



CHILDHOOD/ADOLESCENT ANXIETY DISORDERS: EVALUATION AND TREATMENT

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DESCRIPTIVE TERMS

'Fear' – Adaptive Anxiety:

- Rational response to a real/perceived danger or threat
- Fight or Flight sympathetic activation
- CNS on alert > problem-solving and survival
- Accurate cognitive processing and coping

DESCRIPTIVE TERMS

Maladaptive 'Anxiety':

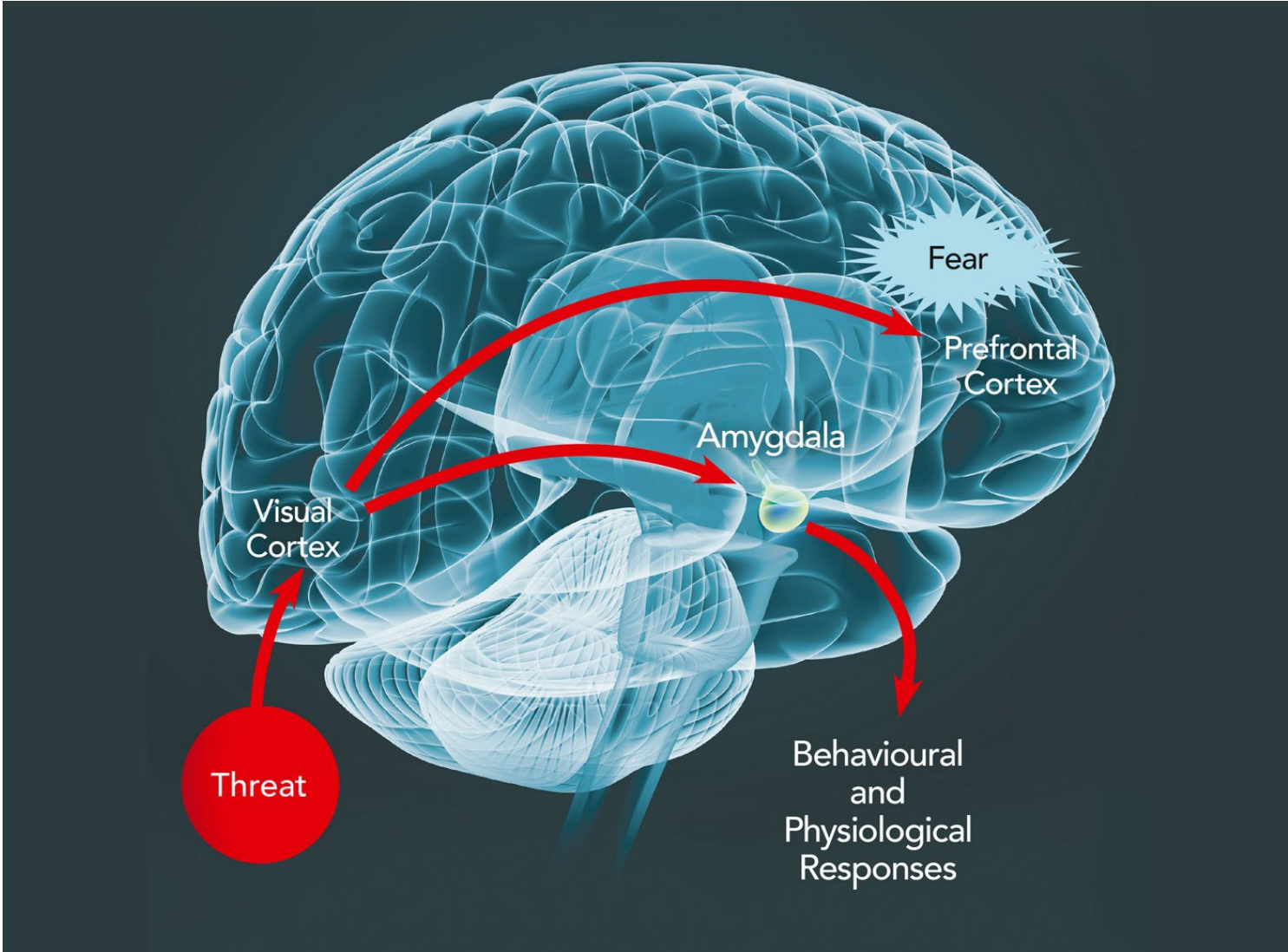
- Irrational response in an actual absence of danger or threat
- Fight or flight sympathetic activation (excessive)
- CNS on alert > distress/dysfunction
- Distorted cognitive processing that impairs function

