

Stress Reactions and Interventions, According to Developmental Stages

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What is Stress?

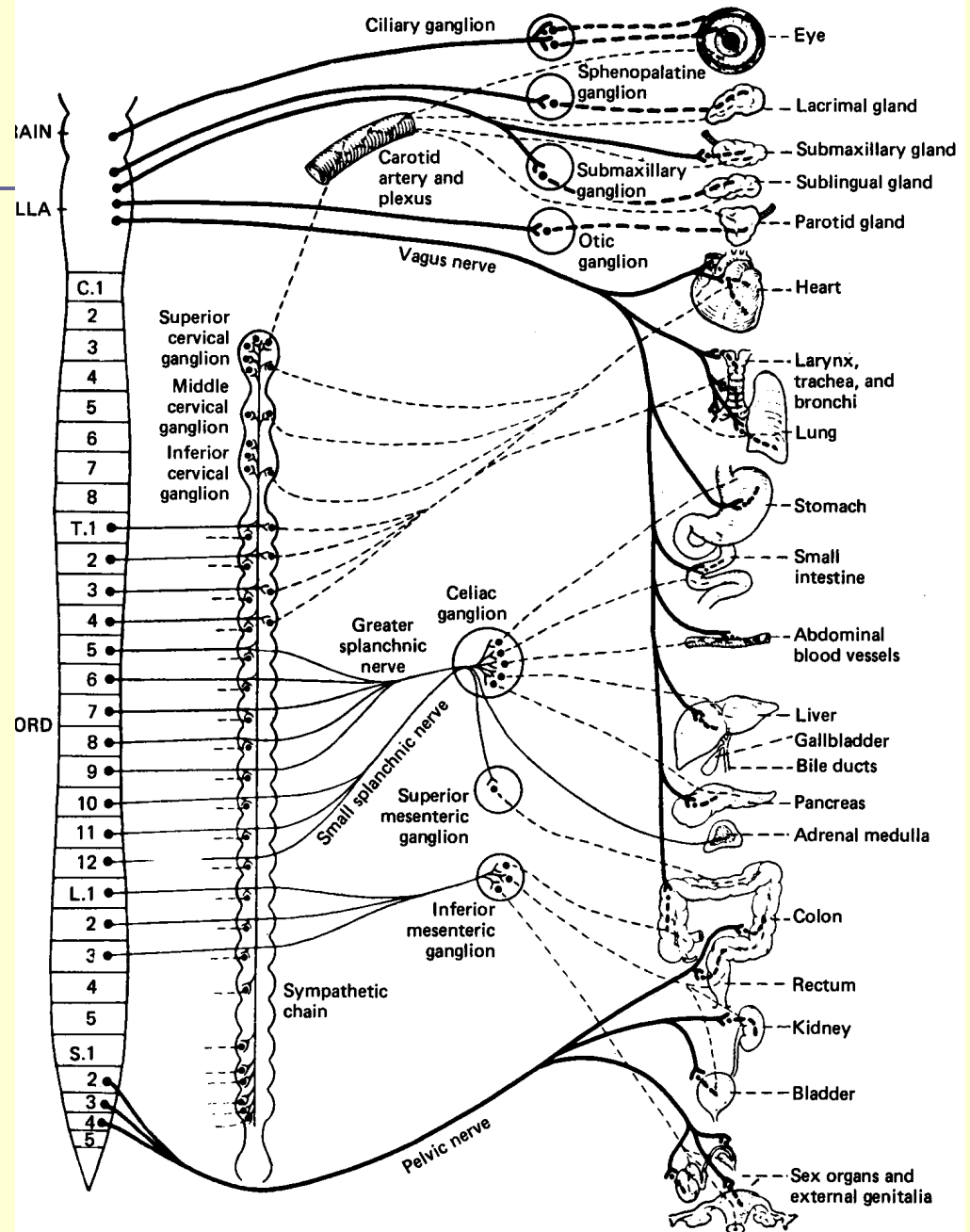
- A subjective emotional state.
- Aversive events or circumstances that demand change.
- Physiological response.

