ANXIETY DISORDERS IN CHILDREN AND ADOLESCENTS

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Anxiety in children/adolescents in the primary care setting

• Some studies suggest ~ 1/4 to 1/3 of children/adolescents presenting in their primary care physician’s office either have a significant anxiety disorder or their chief complaint is significantly affected by their anxiety
Slowly he would cruise the neighborhood, waiting for that occasional careless child who confused him with another vendor.
"Relax, Worthington. ... As the warm, moist air from the jungle enters the cave, the cool, denser air inside forces it to rise—resulting in turbulence that sounds not unlike heavy breathing."
FEAR

VS

ANXIETY
ANXIETY DISORDERS IN CHILDREN AND ADOLESCENTS

• Phobia – Specific anxiety with avoidance
• Anticipatory distress/episodic panic – panic disorder, agoraphobia, separation anxiety disorder, social anxiety disorder
• Chronic, generalized – generalized anxiety disorder
• PTSD- exposure to traumatic event with intense fear and helplessness
• OCD – obsessions/ compulsions
ETIOLOGY?

• Genetic loading
• hardwired for “fight or flight response gone awry”
• Conditioned response and effects of environment
• Avoidance worsens anxiety/exposure to habituation lessons anxiety
Diagnosis of Anxiety Disorders in the Primary Care Setting

- Schedule enough time for the evaluation
- Use questionnaires filled out by parents prior to your assessment to obtain relevant information in an efficient user friendly manner
- Use standardized questionnaires for evaluating children/adolescents to efficiently and thoroughly assess anxiety in a displaced manner (general – Child Behavior Checklist, specific for anxiety- Scared inventory, Leyton obsessional inventory etc)
Diagnosis of Anxiety Disorders in the Primary Care setting

• Try to see parents and child/adolescent both separately and together
• Realize that comorbidity is common in Anxiety Disorders and most people have more than one
• Be flexible as treatment evolves in changing your working diagnosis as appropriate
Treatment of choice for Anxiety Disorders in Children/Adolescents

Education

CBT and Family Therapy

Medication if needed
Cognitive Behavioral Therapy of Anxiety Disorders - Part 1

- Education
- Calming down your body
- Being a good detective, recognizing your worries and talking back to them
- Practicing strategies when relaxed so that they can be used when you are anxious
- Being rewarded
Cognitive Behavioral Therapy of Anxiety Disorders - Part 2

- Understanding the paradox of Anxiety Disorders
- Avoiding anxiety in the short run feels better immediately but worsens anxiety in the long run
- Confronting anxiety in the short run feels worse immediately but improves anxiety in the long run
- Confronting anxiety in a graded manner until you habituate after a therapeutic alliance is formed with the use of a 1-10 feeling thermometer with the child/adolescent in control
When using medication in conjunction with CBT to treat Anxiety Disorders in kids...

- Obtain informed consent before beginning
- Assess symptoms clinically as well as with the use of standardized questionnaires
- Schedule frequent follow-up appointments with enough time to provide realistic hope, reframe side effects as “temporary” and “the medication getting into peoples system and beginning to take effect”.
- Start low and increase slowly secondary to potential sensitivity of people with anxiety to side effect profiles, disinhibition in kids, benefits building gradually over time up until approximately 3 months and to minimize side effects
- Use adequate trial (high enough dose for long enough)
Controversies of Antidepressants in Children/Adolescents

- Good efficacy in controlled studies in treating OCD and other anxiety disorders
- Less consistent efficacy in controlled studies in treating depression
- FDA black box warning began 2004 and reanalyzed in 2012
- Largest practical issue of SSRI’s relates to disinhibition
Specific Phobia - animal, natural environment, blood-injection-injury, situational

- Prevalence 2.3-9.2%
- Slight predominance in girls for simple phobia
- Slight predominance for boys in social phobia
I'm not going to panic... There's a bee in the car, but there's nothing to fear... I'll just pull over and let it out... I'm not going to panic...
JS is a 9-year-old girl referred to me secondary to anxiety and potential depressive symptoms.