DESCRIPTIVE TERMS

Avoidance:

- Coping strategy to avoid threat or danger > adaptive
- Coping strategy to avoid 'anxiety' > maladaptive

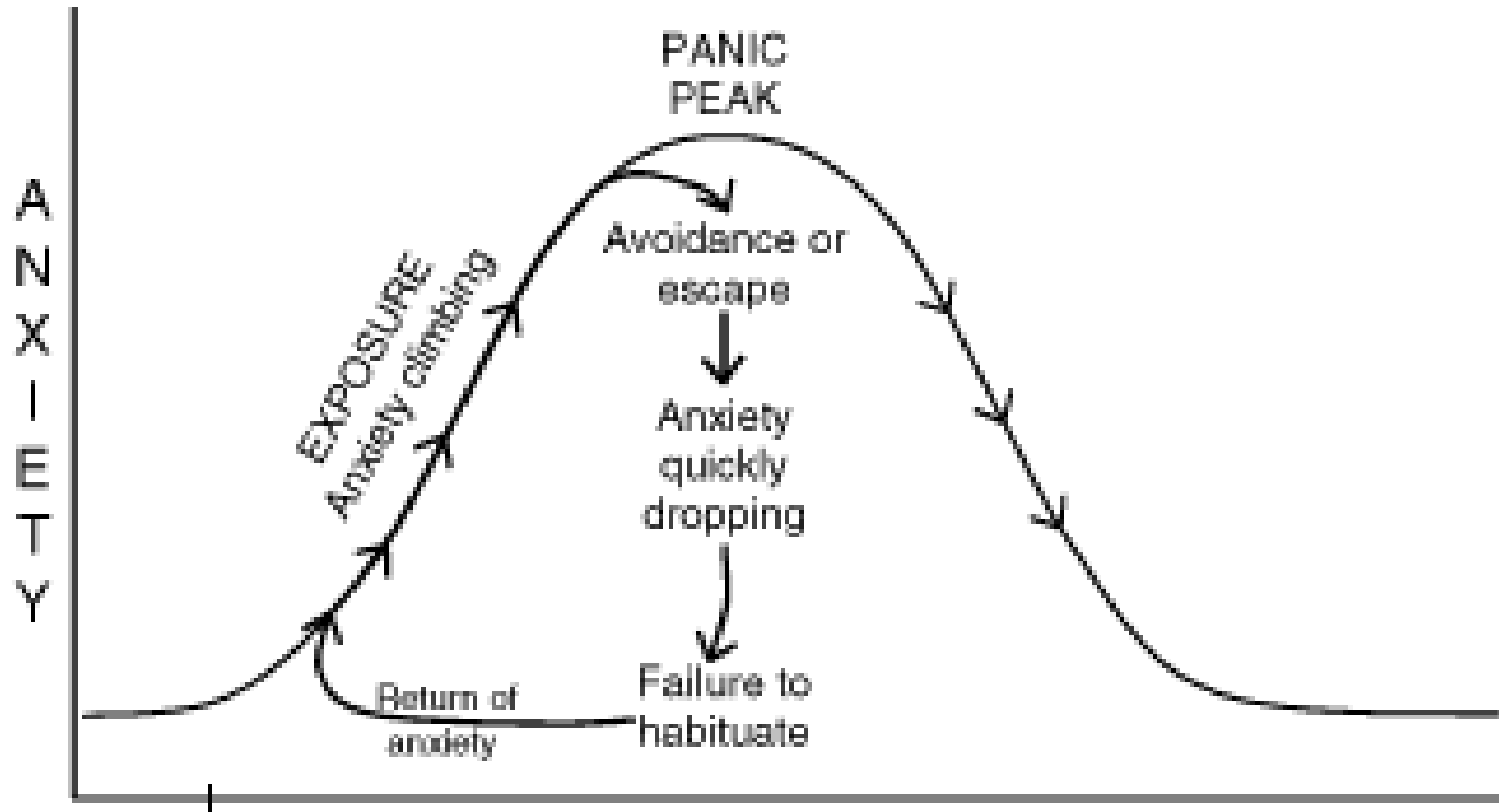
NEUROANATOMY



FEAR/ANXIETY IN HUMANS

- Well functioning anxiety/fear responses are adaptive/protective
- Anxiety heightens cognitive alertness and focuses attention on environmental cues that indicate possible threats
- Excessive anxiety response that over-attributes danger/threat when none exists leads to dysfunction – acute or chronic distress/paralysis/withdrawal and functional impairment

VICIOUS CYCLE OF AVOIDANCE



AGE NORMATIVE FEARS

- Infants: fears of being dropped/normal separation anxiety 8-14 months
- Toddlers: fears of imaginary creatures/darkness
- Early School Age (5-6 y/o): worries about physical well being (injury/kidnapping)
- School Age: worries about school performance, behavioral competence, peer rejection, health, illness
- Adolescence and beyond: worries about social competence, social evaluation, psychological well-being

ANXIETY DISORDERS IN CHILDREN

- 'Internalizing' Disorders – meaning difficult to consistently observe - 'tip of the iceberg' is observable
- Most common class of mental disorders
- Underdiagnosed
- Difficult to quantify degree of dysfunction, but can be substantially impairing across key environments – home/school/peers

PREVALENCE OF CHILDHOOD ANXIETY DISORDERS

- 5-18% of under 18 year olds with 10% having 'severe' functional impairment – school absenteeism/family disruption/etc.
- Age differences in types of anxiety
- Younger Children (<10 years): Separation Anxiety Disorder/Specific Phobia/Selective Mutism
- Adolescents: Social Phobia/Panic Disorder
