Child and Adolescent Anxiety Disorders

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Pre-Lecture Exam
Question 1

1. **A 7-year-old is afraid of the dark and believes there are monsters under his bed. Which one of the following statements is true:**

A. These symptoms are precursors to the development of generalized anxiety disorder.

B. These symptoms should be treated with venlafaxine or a SSRI.

C. These symptoms are indicative of poor parenting skills.

D. These symptoms are normative.

E. These symptoms are indicative of sexual abuse.

Question 2

2. Which one of the following statements about children with anxiety disorders is true:

A. Children with anxiety disorders always tell their parents about their symptoms.

B. Children with anxiety disorders may not tell their parents of their symptoms because they have difficulty describing their inner states.

C. Children with anxiety disorders show little impairment despite their symptoms.

D. Children with anxiety disorders may not tell their parent of their symptoms because they usually share feelings with peers.

E. Children with anxiety disorders come from homes where there is poor parenting.

Question 3

3. **A 15-year-old presents with feelings of anxiety, restlessness, and new onset of "worrying about parents". Which one of the following statement is true?**

A. Review of ECG is imperative.

B. Review of thyroid status is imperative.

C. It is unlikely that his symptoms are due to "street drugs".

D. It is unlikely that his symptoms are due to medications.

E. Review of street and prescribed drugs should be undertaken.

Question 4

4. **A 15-year-old with a history of drug abuse presents to you. He has new onset symptoms of Panic Disorder. Which one of the following statements is true?**

A. Diazepam should be started at a dose of 10 mg tid.

B. Alprazolam should be started at a dose of 10 mg qid.

C. Lorazepam should be started at a dose of 1 mg tid.

D. If possible, SSRI's should be avoided.

E. If possible, benzodiazepines should be avoided.

Question 5

5. A 5-year-old collects Pokemon cards and keeps them in order and reviews them before he goes to sleep. He also avoids "cracks" or lines in the sidewalk. Which one of the following statements is true?

A. He is likely to have an anxiety disorder.

B. He has symptoms of early OCD.

C. His symptoms reveal his insecurities about his parents.

D. His symptoms should be treated with either clomipramine or an SSRI.

E. His symptoms are normative.

Question 6

6. **An 8-year-old boy has symptoms of fears of germs and monster drool and spends 4 hours each day washing his hands, showering, and cleaning household utensils. Which of the following statement is true:**

A. He is likely to tell his parents about his fears immediately.

B. He is very unlikely to have a second anxiety diagnosis.

C. He is likely to have learning disorders in mathematics.

D. He may have another anxiety disorder or depressive diagnosis or a learning disorder in reading.

E. He may have another anxiety disorder or depressive diagnosis or a learning disorder in mathematics.

Question 7

7. An 8-year-old boy develops symptoms of OCD and tics after the onset of a pharyngitis. Which one of the following statements is true:

A. If he has a diagnosis of PANDAS, he is likely to have symptoms develop slowly.

B. If he has a diagnosis of PANDAS, he is likely to have symptoms develop suddenly.

C. He should be checked for signs of Sydenham's Chorea.

D. It is likely that other siblings also will develop these symtpoms.

E. A quick-Strep test should be done.

Question 8

8. A 9-year-old child has severe OCD. Which one of the following statements about possible treatments is true:

A. There is no evidence for the use of clomipramine in this disorder.

B. A clinician should utilize combined treatment with clomipramine and fluoxetine.

C. A clinician should consider use of Exposure and Response Prevention and/or medication.

D. A clinician should use buspirone at doses of 5 mg tid initially since it is the safest drug to use.

E. A clinician should consider using fluoxetine starting with 20 mg hs because of the severity of the symptoms.

Anxiety: Developmental Considerations I

- Developmentally appropriate types of anxiety
  - Stranger anxiety
    - Usually first evident by ~8mos
    - Self/other ⇒ mother /other
  - Separation anxiety
    - Starts in toddler years
  - Various fears and phobias
    - Preschool, school age children
    - Dark, bodily injury / integrity, animals, performance

Anxiety: Developmental Considerations II

- Developmental progression of fears and anxiety
  - Parallels ontogenetic and phylogenetic development
    - Self/mother/other: survival
    - Separation: dependence on other, beginning autonomy
  - Parallels cognitive, language and pubertal development
    - Specific fears: knowing and naming the world
    - Somatic symptoms and adolescents' bodily changes

Anxiety: Development or Disorder?