Physiological Stress Systems

- SAM: Sympathetic-adrenal-medullary (*Adrenalin*)
 - Rapid-response, short-acting
 - “defense reaction”
- HPA: hypothalamic-pituitary-adrenocortical (*Cortisol*)
 - Slower-response, longer-acting
 - “defeat reaction”

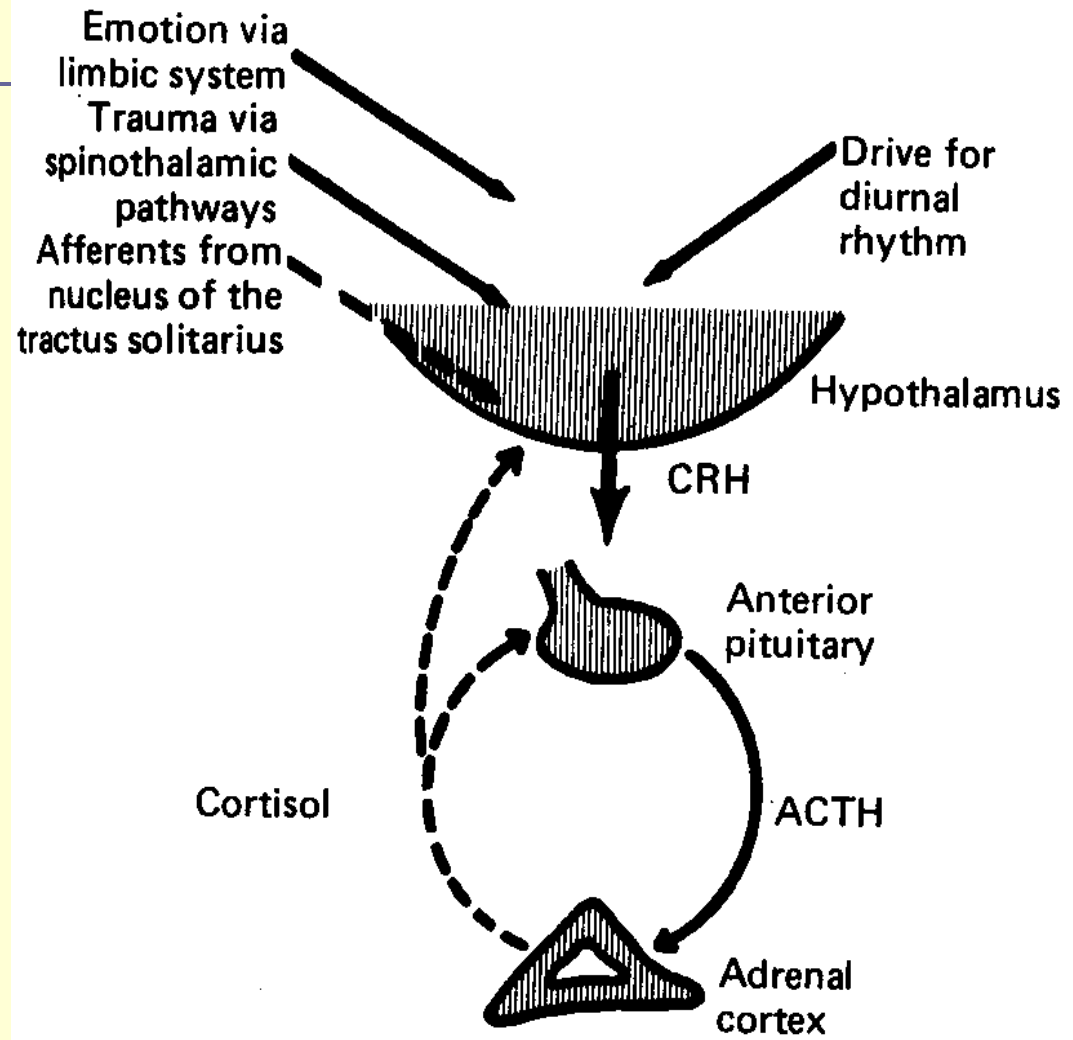
SAM

sympathetic-
adrenal-
medullary:
direct neural
connections



HPA:
Hypothalamic-
Pituitary-
Adrenocortical
system

Cortisol



Hypothalamic-Pituitary-Adrenal Cortex (HPA) System

- ❑ Cortisol release in 10-30 minutes
- ❑ Protein breakdown, increased glucose
- ❑ Decreased immune function
- ❑ Emotional distress, behavioral avoidance, "loss of control"