- Young Adult onward: Generalized Anxiety

DSM-V DISORDER CLASSIFICATION

- Lifespan grouping plus specifiers; OCD and PTSD are excluded
- Panic attacks are now a specifier for any DSM-V diagnosis...
 - Separation Anxiety Disorder
 - Selective Mutism
 - Specific Phobia
 - Social Anxiety Disorder
 - Panic Disorder
 - Agoraphobia
 - Generalized Anxiety Disorder
 - Substance/Medication Induced Anxiety Disorder
 - Anxiety Disorder due to another Medical Condition

OTHER WAYS TO CATEGORIZE ANXIETY...

- **Stimulus-provoked (situational) anxiety**
 - Specific phobias
 - Social anxiety disorder
 - Separation anxiety disorder
- **Stimulus-unprovoked anxiety**
 - Panic disorder
 - Generalized anxiety disorder
- **Other with prominent anxiety**
 - Obsessive Compulsive Disorder
 - Post-traumatic Stress Disorder

MULTIFACTORIAL ETIOLOGY

Individual models/Family models

- Genetic (familial aggregation)
- Fear circuitry aberration (physiologic reactivity)
- Cognitive processing (temperament)
- Defense mechanisms (psychodynamic)
- Familial genetic stress diatheses
- Trauma exposure/threat-vigilance

SEPARATION ANXIETY DISORDER

- Constant thoughts/intense fears about the safety of parents/caretakers
- Refusing to go to school
- Frequent stomach aches or other physical complaints
- Extreme worries about sleeping away from home
- Being overly clingy
- Panic or tantrums at times of separation from parents
- Trouble sleeping or nightmares



OTHER KEY DIAGNOSTIC CRITERIA

- B.** The duration of the disturbance is at least 4 weeks.
- C.** The onset is before age 18 years.
- D.** The disturbance causes clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning.