- Impairment and distress the key distinctions
  - Particularly school attendance and performance
- Children may exhibit marked anxiety / minimal impairment
- Prevalence rates highly dependent on impairment criteria (~10x variation)
- 5-18% range in epidemiological studies
  - Typically transient
  - 80+% of adults with anxiety disorders had as children

Anxiety: Development *into* Disorder? - I

- Heritability
  - Of general predisposition, rather than of specific type
  - Heritability can operate at genetic or contextual levels
- Shyness and social phobia
  - Strongest continuity from child to adulthood
  - Behavioral inhibition (BI) to the unfamiliar (Kagan)
  - Withdrawal reactions on facing novelty,--->% dev. social anxiety as teen
  - Amygdala hypersensitivity to threat?

Anxiety: Development *into* Disorder? - II

- Separation anxiety and panic disorder
  - SAD may be marker for more heritable PD
  - SAD $\Rightarrow$ PA $\Rightarrow$ PD $\Rightarrow$ PD + Ag
  - Respiratory indices might index susceptibility
- General anxiety and depression
  - Early life experience and adverse life events
  - Stress mediation: core biological findings
  - Hippocampus GC receptors / CRH function
  - Hippocampus and amygdala (GAD) / cortex (MDD)

Anxiety: Diagnostic & Treatment Barriers

- Developmental continuum
  - All anxiety “normalized” and impairment underappreciated
- Silent suffering
  - Difficulty communicating internal states
  - Uncommonly leading to disruption
- Measurement difficulties
  - Poor consensus on instruments and definitions
  - Most instruments self-administered

Anxiety Disorders: Classification

- Generalized Anxiety Disorder
- Social Anxiety/Selective Mutism
- Separation Anxiety Disorder
- Panic Attacks / Panic Disorder
- Specific Phobias
- Post Traumatic Stress Disorder
- Obsessive Compulsive Disorder
  - >1/3 of diagnosed children meet criteria for 2+ disorders
  - MDD comorbidity on 1/3 - 2/3

Andrés Martin:

Anxiety: Assessment I

- Subjective anxiety rarely the presenting complaint
  - Physical sxs common (headaches, GI, palpitations)
    - If you don't take a temperature you can't find a fever
- History & semi-structured interview (K-SADS)
- Medical work-up
  - Low general yield (thyroid, arrhythmias, etc)
  - Consider drugs (street and prescribed)
    - SSRIs: akathisia
    - Pimozide, risperidone: school phobia and separation anx.
    - Diet pills, sympathomimetics, asthma agents (incl. steroids)

Anxiety: Assessment II

- Rating instruments
  - SCARED (Screen for Child Anxiety Related Disorders)
    - Parent and child instruments; general and subscale scores
    - I Panic/Somatic II General III Separation
      IV Social V School
  - MASC (Multidimensional Anxiety Scale for Children)
  - PARS (Pediatric Anxiety Rating Scale)
    - Clinician-administered; similar format to Y-BOCS

Anxiety: Psychosocial Treatment I

- Cognitive Behavioral Therapy (CBT)
  - Best empirical support in children and adolescents
- Four general components
  - Exposure: graded exposure & "fear hierarchy", systematic desensitization, relaxation techniques
  - Contingency management: external factor reinforcement, shaping, extinction
  - Cognitive strategies: internal factor self instruction, problem solving
  - Modeling: appropriate behavior in anxiety situation

Anxiety: Psychosocial Treatment II

- CBT Treatment Algorithm
  - Biological Psychiatry 1999; 46: 1573

Anxiety: Psychopharmacology I

- Definitive efficacy data available only in OCD
  - SER (March et al 1999, n=187), FLV (n=120), CMI (n=60)
  - FLX (n=14)
- Large DB RCT studies recently completed
  - RUPP (Research Units in Pediatric Psychopharmacology)
    - FLV in GAD, SAD, SP
    - Enrollment completed 8/1999; n=129; ages 6-17
  - Buspirone in GAD
    - Industry-sponsored; n=350; ages 6-17

Anxiety: Psychopharmacology II

- TCAs
  - SAD: 1971 report of IMI > PLA (n=35)
    - Not replicated by same group in 1992 (n=21, SAD)
  - Role in resistant or comorbid (e.g. ADHD) cases
  - Concerns over cardiotoxicity: EKG monitoring
- Benzodiazepines
  - Only open-label support; no better than PLA in DB
  - Disinhinbition: more common at low doses?
  - Clonazepam and lorazepam most commonly used