- She was deathly afraid of dogs.
- She would run to the other side of the street if a dog approached her.
- She would cry and cling to her mother or father if she thought that she would be by a dog.
- She had no previous traumas with dogs.
Specific Phobia Treatment

Psychoeducation

Cognitive Behavioral Therapy and occasionally medications
JS therapy

- Educating JS and her family about Anxiety and treatment
- Building a rapport and helping JS recognize her worries
- Teaching JS progressive muscle relaxation and diaphragmatic breathing
- Giving JS and her family a feeling thermometer
- Having her family reinforce/reward her facing her anxiety
- Gradually exposing JS in my office first in imagination and then directly to a dog until she habituated
Separation Anxiety Disorder
Separation Anxiety Disorder

- Excessive Fear and avoidance about separation from parents/attachment figures is persistent
  - Greater than 4 weeks
  - Causes clinically significant distress or impairment
Separation Anxiety Disorder

ASSOCIATED SYMPTOMS

• Recurrent excessive distress when anticipating separation
• Persistent and excessive worries about losing parent or harm coming to them
• Reluctance or refusal to go out, away from home to school or work
• Repeated nightmares with separation themes
• Refusal or reluctance to sleep away from home or to go to sleep without being near a parent
• Repeated complaints of physical symptoms when separation from parents occurs or is anticipated
Separation Anxiety Disorder

SEPARATION ANXIETY DISORDER

- Peak onset 11 years old
- Prevalence 3.5 – 5.4 %
- Often follows illness or loss
- “Contagion” family anxiety
RB is an 9-year-old boy referred to me by his primary care doctor

- He had a long history of being mildly anxious when separated from his mother.
- He had difficulty going to sleep by himself at night.
- After returning from a summer vacation and having an illness he presented with severe separation anxiety such that he would refuse to go to school and cling to his mother.
- He would try to get out of a moving car to avoid going to school.
- Once at school he needed to be manually separated from his mother or father by the principal and then was briefly distraught and tearful but after a few minutes calmed down and took part in school.
- At home in addition to being anxious he was very angry, irritable and oppositional when asked to do anything by his parents.
Separation Anxiety Disorder

TREATMENT

• Must attend school
• Psychoeducation and cognitive behavioral therapy individually and in the family
• In some cases, medication (SSRI’s, SNRI’s, TCA’s and benzodiazepines)
RB treatment

- RB’s parents were extremely anxious and needed a great deal of support and reassurance so that they could encourage RB to confront his anxiety
- RB reluctantly tried CBT strategies with gradual success
- Consultation and collaboration with the school, principal and teacher was paramount to success
- RB responded positively to therapy but because of the severity of his anxiety, sertraline 12.5 mg was added and dosage was increased every 2 weeks until he was at 37-1/2 mg
Social Anxiety Disorder

- Marked fear of one or more social situations in which the individual is exposed to possible scrutiny by others
- The individual fears that they will act in a way or show anxiety symptoms that will be negatively evaluated.
- The social situations are avoided or endured with intense anxiety
- The fear or anxiety is out of proportion to the actual threat
- The fear/anxiety or avoidance is persistent, > 6 months
- The fear/anxiety causes significant impairment socially/occupationally or in other areas
Social Anxiety Disorder

- Prevalence: 3 to 13%
- Onset typically in midteens sometimes emerging out of a child and history of social inhibition/shyness.
TL is a 15-year-old young woman referred to me because of anxiety

• She had a long history of being shy.
• From an early age she did not like to order her own food at a restaurant.
• She had a few close friends but in groups was very uncomfortable.
• Despite knowing the answers in class, she never raised her hand to answer a question.
• She avoided/refused presentations in front of the class at school.
• She avoided/refused calling people on or answering the phone.
Social Anxiety Disorder - treatment

- Psychoeducational/cognitive behavioral therapy
- In some cases, medication (SSRIs, SNRIs, benzodiazepines)
TL treatment.

