

Spina Bifida, Anxiety, & Anxiety Disorder

SBANT Education Day

February, 23 2019

Plano Conference Center

Richard Adams, MD

Professor & Director, Division of Developmental Behavioral Pediatrics, UT Southwestern Medical Center

*Director, Pediatric Developmental Disabilities,
Texas Scottish Rite Hospital*

Mary Dryden, MA

Texas Women's University, Department of Psychology

Licensed Psychological Associate (LPA)

UTSW Division of Developmental Behavioral Pediatrics

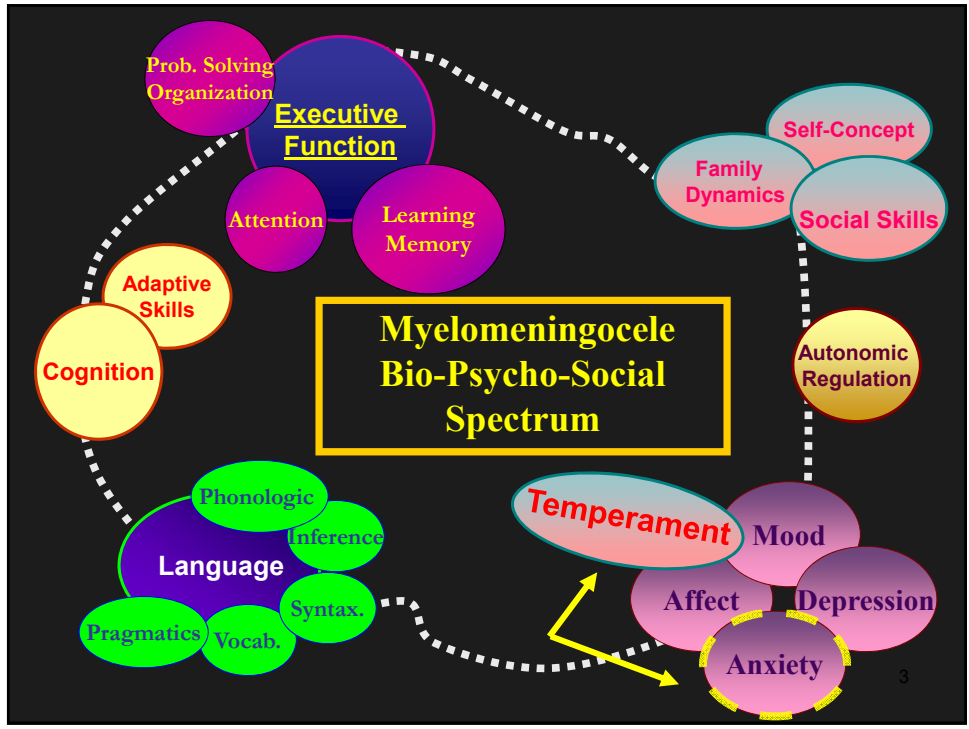
1

Spina Bifida, Anxiety, & Anxiety Disorder

SBANT Education Day

February 23, 2019

- 🌀 *Let's be clear: there is "anxiety" and there are "**anxiety disorders**"*
- 🌀 *Describe the relationship between anxiety and Spina Bifida*
- 🌀 *Identify core concepts of intervention*
- 🌀 *Explain how symptoms of anxiety disorders can go unrecognized in children with Spina Bifida.*
- 🌀 *Approaches to care*