BZDs- comparisons

Drug (*sub-lingual)	(mgs) Equiv	absorption	important mtblites	1/2 life (hrs)	Dose comments/metabolism
*diazepam (valium) < min age 6 mo	10	fastest	desCH3DZ	20-100 long	high addictive potential <CYPs 3A4, 2C19>
alprazolam (xanax) min age 18 years	1	intermed	no	10-24 intermed	high abuse,rage rx <CYP 3A4 et al>
*lorazapam (ativan) min age 12 years	1.5-2	intermed	no	10-20 short	IM, glucuronidated
clonazepam (klonopin) min age not specified	0.50	slow	mod	18-60 intermed	anti-seizure<CYP 3A >+ ketoreduction/acetylation

Anxiety: Psychopharmacology III

- Selective Mutism
  - FLX>PLA (Black and Uhde; n=15, 6-11 years)

- Venlafaxine, beta blockers, MAOIs,
- Augmentation strategies
  - No data in children

Anxiety: Psychopharmacology IV

- Psychopharmacologic Treatment Algorithm
  - Biological Psychiatry 1999; 46: 1573

Childhood OCD- “Hiccup of the brain” (J Rapoport)

- Must differentiate normal developmental OC behaviors or normal rituals or normal collecting behaviors
- Prevalence in community samples: teens 1-3.6% (Apter 1996)
- Many children have “poor insight” type since they may not recognize activity or thought as senseless
- Boys have more severe or earlier onset: boys 9 years, have family member with TS or OCD; girls at 11 years (Swedo 1989, Leonard 1992)

Symptoms of childhood OCD

- Obsessive thoughts and washing some time in 85%
- Repeating rituals in 50%:need to be perfect/ just so
- Checking in 46%, (e.g., doors, windows appliances)
- Ordering, arranging and symmetry in 17%,
- Scrupulosity in 13%
- Takes 4-6 months before parents aware of sxs

Leonard 1993

Comorbidity of childhood OCD

- Sole diagnosis (26%)
- Major depression (26%)
- Anxiety disorders: simple phobia (17%), SAD (7%),GAD(16%)
- Motor tics (30%) may have younger age of onset
- Reading and language delays (24%)
- ODD (11%),
- ADHD (10%)

(Swedo 1989)

Instruments-childhood OCD

- Semistructured interviews (e.g., Anxiety Disorders Interview for Children)
- Child's Leyton Inventory (Berg 1988)
- Drug sensitive Scales :C-YBOCS, NIMH OC scale (Goodman 1992)

PANDAS- a form of PITANDS

- Some TS and OCD that begin acutely maybe from antibodies to Strep infections that attack the basal ganglia (model Sydenham's chorea)
- Lymphocyte BD 8/17 marker associated with rheumatic fever and PANDAS
- Check Strep serologic studies (anti-DNase B and ASO titers) and Strep cultures in kids who develop tics or OCD suddenly
- Consider antibiotic treatment if positive Strep cultures only (Swedo 1997, 1998)
- Immunomodulary therapy (Perlmutter 1999)

Childhood OCD-Medication

- CMI: best studied (DeVeaugh-Geiss 1992, review Leonard 1989)
- Fluvoxamine 8-17 yrs, short term DBPCT (n=120) (Riddle 1996)
- Sertraline: 6-17 yrs, short term DBPCT(n=187) (March 1998)
- Paroxetine-open study (n=20) Rosenberg 1999
- Citalopram- open study (n=27) Thomsen 1997
- Fluoxetine -retrospective (n=38) Geller 1995; open trial (n=14) Riddle 1988
- Combined SSRI and CMI (Figueroa 1998): beware drug interactions, ?best theoretical combination fluvoxamine and CMI (Oesterheld and Oster 1999): watch for serotonin syndrome

Childhood OCD-CBT

- Exposure and Response Prevention (March 1994, Scahill 1996, Franklin 1998)
- Imaginal exposure for obsessions
- Habit reversal for “just-so” phenomena
- Cognitive restructuring
- Behavioral rewards

(Piacentini 1999)

Post Lecture Exam
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Answers to Pre & Post Competency Exams

1. D
2. B
3. E
4. E
5. E
6. D
7. A
8. C