- TL was extremely motivated in overcoming her anxiety.
- TL and her family were educated and with help developed a hierarchy of anxiety provoking situations to confront and with practice within the office setting and family support succeeded.
- She saw me for 8 weekly sessions, 2 sessions every other week sessions and then in 1 month and therapy was terminated as she was doing well.
And then Al realized his problems were much bigger than just a smashed truck.
Panic Disorder

WITH OR WITHOUT AGORAPHOBIA
Panic Disorder

- Recurrent unexpected panic attacks
- A panic attack is an abrupt surge of intense fear/discomfort that peaks within minutes with at least 4 of the following symptoms:
Panic Attacks (symptoms)

- Palpitations
- Sweating
- Shaking
- Shortness of breath
- Feeling of choking
- Chest pain or discomfort
- Nausea or abdominal distress
- Feeling dizzy or light headed
- Derealization or depersonalization
- Fear of losing control or going crazy
- Numbness or tingling
- Chills or hot flashes
Panic Disorder

- At least one of the attacks has been followed by
  - Persistent concern or about additional attacks and their consequences (losing control, having a heart attack, “going crazy”)
  - Significant change in behavior related to attacks (avoidance of situations that you believe might cause the panic attack)
Panic Disorder

- Prevalence ~2-3% adolescents and adults
- 0.4% children
- Female/Male ratio: 2:1
CC is a 14-year-old young man referred to me secondary to depression and anxiety.

- He described having intermittent times where his heart would race fast, he could not feel his hands and feet and he felt like he was dying.
- His parents took him to the emergency room on 6 different occasions secondary to the severity of his symptoms.
- He was evaluated by multiple physicians who found no specific body based medical issues.
- He was constantly asking his parents and others for reassurance that these episodes would not happen again.
- He gradually withdrew from being involved in multiple activities secondary to concerns that these activities might precipitate an episode.
Panic Disorder

TREATMENT

• Psychoeducation
• Cognitive Behavioral Therapy
• Medications
  – Antidepressants
    • SSRI’s
    • TCA’s
    • SNRI’s
  – Benzodiazepines
CC treatment

• CC was at first very worried that his anxiety attacks would increase and be unbearable

• He was seen in my office twice a week for 2 weeks and then weekly thereafter for 12 weeks and cognitive behavioral strategies were practiced with frequent homework assignments including practicing diaphragmatic breathing and progressive muscle relaxation, developing a feeling thermometer, being aware of his distorted thoughts when he became anxious and challenging them cognitively, realizing that his anxiety attacks were time-limited and not dangerous

• He was discharged from my practice after 14 weeks with a graduation exercise of my causing him to have an anxiety attack in my office and his utilizing strategies to handle it.
Agoraphobia
marked fear of 2 or more of the following:

• Using public transportation
• Being in open spaces
• Being in enclosed spaces
• Standing in line or being in a crowd
• Being outside of the home alone
Agoraphobia

• The individual fears or avoids these situations because escape might be difficult or needed help might not be available
• The agoraphobic situation almost always provokes anxiety
• The agoraphobic situation is almost always actively avoided, requires a companion or is endured with intense anxiety
Agoraphobia

- Prevalence: 1-2% adolescents and adults
Agoraphobia - treatment

- Psychoeducation
- Cognitive Behavioral Therapy
- Medications
  - Antidepressants
    - SSRI’s
    - TCA’s
    - SNRI’s
  - Benzodiazepines
I told you, I'm not sick! What's that? Will it hurt?

It's a tongue depressor. It won't hurt at all.
What's THAT? Will it hurt?

It's a stethoscope. It won't hurt at all.
What's THAT? Will it HURT?

It's a cattle prod. It hurts a little less than a branding iron.
LITTLE KIDS HAVE NO SENSE OF HUMOR.
Generalized Anxiety Disorder

EXCESSIVE, UNREALISTIC WORRIES (occurring more days than not) about a number of events or activities usually in relation to:

- Competence
- Approval
- Past behavior
- Future
Generalized Anxiety Disorder

EPIDEMIOLOGY

• 2.7 – 4.6 % of children and adolescents
• 1:1 male to female until adolescence, then more common in females
• 50% have another anxiety diagnosis
Generalized Anxiety Disorder

• Risk factors
  – First born
  – Small families
  – Upper SES
  – Older parents

• Family styles
  – Overly success oriented
  – “tyrannical children”
Generalized Anxiety Disorder