Anatomy & Anxiety / Temperament

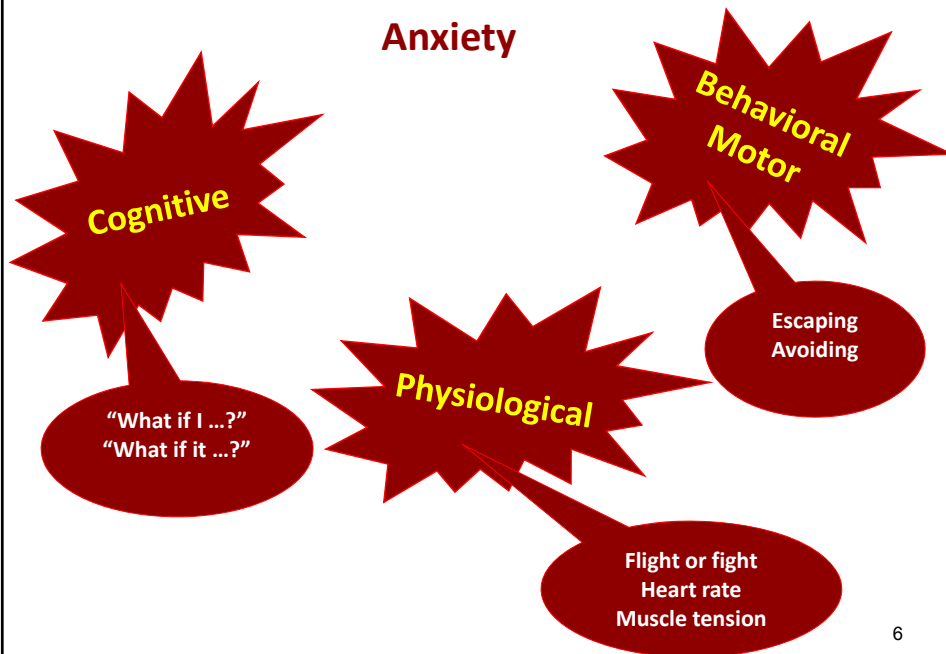
Vachha B, **Adams RC**, Rollins NK. Limbic Tract anomalies in pediatric myelomeningocele and Chiari II malformation
 Vachha B, **Adams RC**. Myelomeningocele, Temperament Patterns, and Parental Perceptions
 Vachha B, **Adams RC**. A temperament for learning: limbic system in myelomeningocele
 Etc.
 Etc.

Anxiety

- “Future-oriented emotion”
- Perceptions of lack of control &
- Unpredictability over potentially aversive events
- Rapid shift of attention to the focus of potentially “dangerous” events

5

Anxiety



6

Worry

- Involves thoughts / images that cause anxiety
- Content of concern differs from time to time

Fear

- Part of the bodily response system
- Essential in focusing on escaping *immediate* situations / threats

Anxiety

<u>Disorder</u>	<u>Prevalence</u>	<u>Age</u>
Generalized anxiety	3-12 %	> In adolescents
Separation anxiety	4-13 %	> In children
Specific phobia (dog, crowds, clowns)	3 – 9 %	Child=Adolescent
Social phobia	1- 6 %	> In Adolescents
OCD	1 -4 %	Child~Adolescent
Panic Disorder	4 -5 %	> In adolescents
Post-traumatic stress disorder	1 – 3 %	???

Generalized Anxiety Disorder

- A. Excessive anxiety / worry more days than not for at least 6 months about a number of events or activities**
- B. Sense of lack of control**
- C. 1 or more:**
 - Restlessness {Keyed up}
 - Easily fatigued • Sleep Disturbance
 - Difficulty concentrating
 - Irritability
 - Muscle Tension

Anxiety

<u>Disorder</u>	<u>Prevalence</u>	<u>Age</u>
Generalized anxiety	3-12 %	> In adolescents
Separation anxiety	4-13 %	> In children
Specific phobia (dog, crowds, clowns)	3 – 9 %	Child=Adolescent
Social phobia	1- 6 %	> In Adolescents
OCD	1 -4 %	Child~Adolescent
Panic Disorder	4 -5 %	> In adolescents
Post-traumatic stress disorder	1 – 3 %	??? Spina Bifida

Differential Diagnoses

- *Pervasive Dev Disorders (PDD)*
- *Oppositional Defiant Disorder*
- **ADHD**
- *“Normal” anxiety*

**Spina Bifida – specific.
Example: Shunt issues**

Co-Existing Conditions

- **Other anxiety disorders**
- **Depression ***
- **Disruptive Behavior Disorders**
- **Tic Disorders**

11

Anxiety - - - Why Should We Talk About This?

