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**Focusing a little light on PTSD in  
youth**

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# Question 1

- Which of the following statements about PTSD in youth is true?
- A- PTSD symptoms only develop in youth over the age of 7 years
- B- PTSD can develop by witnessing domestic violence
- C- The DSM-IV criteria apply equally well to adults and toddlers
- D- PTSD symptoms relent in youth and rarely recur
- E- None of the above

# Question 2

- Which of the following treatments have been shown to be effective in the treatment of PTSD in youth?
- A-Trauma-focused CBT
- B-Hypnosis
- C-Valproate
- D-Eye Movement Desensitization and Reprocessing
- E-Buspirone

# Question 3

- Which of the following statements is true about play therapy in PTSD in children
- A-Children with PTSD have normal play
- B-Children with PTSC have more imaginative play than those without PTSD
- C-Children with PTSD have routinized anhedonic play that symbolized the trauma
- D-Children with PTSD never symbolize their trauma in play
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# Question 4

- Which of the following drugs may be useful in symptoms of PTSD in children?
- A-Clonidine, hypnotics, SSRIs
- B-Clonidine, valproate, buspirone
- C-Hypnotics, carbamazepine, SSRIs
- D-SSRIs, clonidine, carbamazepine
- E-None of the above

# Question 5

- Which criteria of PTSD is likely to be absent from children?
- A- Re-experiencing the trauma
- B- Persistent arousal symptoms
- C- Persistent avoidance
- D- Nightmares
- E- Startle reaction

# Preview

- DSM-IV criteria
- Modification of criteria for youth
- Type 1 and Type 2- Terr
- Epidemiology
- Risk factors
- Co-morbidity
- Treatment of PTSD

# Teaching Points

- PTSD is often overlooked in youth because symptoms are asked about
- Treatment of choice for PTSD symptoms is trauma-focused CBT
- Since symptoms recur in youth with chronic PTSD, treatment must be tailored to current symptoms



# Concept of PTSD in youth

- Relatively new area of interest-25 years
- Lenore Terr and Chowchilla bus kidnapping sparked interest in 1981
- In 1985, Michael Rutter concluded that children's reaction to trauma were less severe than adults and did not warrant their inclusion within a diagnostic category of PTSD
- In 1987, DSMIII-R first recognized PTSD in youth

# PTSD DSM-IV criteria

## describes single event trauma

- 1-Follows a traumatic event (event criteria) A
- 2-Re-experiencing of trauma (one )B
- 3-Persistent avoidance/numbing of associated stimuli (three)C
- 4-Persistent increased arousal symptoms (two)D
- One month or more duration of symptoms

# DSM-IV Event criteria-A

- Witness or experience an event with threat of death or serious injury to self or others
- Experience “intense fear, helplessness or horror”  
-- like the antelope just about to be caught by the lion--- frozen (cognitive surrender)

# DSM-IV Re-experiencing criteria-B

Need one of the following:

- Recurrent recollections or image
- Distressing dreams
- Flashbacks
- Intense distress if internal or external cues
- Physiologic distress if internal or external cues
- Unique to PTSD

# DSM-IV Avoidance criteria-C

Persistent avoidance of cues /thoughts or numbing

Need 3 of following:

- avoid thoughts, feelings or talk about event
- avoid cues of event
- cant recall important aspects of event
- not interested in important life events
- feeling detached from others
- restricted range of feelings
- sense that life will be short

# DSM-IV Arousal Criteria-D

- Arousal symptoms (2 necessary)
  - sleep difficulty
  - irritability
  - poor concentration
  - hypervigilence
  - exaggerated startle

# How to put these criteria together

- Go thru or see a terrible event
- Wave of recollections threaten to sweep over you
- Try to avoid them or numb self
- Left with a sense of watchfulness

# The DSM-IV criteria best fits adults and single event

- Not sensitive to very young kids
- Not sensitive to long-term effects of physical or sexual abuse
- Teens more likely to meet adult criteria



# Modification of Event Criteria for kids

- Younger kids may not have “feelings” or behavioral changes at the time “disorganized or agitated behavior”

# Modification of Re-experiencing criteria for kids

- ❖ Recurrent intrusive memories- younger kids have repetitive play or volitional re-enactments- dangerous
- ❖ Recurrent dreams of event: kids have non-specific
- ❖ Flashbacks -uncommon in very young kids
- ❖ Events and symbols of events- kids have condensation of symbols and sense of danger

# Modification of Avoidance criteria for kids

- Must have cognitive ability to link the event with trying to avoid it
- Especially thoughts when quiet or at night
- “Its like my mind is a library with all of the books tightly shut until I talk, then all the books open”
- Sense of foreshortened future in kids very common, omens and time-skewing
- Instead of anhedonia, loss of skills or new fears including separation fears
- Instead of detachment, restricted range of affect

# Modification of Arousal Criteria in kids

Generally present

- ❖ Startle (maturation of inhibition develops at 8-10 years and may be prevented by PTSD)