- > 6 months of symptoms with significant distress and/or functional impairment
- Three of the following (1 in children)
  - Restless, keyed-up
  - Easy fatigue
  - Trouble concentrating
  - Irritable
  - Muscle tension
  - Sleep disturbance
Generalized Anxiety Disorder

ASSOCIATED SYMPTOMS

• Excessive need for reassurance
• Unable to relax
• Frequent somatic complaints (headache, stomach ache)
LB is a 12-year-old girl referred secondary to worries

- She described being worried about “everything”.
- She worried about her parent’s health and well-being, her dog, natural disasters, getting an illness, grades in school, her friends, her performance in sports and she frequently thought and worried about the future planning out where she would go to college, her occupation and who her future spouse could be.
Generalized Anxiety Disorder

TREATMENT

• Therapy – individual/family psychoeducational and cognitive behavioral therapy

• Medications – SSRI’s, TCA’s, SNRI’s, BuSpar, Benzodiazepines?
Professor Gallagher and his controversial technique of simultaneously confronting the fear of heights, snakes, and the dark.
PTSD-

exposure to traumatic event

• Event involved actual or threatened death, serious injury or sexual violence
PTSD-symptoms

- Intrusive symptoms
- Avoidance
- Alterations in cognition and mood
- Arousal
RK is a 10-year-old boy referred to me because of aggressive behaviors

- He grew up in a chaotic environment and was placed in foster care and then adopted at the age of 5.
- After he became comfortable with me, he described intrusive thoughts of his biological father drunk and out of control yelling and hitting his biological mother and then hitting RK when he tried to protect his mother and siblings.
- He had significant episodes of anger dyscontrol out of context to situations.
- He had difficulties going to sleep at night and nightmares.
- He was hypervigilant and had an easy startle reflex.
Treatment of PTSD

- Cognitive Behavioral Therapy
- EMDR
- Alpha agonists- Prazosin, Catapres, Tenex
- Antidepressants
- Anticonvulsants
- etc
Obsessive Compulsive Disorder
OCD
OCD

- Obsessions – thoughts, urges or images at some point seen as intrusive and unwanted causing marked anxiety and distress
- The individual attempts to ignore, suppress or neutralize them by performing a compulsion
**OCD**

- Compulsions – repetitive behaviors or mental acts that an individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.

- The behaviors or mental acts are aimed at preventing or reducing anxiety/distress or preventing some dreaded event or situation.
Obsessive Compulsive Disorder

DIAGNOSIS

Symptoms cause marked distress, are time consuming (>1 hour/day), or interfere with life
Obsessive Compulsive Disorder

Common Obsessions

• Dirt, germs, illness
• Fear for loved ones
• Exactness or symmetry
• Religious scrupulousness
• Aggression and sex
Obsessive Compulsive Disorder

Common Compulsions

• Cleaning rituals
• Repeating actions (doing and undoing)
• Checking rituals
• Counting
• smelling
Etiology
“DON’T TOUCH ANYTHING. DON’T PICK ANYTHING OFF THE FLOOR AND EAT IT. DON’T PLAY WITH YOUR EARS. DON’T FOOL AROUND WITH BILLY MAGUIRE’S RETAINER. DON’T GRAB ANYONE’S HAIR. DON’T FORGET TO SAY PLEASE AND THANK YOU. DON’T PICK YOUR NOSE, TALK LOUD OR PLAY WITH TOO MANY TOYS. AND HAVE A WONDERFUL TIME.”
PET Scans

Normal Control

Obsessive Compulsive

Source: S.A. Rasmussen
Obsessive Compulsive Disorder

• Prevalence
  – Approximately 1% of children
  – Approximately 1 – 4% of adolescents
• OCD often goes undiagnosed
OCD Risk Factors and Comorbidity

- Boys are at greater risk for developing OCD at an earlier age than girls
- Children of a parent with OCD have a tenfold greater risk for OCD
- Children with PANDAS are more likely to develop OCD
- Most children with OCD have other coexistent psychiatric illnesses, including tic disorders or Tourette’s disorder, ADHD, major depression or another anxiety disorders
Obsessive Compulsive Disorder