Health Effects Associated with Chronic Stress

- Immunological
 - Infections
 - Allergies
- Injuries
- Growth
- Psychological
 - Internalizing: depression and anxiety
 - Externalizing: acting out, risk taking

Stress Response Stages

1. Initial response: Fear, shock, denial, grief
2. Short-term (days to weeks):
 - Exaggerated autonomic reactions (startle)
 - Disrupted daily living (eating, sleeping, etc.)
 - Internalizing or externalizing
 - Regressions
3. Long-term (> 1 month): resolution or chronicity

Psychiatric Diagnoses

- Adjustment Disorders
 - Depression/ anxiety
 - Aggression/ antisocial
- Acute Stress Disorder
- Post Traumatic Stress Disorder (PTSD)

PTSD

- Witnessed extra-ordinary event,
- Responded with horror or agitation/
disorganization
- CORE symptoms
 1. **Re-experiencing** (dreams, play, flashbacks)
 2. **Avoidance** of reminders, and general numbing
 3. **Increased arousal** (hyper-vigilance, startle responses)
- Duration > 1 month

More than PTSD

- Children's initial responses may confuse, concern parents:
 - Extreme distress
 - Little or no apparent distress
 - Clinginess/"bad behavior"/ irresponsible behavior
- Parents need support to handle their children's responses
 - General information
 - 1:1 support – "grandparents" and professionals

Mental Health Effects on Children

- 9/11 – high rate of psychiatric illness
 - Of children who lost a parent –73% after
 - >50% suffered from an anxiety disorder
 - 30% of those developed PTSD
- Hurricane Katrina – about half of parents surveyed had at least one child with new behavior difficulties
- Children of parents in US military serving in Iraq have higher blood pressure, heart rate, and stress levels than other children

Risk and Resilience Factors

Risk

- ❑ Pre-existing mental health problems
- ❑ “Reactive” or “slow to warm up” temperament
- ❑ Parental maladaptation
- ❑ Social isolation

Resilience

- ❑ Intelligence
- ❑ Physical health
- ❑ Beliefs (e.g. religion)
- ❑ Supportive social networks (families, friends, institutions)

Acute Stress and Developmental Stage

- Different psycho-social issues are salient at different ages/stages.
 - Key issues predict characteristic or "signature" stress responses.
 - Stress responses from any *earlier* stage are also always possible.
- ★ *Extreme stress (disaster) interrupts developmental pathways*

Infancy (0 to ~1)

Key Issues

- Attachment
 - Physical proximity
- After 6 months:
 - Emotional “secure base”
 - Attachment becomes internalized
- Foundation for later relationships, and responses to stress

Common Symptoms

- Eating, sleeping
- Irritability, “cranky”
- Exaggerated startle response

Toddlerhood (~1 to 3)

Key Issues

- Autonomy and exploration
- Testing limits: physical relationships
- Temperament: individual differences in behavior

Signature Symptoms

- Tantrums
- Clinging, separation distress
- Regression
 - Talking
 - Bowel/bladder
 - Self-help

Preschool (3 to 6 years)

Key Issues

- Imagination
 - Magical thinking
 - Animism

- Egocentric thinking

- Misunderstandings about death
 - Reversible
 - “going somewhere”

Signature Symptoms

- Disrupted play
 - Not playing
 - Repetitive playing

- Nightmares, night terrors

- Acting out
 - Aggressive
 - Oppositional
 - “Bad”

School Age (6 to 12 years)

Key Issues

- Focus on *competence*
- Peer group
 - Peer acceptance, conformity
 - Peer hierarchy
- Non-parental adults

Signature Symptoms

- Poor grades/ school failure
- Withdrawal from normal activities
- Internalizing (depression, anxiety)
- Externalizing (hyperactivity, aggression)

Adolescence (12 to 18 years)

Key Issues

- ❑ Cognitive shift: concrete to abstract
- ❑ Real-life responsibilities
- ❑ Awareness of self in society
- ❑ Idealism and future orientation

Signature Symptoms

- ❑ Disillusionment/ crisis of faith (e.g. in God)
- ❑ Clinging to new ideal (e.g. radicalism)
- ❑ Parentification
- ❑ Identity crisis
 - Loss of direction
 - Hopelessness/despair
 - Acting out, risk taking

Summary

- Stress: emotional and physiological
- Stages of the stress response
- Stress disorders
- Risk and resilience factors
- Developmental Stages: Key issues and signature symptoms