1. Longitudinal studies: *association between anxiety disorders & educational underachievement*
2. Occurrence of Anxiety Disorders *precede depressive disorders / substance abuse disorders*
3. Anxiety disorders can be related to *difficulties in social and peer relations which can contribute to feelings of loneliness, low self-esteem → depression.*

12

Anxiety --- “Why”

1. Genetics / Temperament
2. Attachment to Caretakers
3. Parenting Styles
4. Life Experiences

Spina Bifida

13

Anxiety --- Genetics / Temperament

“behavioral inhibition” –

child’s tendency to approach unfamiliar or new situations with distress, restraint, avoidance”

Kagan 1999

**** “enduring temperament trait”***

14

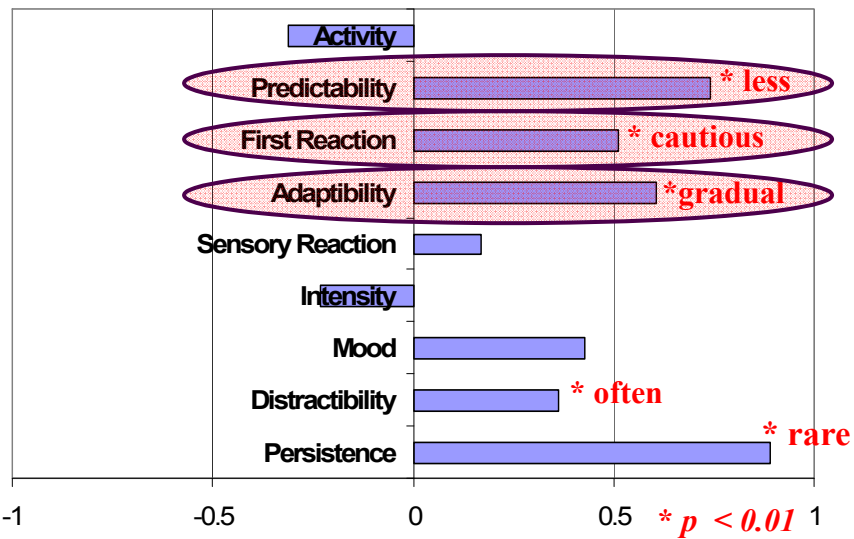
**“Myelomeningocele, Temperament
Patterns, and Parental Perceptions”**

Richard Adams, MD

Behroze Vachha, PhD

*Developmental Disabilities,
Texas Scottish Rite Hospital for Children
Department of Pediatrics,
University of Texas Southwestern Medical Center, Dallas, Texas*

Temperament in children with SB



Anxiety --- “Why”

- 1. Genetics / Temperament**
- 2. Attachment to Caretakers**
- 3. Parenting Styles**
- 4. Life Experiences**

17

Anxiety --- Attachment

Warren et. al Longitudinal Study

Follow-up at 12 months & through 17 years

High-risk attachment:

- * predicted anxiety disorders in adolescence**
- * in scientific analysis – stronger even than maternal anxiety or infant’s temperament**

It’s the dynamic interaction

18

Anxiety --- “What can impact (up or down)?”

- 1. Genetics / Temperament**
- 2. Attachment to Caretakers**
- 3. Parenting Styles***
- 4. Life Experiences**

19

Anxiety --- Parenting Styles

Parental Control

Siqueland et al

**Parents of children with anxiety disorders were rated
by independent observers as
less granting of autonomy
than parents of control children**

{Study among typically developing children }

20

Anxiety --- Parenting Styles

Parental Control *Observational studies*

Parents of anxious children were

More involved in directing the child's moment to moment activities

More "intrusive" – answering on their behalf, making decisions for them, etc

More negative – fearful of potential harm

More likely to agree with and encourage the child's avoidance

21

Anxiety --- "Why"