SOCIAL ANXIETY DISORDER (PREVIOUSLY SOCIAL PHOBIA)

- Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation), being observed (e.g., eating or drinking), or performing in front of others (e.g., giving a speech).
- The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (e.g., be humiliated, embarrassed, or rejected) or will offend others.
- Avoidance of social situations
- Few friends outside of family

SCREENING TOOLS FOR CHILDHOOD ANXIETY

- **Beck Anxiety Inventory**
 - 21 items on a 0 -3 Likert scale
 - 0-21 (low anxiety)
 - 22-35 (moderate anxiety)
 - >36 (cause for concern)
- Free
- Not specific for anxiety disorder type

SCREENING TOOLS FOR CHILDHOOD ANXIETY

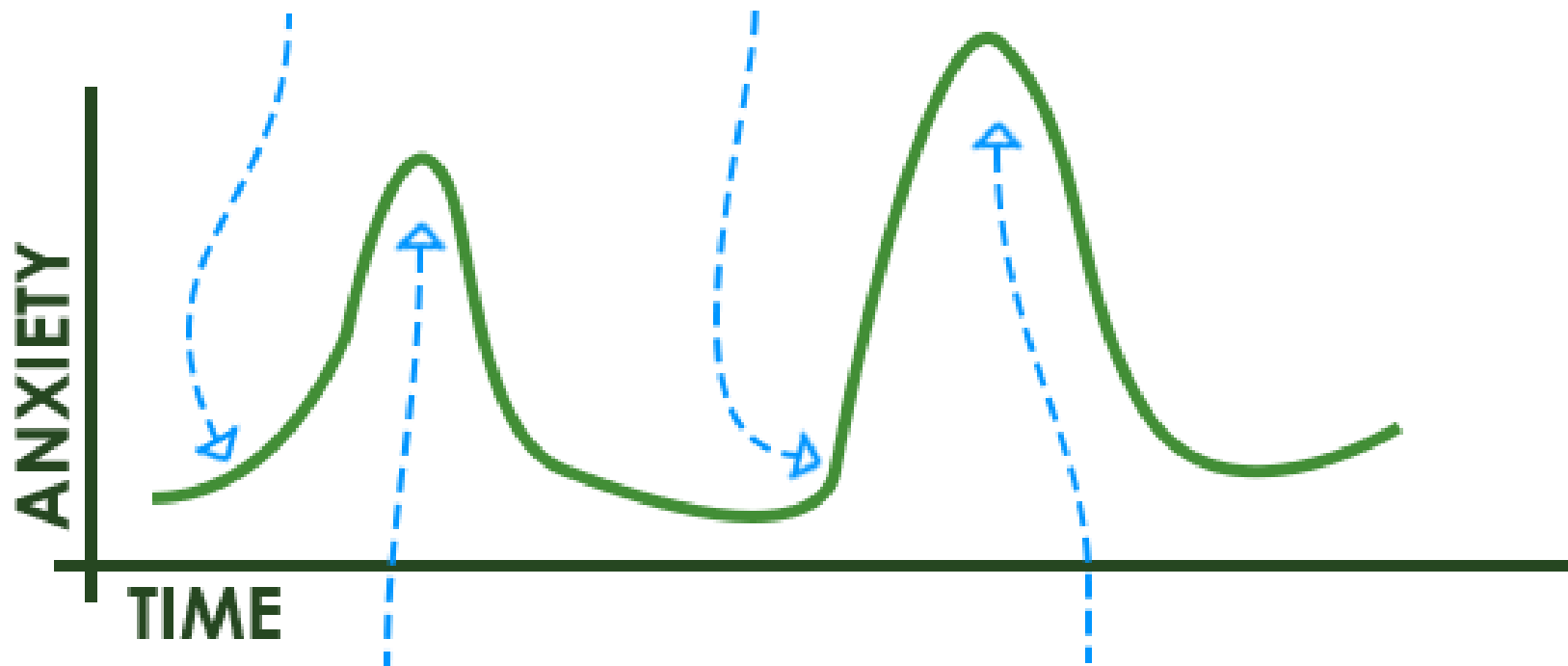
- **SCARED** – Screen for Anxiety Related Disorders (Child and Parent forms)
 - 41 item screen
 - Item specific thresholds for:
 - Panic/Somatic symptoms
 - Generalized Anxiety Disorder
 - Separation Anxiety Disorder
 - Social Anxiety Disorder
 - School Avoidance