# Is PTSD present?--- remember

## Three forms

- ❖ Acute = symptoms present 1-3 months
- ❖ Chronic=more than 3 months
- ❖ Delayed=minimum of 6 months between the event and symptoms
- ❖ If symptoms resolve in one month= Acute Stress Disorder which may go on to PTSD (evidence for subsyndromal symptoms-> PTSD)
- ❖ Partial symptomology of PTSD may not meet criteria but still needs treatment

# Terr's Type 1 and 2 (Famularo 1996)

- No evidence-based support
- Type 1 single event-> re-experiencing, avoiding and increased arousal (especially sleep difficulties)
- Type 2- from chronic or prolonged events-> dissociation, restricted affect, sadness and detachment

# Characteristics of PTSD play (based on Terr 1981)

- “Terrible sameness”- compulsive repetitiveness-driven quality to play
- Unconscious link with event
- Literalness of play with simple “defense”, e.g., identification with aggressor, passive into active, doing and undoing
- Play not relieve anxiety-contagious quality
- Wide range of ages

# Re-enactments

- Potentially dangerous--
- Sexual re-enactments (as well as sexualization of immature psyche)
- Example: Boy who had seen his father being shot and fall from porch repeated this action whenever he heard loud noises.



Not everyone who experiences a single terrible event will develop PTSD: about 25-30% will

-not absolutely related to type, severity frequency--- importance of younger age, developmental level, responses of “safety net” and even if not meet criteria for PTSD, symptoms may still be impairing

# What types of events lead to PTSD?

- ❖ Accidents of all kinds (e.g. gun shots to abdomen, Gill 2002), gang warfare, medical procedures (e.g., liver transplant, Shemesh et al 2002), peer suicides, natural disasters, sexual and physical abuse
- ❖ Witnessing an event has same significance, especially domestic violence and 10% of murders, rapes, suicides witnessed by kids
- ❖ Near-misses or hearing about them

# Epidemiology

- Kids 3-6% in community samples
- 14-25% after MVA (de Vries 1999)
- 20% after visualization of domestic violence (Mertin and Mohr 2002)
- Urban teens 12-36% full criteria
- Maltreatment 39% (Famularo 1992)
- In juvenile detention, 11.2% (Abram 2004)
- Natural disasters low except for more severe ones such as earthquakes or hurricanes 63% (Bradburn 1991)

# Possible Risk Factors for Developing PTSD

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- Severity of trauma (threat, duration, injury, loss e.g, violence such as war)
- Parental Distress/psychiatric diagnosis
- Type of threat (worse if caused by people and those known to victim)
- Sexual trauma more than physical
- Cult and ritualized sadistic trauma, psychotic or bizarre adults
- Prior history of anxiety diagnosis (La Greca 1998)

# Remember!

- Rarely does PTSD exist by itself
- Importance of co-morbidity
- If trauma occurs in a developmentally sensitive period with changes in neurotransmitters, then child vulnerable to other conditions (e.g., attachment, social skills, aggression, drug abuse, sexualized behaviors etc)

# *PTSD Co-morbidity*

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- Specific fears around related trauma events or social phobias
- Generalized Anxiety Disorder, later panic attacks
- Survivor guilt
- Complicated bereavement and pathological grieving reactions
- Depression with suicidal ideation, intent, attempts
- Aggression/violence
- For teens, dissociative features, self-injuries behaviors, and especially with girls, substance abuse (Lipschitz 2000)

# Confusion

- Reactive Attachment Disorder (RAD) and PTSD
- Both may have same etiology-maltreatment, but RAD must occur before 5 years
- Child may have had maltreatment and have both or one or none
- RAD refers to “relatedness” -disinhibited or inhibited type and PTSD, the cognitive structures overwhelmed

Response of child's social system, and particularly the child's mother, is the most important factor in determining outcome, more important than the objective elements of the victimization itself ( Tackett 1997)



# Children Less than 4 years (Scheeringa and Zeenah 2001)

- Preschoolers cant manage stress alone
- Dyadic perspective “relational PTSD” and vicarious effects
- 3 patterns of adult response: unresponsive, overprotective, re-enacting
- Symptom diagnosis needs to be modified

# Parents response (White paper)

- Believing and validating trauma
- Affect management of child
- Affect management of self especially if child's needs not tended to
- Cultural issues

# 5 Goals of assessment (Lonigan 2003)

- Was there a traumatic event
- Negative reaction to the event
- Clear symptoms that meet criteria B,C,D
- Establishing duration of symptoms
- Establishing impairment criteria

# Clinical Assessment

- Requires a face-to-face interview with child skillfully done to avoid re-traumatization
- Let the child tell the whole story of event
- Later, go back with prompts for more details
- Symptoms not volunteered should be asked for
- Any thoughts about the future?
- Play assessment if appropriate-look for traumatic play
- Review: tie trauma and symptoms: ask how they felt about interview: “courage award”
- Learn about event from others if appropriate

# Screening questions for PTSD

(adapted from Levinson and Engel 1991)

- What is the worst thing that has ever happened to you?
- Have you ever been in danger or seen someone else in danger?
- Have you seen grown-ups be mean to each other? Yell? Fight?
- Do you ever think about it?