1. Genetics / Temperament
2. Attachment to Caretakers
3. Parenting Styles

4. Life Experiences {Plus: Spina Bifida-specific}

22

Anxiety --- Life Experiences

Anxiety can be related to exposure to negative life events

Research reviewed... supports the conclusion that

temperament (style of response to stimuli)

attachment issues

parental clinical anxiety (diagnosed)

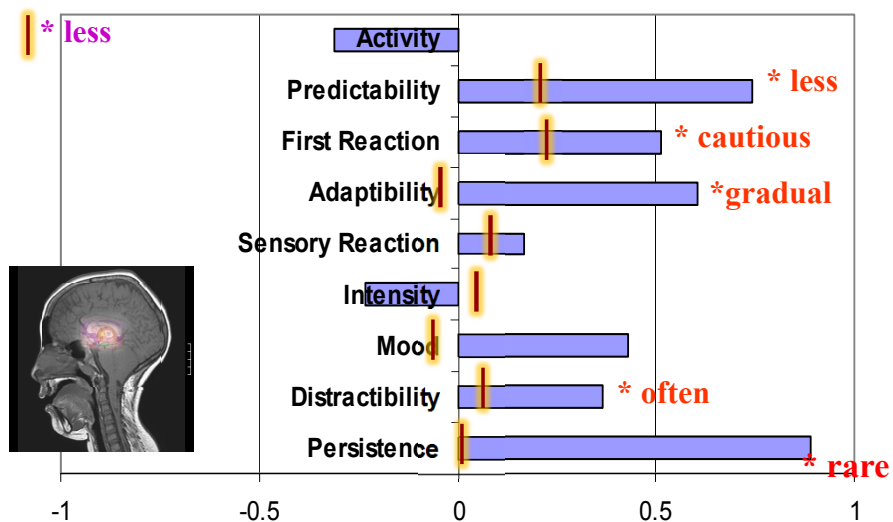
parenting styles

all play a part in the development of anxiety in children

Bernstein & Layne, 2006; etc

Temperament profile in Osteogenesis Imperfecti

Suskauer. *Pediatrics*.



Anxiety --- What to do?

- **Exposure**
- **Modeling**
- **Cognitive-Behavioral Therapy**

In review of over 200 investigations, the protocols that consistently demonstrate strongest results in children / adolescents include these 3 components

25

Anxiety → Exposure

Strategy:

real or imagined confrontation with a feared stimulus

Variations in Approach:

Intensity

Order of stimuli

Relaxation

Rewards

**> 35 RCT's
Exposure shown effective
in reducing
childhood fears / anxieties**

26

Anxiety → Modeling

Strategy:

Child's observation of another person interacting successfully with a feared stimulus

Variants:

Live Model

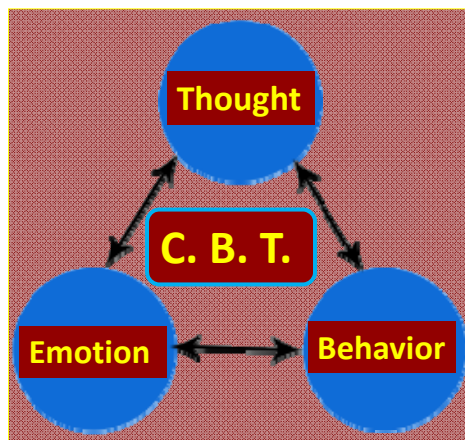
Symbolic

Participant

Rewards

Modeling has been shown more effective compared to no treatment

Anxiety → Cognitive- Behavioral Therapy (CBT)



EXPOSURE is a central component in CBT

Summary

What Your Spina Bifida Team Can Do To Help

1. Help identify list of fears { Listen }
2. Education about Anxiety
3. Cognitive processing of fears:
ideas & accuracy; coping; control techniques
4. Practice feared situations {real or imagined}
5. Support over time to help new skills
6. Dev Peds: Medications management if needed