TREATMENT OF ANXIETY

- Multimodal approach
 - Parent/child interaction
 - School personnel input
 - Degree of impairment
 - Child participation
- Cognitive Behavioral Therapy
- Medication
- Combination

ANXIETY AND AVOIDANCE

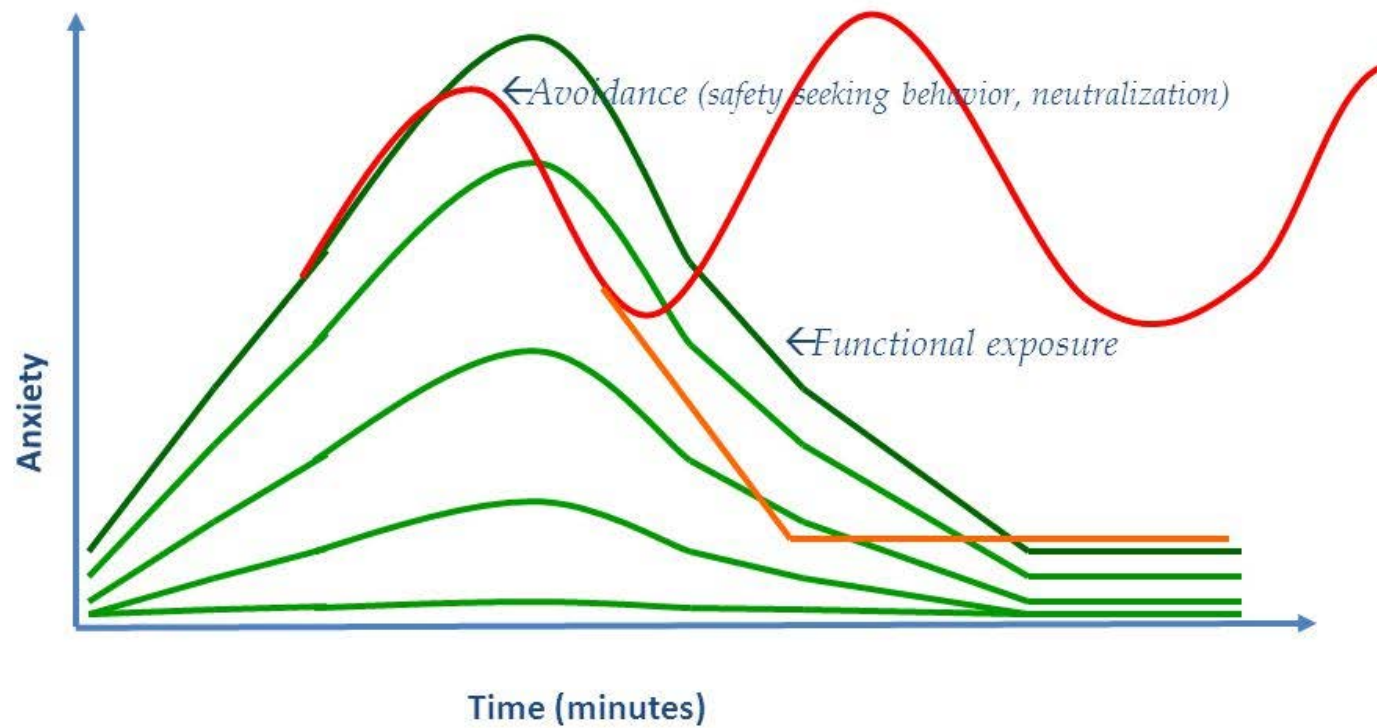
(A person is confronted with an anxiety-producing situation which leads to an uncomfortable sense of worry and agitation.)