Course

• Onset
  – Males, 35% develop 5-15 years old
  – Females, 20% develop 5-15 years old
• Delay before diagnosis – 7 to 8 years
• Delay before adequate treatment – another 5 to 6 years
JB is a 10-year-old girl referred to me secondary to anxiety and perfectionism

• She obsesses about her favorite TV show as well as wanting to purchase a horse.
• She spends hours studying for quizzes or exams and trying to get her projects perfect.
• She has extreme difficulties making small decisions.
• She asks her mother or father the same question multiple times even though she knows the answers to this question.
• She has difficulties answering questions specifically because she does not want to tell a lie.
Obsessive Compulsive Disorder

TREATMENT

• Psychoeducational/support
  – Explain biology, child is not crazy
  – Take away blame
  – Reassure they are not alone – reading, groups
  – Help families cope, but not give in
At the hospital for mothers whose children stepped on sidewalk cracks
Obsessive Compulsive Disorder

Treatment

• Cognitive Behavioral Therapy
  – Thought stopping, self-talk for obsessions
  – Systematic desensitization (from imagination to in vivo exposure) with response prevention
  – Work with both child and family
CBT Modifications for Children and Adolescents

- Education and explain role of psychiatrist (coach)
- Instill hope
- Separate OCD from child/adolescent (don’t let OCD push you around)
- Draw battle lines in a graded manner
- See frequently at first
- Use parent as assistant coaches
- Give frequent homework assignments
- Modify approach because of age/cognitive level (songs, games, examples)
- Tolerate anxiety until habituation occurs
JB’s treatment

- JB’s parents were interested and nonpharmacologic approaches to her OCD.
- She was seen once a week for cognitive behavioral therapy as previously described and her parents were seen every other week separately to address their anxiety and help them to follow through with homework assignments assigned to JB and her family.
- She was seen for 16 weeks and had a positive response to treatment interventions and was discharged from my practice.
Obsessive Compulsive Disorder

Pharmacological Treatment

• SSRI’s are the mainstay of treatment
• Often need higher doses for longer time compared to depression
• Augmentation with buspirone, lithium …
Obsessive Compulsive Disorder
SSRI’s in Children/Adolescents

• Positive, large, placebo controlled studies
  – Anafranil
  – Prozac
  – Zoloft
  – Luvox

• Smaller, open studies
  – Celexa
  – Lexapro
  – Remeron
  – Paxil
Obsessive Compulsive Disorder

Issues in Pharmacological Treatment

• Integration with behavioral and psychosocial treatment
• Maintenance treatment
• Discontinuation of treatment
Obsessive Compulsive Disorder

Prognosis and Course

• Exacerbations and remissions are typical
• Half of the children and adolescents with OCD are symptomatic as adults
• The high incidence of comorbid diagnoses makes treatment more difficult
Obsessive Compulsive Disorder

Summary

• Exposure with response prevention has proven efficacy and is the current recommended first-line treatment
• SSRI’s are the pharmacologic treatment of choice
• Integrated treatment which includes
• pharmacological and behavioral therapy is most effective
• 80% of patients will show at least moderate improvement using an integrated approach
Take-home points

• Anxiety Disorders are extremely common in the primary care setting
• Treatment is extremely effective and the treatment of choice in children/adolescents is either CBT alone or in combination with a SSRI
• For optimal success schedule adequate time for evaluation and follow up
• Do not be afraid to use SSRIs in children/adolescents if you do a thoughtful evaluation with appropriate monitoring making sure that CBT is also provided
When using medication in conjunction with CBT to treat Anxiety Disorders in kids…

- Obtain informed consent before beginning
- Assess symptoms clinically as well as with the use of standardized questionnaires
- Schedule frequent follow-up appointments with enough time to provide realistic hope, reframe side effects as “temporary” and “the medication getting into peoples system and beginning to take effect”.
- Start low and increase slowly secondary to potential sensitivity of people with anxiety to side effect profiles, disinhibition in kids, benefits building gradually over time up until approximately 3 months and to minimize side effects
- Use adequate trial (high enough dose for long enough)