Treatment of PTSD: After a treatment plan is developed, it should be described to guardian and child-- “Treatment never should be a mysterious process”  
(Donnelly 2003)

# Treatments: PHASED BASED (White Paper )

Safety

Skills development

Meaning Making

Enhancing Resiliency

# Treatment modalities

- Trauma-focused CBT-treatment of choice- either individual of concurrent child trauma-focused CBT and parent therapy (Cohen 1998) or group models for teens (Cloitre 2002)
- Play therapy: younger children
- IPT
- Parent-child dyadic psychotherapy (Lieberman 1997, infant and toddlers)
- Milieu model ARC (Cook 2003), Sanctuary (Bloom 2003)
- School based approaches (DeRosa 2003)



# Treatment of chronic PTSD- overview

- No quick fixes; have an overall treatment plan related to symptoms and situation
- Importance of being and feeling safe: protect from further trauma and own aggressivity, SIB, sexualized behavior
- Severity of sx's change and recur over time with particular events: alternation of numbing and re-experiencing
- Pulsed therapy: series of short term interventions: sometimes close down sx's, sometimes active treatment; importance of non-verbal techniques
- Treat co-existing conditions (e.g. insomnia, ADHD)

# CBT program for chronic PTSD- 1 (Perrin et al 2000)

- Start with education and goal setting
- Goal is to take “the sting out of the malignant memories “ (e.g. anxiety reduction when confronted by stimulus, reduction of the power of the intrusive thoughts)
- Coping skill box-recognize triggers and reduce avoidance: learn relaxation techniques, imagery, positive self-talk, thought-stopping

# CBT program for chronic PTSD- 2 (Perrin et al 2000)

- Start with relaxed child
- Develop a “thermometer of distress” (TOD)
- Ladder of less-to-more stressful parts of event
- Imaginal or invivo exposure and relaxation using TOD and review of feelings during session and stay until TOD is decreased
- When relaxed, discussion of cognitive attributions of the trauma (e.g., blame or omens) and how future will be changed
- Discussion of coping strategies- thought suppression, distraction

# CBT program for chronic PTSD- 3 (Perrin et al 2000)

- Homework assignments of gradual exposure to traumatic reminders
- If appropriate, parents involved
- Guardians must not support avoidance but rewards positive coping
- Termination and relapse prevention: make a videotape
- Booster therapy few months after and at anniversaries

# When to consider medication

- 2 central roles: treat current symptoms and helps them to utilize psychological treatments
- Consider if aggression, SIB, disorganization, insomnia, anxiety or depression
- Since PTSD is relapsing condition, may have to treat different target symptoms over time
- Important to pick the target that is most significant or a “broad -spectrum” intervention

# Trials of Meds for ASD/PTSD

| Medication   | Author yr                | Type response   |
|--|--------------------------|---|
| citalopram   | Seedat 2002, Seedat 2002 | Open 8 wks n=24 38% reduction in sxs and open 8 wk, comparison with adults w equal efficacy |
| risperidone  | Horrigan 1999            | Open n=18 13/18 pos   |
| propranolol  | Famularo 1988            | Open 5wks n=11 8/11pos  |
| Imipramine 100 mg hs<br>v 25mg/kg chloral<br>hydrate | Robert 1999              | DB head to-head n=25 ASD 83% v<br>38% in burn pts   |
| clozapine  | Kant 2004                | Chart review serious s/es   |
| Nefazodone 200-<br>600mg                             | Domon Andersen2000       | Case series improvement in<br>aggress, insom, hyperarous                                    |
| Carbamazepine serum<br>levels 10-11.5ug/ml           | Loof 1995                | Case series N=28 sexually abused<br>22/28 pos on other drugs                                |
|  |                          |   |

# Sxs of Hyperarrousal

- May be most amenable to treatment in youth (Donnelly 2003)
- Irritability, concentration difficulties, hypervigilence, startle, ourtbursts
- Child is on-the alert-- scanning
- Sleep difficulties: initiations, nightmares, awakenings

# Clonidine in PTSD in youth

| Author yr                            | Type study            | sx  | instrument | result                               |
|--------------------------------------|-----------------------|---|------------|--------------------------------------|
| Harmon 1996<br>0.1 mg hs or<br>patch | Open n=7<br>preschool | Aggress<br>hyperar<br>insomnia            | clinical   | 5/7-7/7                              |
| Pearsall 2003                        | Open n=56 5-<br>24y   | nghtms<br>flsbcks                         | natural    | Improved if<br>< 6mos post<br>trauma |
| Perry 1994<br>0.05-0.1mg bid         | Open n=17             | Anx,<br>arrousal,<br>conc, mood<br>impuls | clinical   |                                      |



# SSRIs

- Borrowing from adult literature, start with “broad spectrum” treatments such as SSRIs (Donnelly and Amaya-Jackson 2002) or nefazodone (beware of recent hepatitis warnings)
- Paroxetine and sertraline have FDA approval in adults
- Two open trials with citalopram (Seedat 2002, Seedat 2002)
- Affects all PTSD symptoms

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# Answers

- 1-b
- 2-a
- 3-c
- 4-a
- 5-c