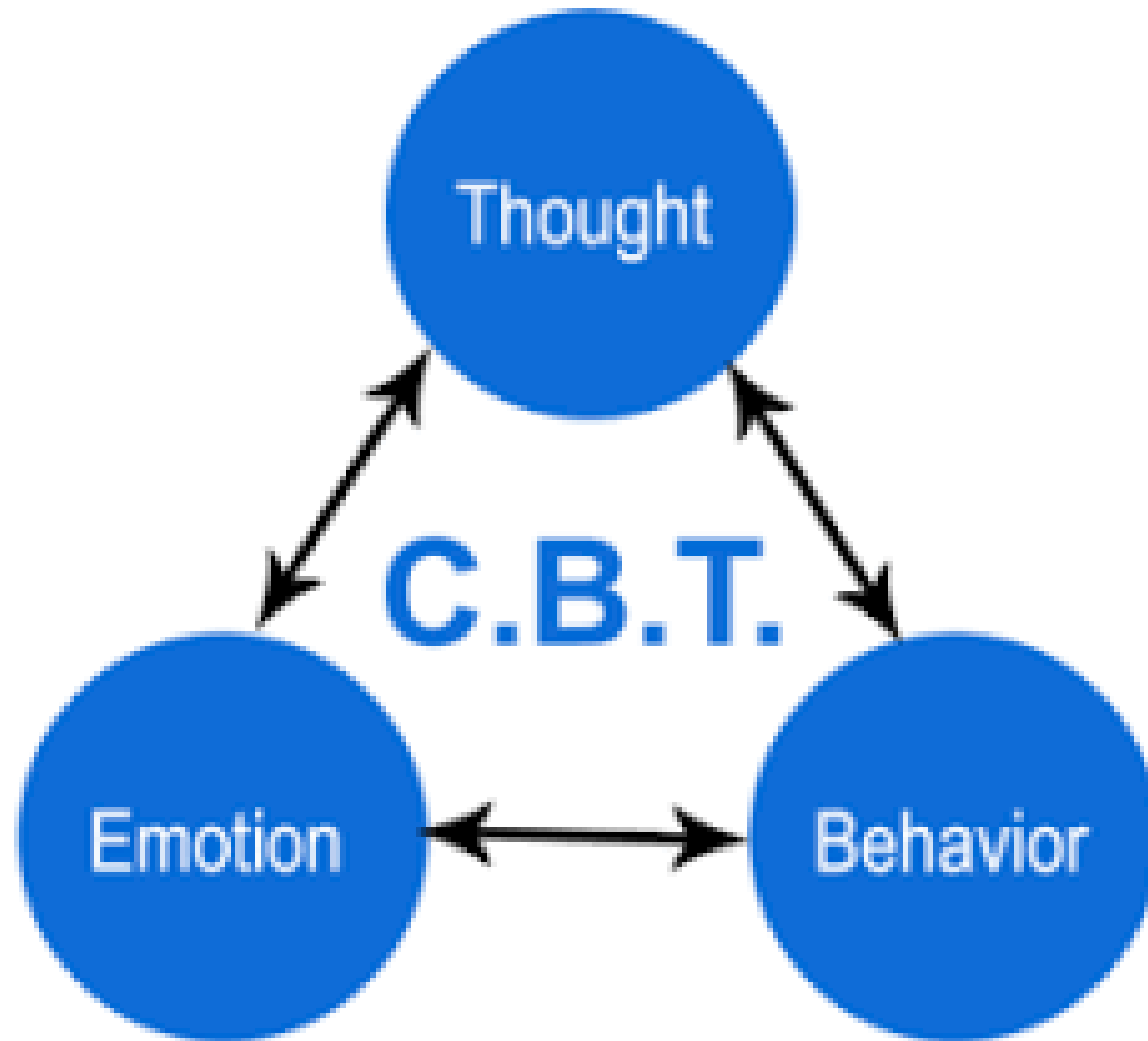


(The anxiety-producing situation is avoided, and the person receives a feeling of relief. However, next time the anxiety will be worse.)

