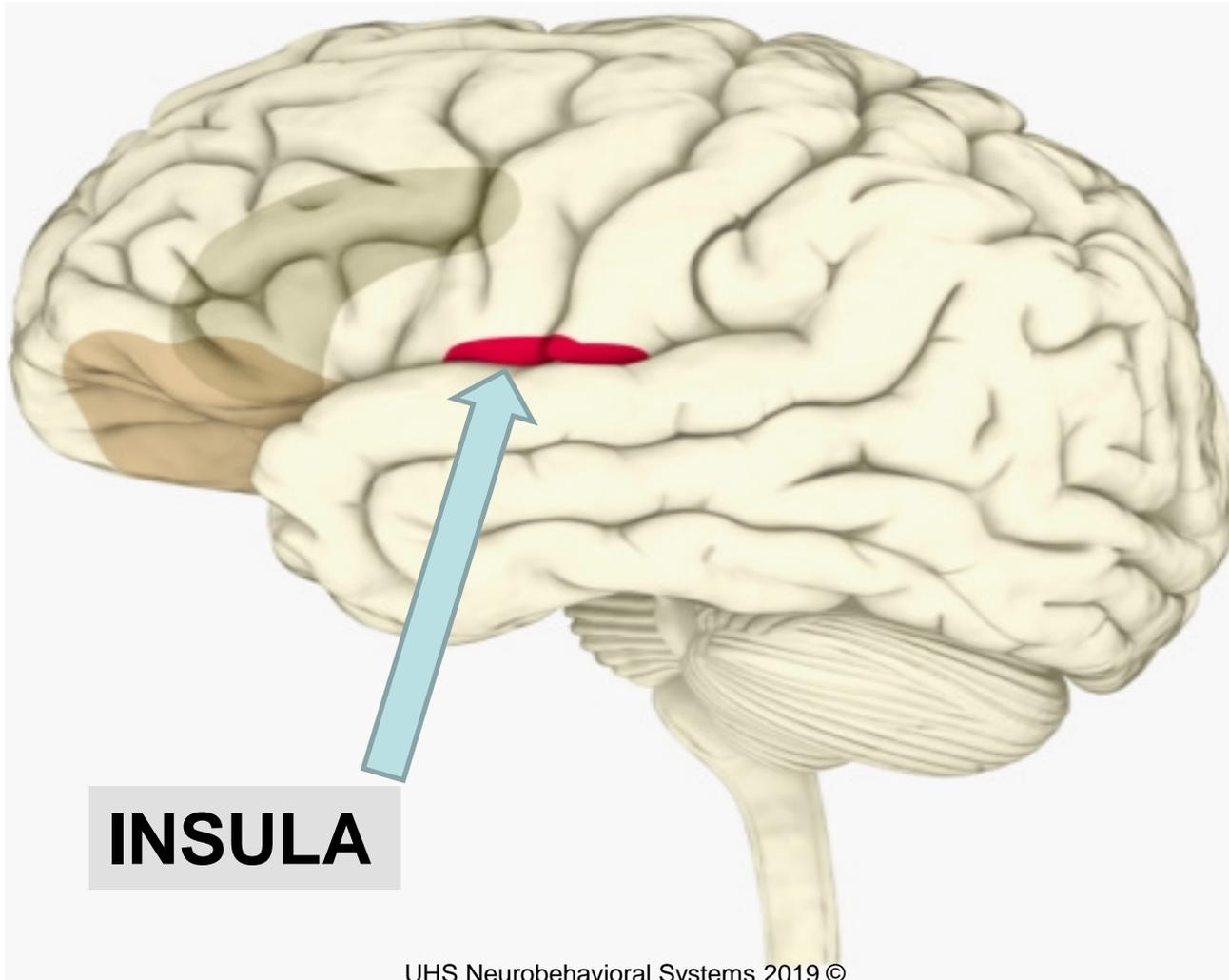
Persons with Borderline Personality Disorder often manifest:

- A.Attention and concentration problems
- B.Impulsivity
- C.Sleep problems
- D.Irritability or aggression with little, or no provocation
- E.Affective instability
- F.Over arousal
- G.Noise sensitivity
- H.Memory problems
- I.Substance abuse

BRAIN REGIONS



BRAIN REGIONS



INSULA

Treatment Planning Based on Symptoms and Interactions (Neurological Source)



- A. Memory impairments (Hippocampus)
- B. Irritability or aggression with minimal provocation (Amygdala, orbitofrontal and/or prefrontal)
- C. Anxiety, depression or affective instability (Amygdala, lateral frontal, prefrontal)
- D. Apathy or lack of spontaneity (Amygdala, lateral frontal, esp. right)
- E. Disordered sleep (Brainstem, amygdala, cingulate)
- F. Personality Changes (e.g. social or sexual inappropriateness) (Frontal lobes, esp. prefrontal)

Neurophysiological Dysfunctions Associated with Cognitive and Behavioral Symptoms in Borderline Personality



- A. Dysfunction of the orbitofrontal cortex resulting in decreased activity produces problems with impulse control and concentration problems.
- B. Cingulate gyrus dysfunction leads to poor emotional control.
- C. Abnormal amygdala and anterior cingulate gyrus responses to fearful faces correlates with poor response to Cognitive Behavioral (CBT) and exposure therapies.
- D. Dysfunction in the insula is associated abnormal perception of social gestures and self image perception.

Neurophysiological Dysfunctions Associated with Cognitive and Behavioral Symptoms of BPD



- E. Abnormal amygdala and anterior cingulate gyrus responses to fearful faces correlates with poor response to cognitive behavioral (CBT)/exposure therapies.
- F. Reduced amygdala responses to fearful faces in children and adolescents correlates with Callous-Unemotional Traits and sociopathic tendencies.
- G. Decreased hippocampal size and/or functioning associates with increased susceptibility to PTSD development, impairment of attention, and problems with fear extinction.

Summary of Most Recent National and International Reviews Regarding Adolescent BPD



- 1) Prevalence rate is 3% in the general adolescent population. It is, 11% in adolescents seen in treatment in outpatient clinics, and 78% in suicidal adolescents seen in Emergency departments.
- 2) Standardized clinician-rated instruments are available to guide assessments.
- 3) Dialectical Behavioral Therapy (DBT), Cognitive Behavioral Therapy (CBT) and Mentalization-based Therapy are all manualized therapies that have Randomized Controlled Trials (RCT's) that support their efficacy.

Summary Continued



- 4) “With regard to evidence-based medicine, psychopharmacological treatment is not recommended and, if ultimately required, should be limited to second-generation antipsychotics.”

I agree with 1 thru 3 above. However, I disagree with number 4.

In regard to the identified neurophysiological dysfunctions associated with the cognitive and behavioral symptoms of BPD outlined previously, medications that directly address the dysfunctions can markedly improve the dysfunctions. This neuropsychopharmacological approach has been shown to enhance the effectiveness of the recommended psychotherapeutic treatments.

Medications Discussed for Specific BPD Related Brain Dysfunctions



These medications are being used “off label”.

- 1) Symmetrel (amantadine HCl)
- 2) Trileptal (oxcarbazepine)
- 3) Ritalin (methylphenidate)
- 4) (dextroamphetamine)