CBT

The Process of Exposure

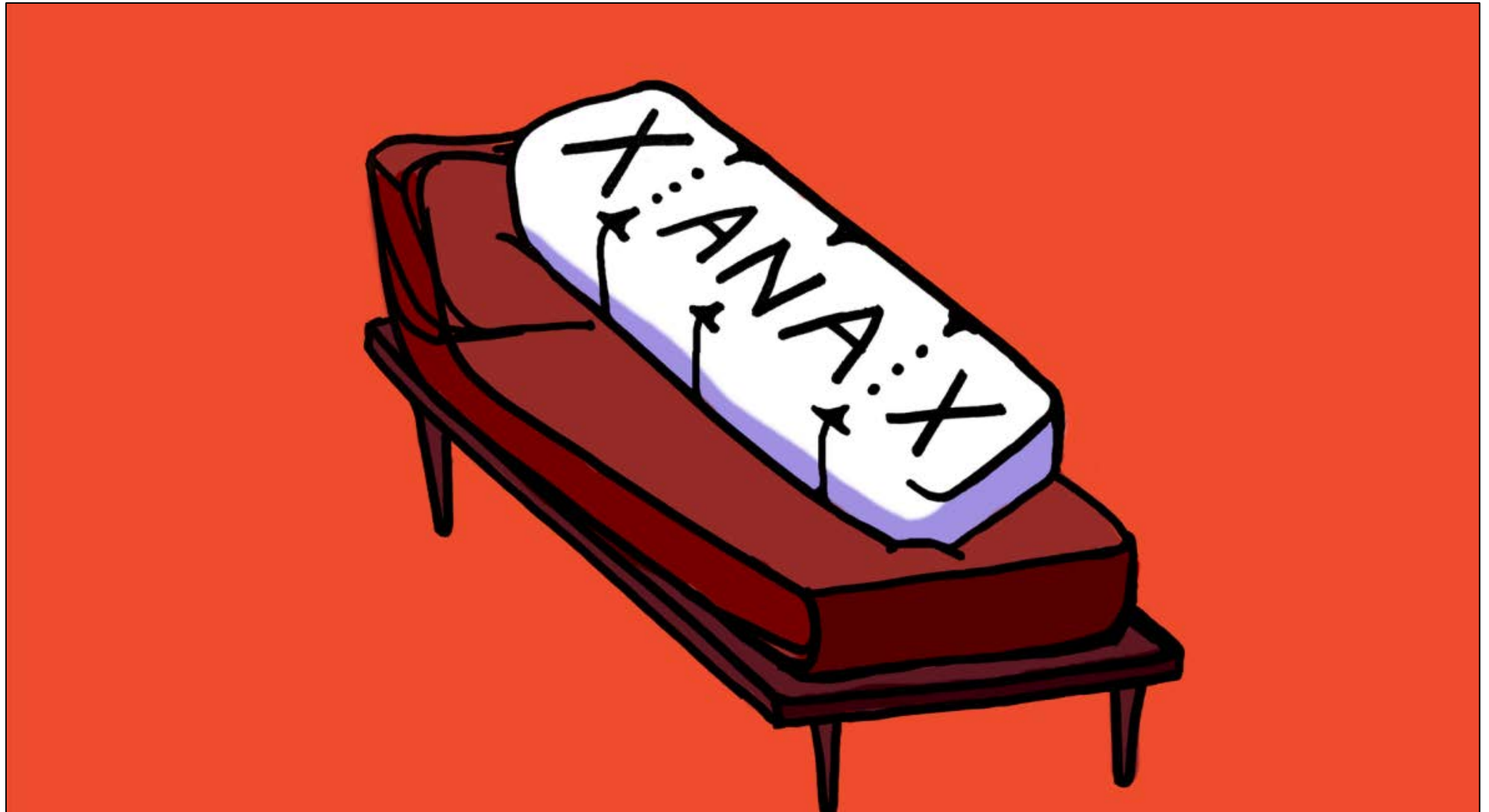




COMPONENTS OF CBT

- Psycho-education
- Skills building
- Exposure therapy
- Adequate exposure to an anxiety inducing stimulus will ultimately lead to reduction of symptoms (the cure to anxiety is through it, not around it)

PSYCHOPHARMACOLOGY



PSYCHOPHARMACOLOGY

- **Acute symptomatic treatment**
 - Antihistamines (diphenhydramine/hydroxyzine) can be helpful – careful of paradoxical responses in young children and habituation
 - Benzodiazepines – with caution
 - Propranolol can be helpful for performance/phobia issues
- **Longer-term treatment**
 - SSRI's/SNRI's for most
 - Other agents in refractory/severe cases (anticonvulsants/atypical antipsychotics)

SSRI'S / SNRI'S FOR CHILDHOOD ANXIETY

Medication	FDA Approval	Starting Dose	Usual Dose Range	Maximal Daily Dose
Citalopram	No	5-10 mg/d	20-40 mg/d	40 mg/d
Escitalopram	Yes – 12up/MDD	2.5-5 mg/d	5-20 mg/d	30 mg/d
Fluoxetine	Yes – 8 up/MDD; 7/up OCD	5-10 mg/d	10-40 mg/d	60 mg/d
Fluvoxamine* *bid dosing	Yes – 8 up/OCD	25-50 mg/d	50-200 mg/d	300 mg/d
Sertraline	Yes – 6 up/OCD	12.5-25 mg/d	25-100 mg/d	200 mg/d
Duloxetine	Yes – 7 up/GAD	30 mg/d	30-60 mg/d	120 mg/d

BENZODIAZEPINE USE IN CHILDREN

- Use cautiously for short-term/acute treatment
 - Until SSRI is effective and CBT skills are in place (1- 3 months typical)
- Review side-effect risks
 - Misuse/abuse/diversion
 - Sedation/paradoxical disinhibition
 - Impaired judgment
 - Altered sleep
- What about diazepam (Valium)/alprazolam (Xanax)?
 - Use with caution – more cognitive effects with diazepam
 - Alprazolam helps panic, but is consistently problematic to use

Benzodiazepine	Pediatric Dosing
Clonazepam (Klonopin)	0.25 mg to 4 mg/d divided 2-3X
Lorazepam (Ativan)	0.125 mg to 2 mg/day divided 3-4X

OTHER MEDICATION CONSIDERATIONS...

- Clonidine at low doses prior to sleep can be helpful
- Gabapentin at low doses prior to sleep and judicious daytime use can be helpful
- Avoid use of atypical antipsychotic class as a first line for sleep; d/t metabolic and other SE risks, reserve for the most difficult to treat/refractory situations
- Keep therapy (CBT) ongoing and always in conjunction with medications for most robust response

OTHER POINTS FOR BENZODIAZEPINE USE

- Not approved by FDA for use in children
- Tolerance and withdrawal, including risk of seizure if not tapered slowly
- Drug-drug interactions, especially problematic with recreational drug use – alcohol in adolescents
- Impairment if adolescent who drives
- Can be problematic for work – positive drug screens, etc.

TREATMENT PHASES

- Acute symptom control (panic/sleep disruption)
- Maintenance of response and functional improvement
- Prevention of recurrence
- Termination of treatment
- Monitoring off of treatment