Panic Disorder with and without Agoraphobia

• Statistics
• Although 8-12% of people have experienced at least one panic attack, only a portion of those go on to develop an anxiety disorder.
  – 2.7% (year)
  – 4.7% (life)
  – Female : male = 2:1-
    • Why?
  – Acute onset, ages 20-24
Panic Disorder - Special Populations

• Children
  – Hyperventilation
  – Cognitive development

• Elderly
  – Health focus
  – Changes in prevalence
Causes of common symptoms in primary medical settings

(Kroenke & Mangelsdorff, 1989)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Unknown</th>
<th>Organic Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Pain</td>
<td>10.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Dizziness</td>
<td>7.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Headache</td>
<td>5.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Back pain</td>
<td>3.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Numbness</td>
<td>1.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Typical clinical course of Panic Disorder with Agoraphobia

Repeated spontaneous and situationally predisposed panic attacks

Anticipatory anxiety

Avoidance Behavior / Agoraphobia

Location of previous attacks

Physical sensations of attacks

Negative reinforcement of avoidance
Panic Disorder: Causes

- Generalized biological vulnerability
  - Alarm reaction to stress

- Cues get associated with situations
  - Conditioning occurs

- Generalized psychological vulnerability
  - Anxiety about future attacks
  - Hypervigilance
  - Increase interoceptive awareness
### TABLE 5.1  Typical Situations Avoided by People with Agoraphobia

<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping malls</td>
<td>Being far from home</td>
</tr>
<tr>
<td>Cars (as driver or passenger)</td>
<td>Staying at home alone</td>
</tr>
<tr>
<td>Buses</td>
<td>Waiting in line</td>
</tr>
<tr>
<td>Trains</td>
<td>Supermarkets</td>
</tr>
<tr>
<td>Subways</td>
<td>Stores</td>
</tr>
<tr>
<td>Wide streets</td>
<td>Crowds</td>
</tr>
<tr>
<td>Tunnels</td>
<td>Planes</td>
</tr>
<tr>
<td>Restaurants</td>
<td>Elevators</td>
</tr>
<tr>
<td>Theaters</td>
<td>Escalators</td>
</tr>
</tbody>
</table>


### TABLE 5.2  Interoceptive Daily Activities Typically Avoided by People with Agoraphobia

<table>
<thead>
<tr>
<th>Activity</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running up flights of stairs</td>
<td>Getting involved in “heated” debates</td>
</tr>
<tr>
<td>Walking outside in intense heat</td>
<td></td>
</tr>
<tr>
<td>Having showers with the doors and windows closed</td>
<td>Hot, stuffy rooms</td>
</tr>
<tr>
<td>Hot, stuffy stores or shopping malls</td>
<td>Hot, stuffy cars</td>
</tr>
<tr>
<td>Walking outside in very cold weather</td>
<td>Having a sauna</td>
</tr>
<tr>
<td>Sports</td>
<td>Hiking</td>
</tr>
<tr>
<td>Aerobics</td>
<td>Drinking coffee or any caffeinated beverages</td>
</tr>
<tr>
<td>Lifting heavy objects</td>
<td>Sexual relations</td>
</tr>
<tr>
<td>Dancing</td>
<td>Watching horror movies</td>
</tr>
<tr>
<td>Eating chocolate</td>
<td>Eating heavy meals</td>
</tr>
<tr>
<td>Standing quickly from a sitting position</td>
<td>Getting angry</td>
</tr>
<tr>
<td>Watching exciting movies or sports events</td>
<td></td>
</tr>
</tbody>
</table>

Panic Disorder: Treatment

• Medications
  – Multiple systems
    • serotonergic
    • noradrenergic
    • benzodiazepine GABA
  – SSRIs (e.g., Prozac and Paxil): 60% panic free as long as they are on the drug. But….
  – High relapse rates when d/c’d
Panic Disorder: Treatment

- Psychological
  - Exposure-based
  - Reality testing
  - Relaxation
  - Breathing

- Panic Control Treatment
  - Exposure to interoceptive cues
  - Cognitive therapy
  - Relaxation/breathing

- High degree of efficacy
Specific Phobias

• φόβος, phóbos

• Clinical Description
  – Extreme and irrational fear of a specific object or situation
  – Significant impairment
  – Recognizes fears as unreasonable
  – Avoidance

What differentiates a fear from a phobia?
Specific Phobias

- **Blood-Injection-Injury Phobia**
  - Decreased heart rate and blood pressure
  - Fainting
  - Inherited vasovagal response
  - Onset = ~ 9
  - Different from other phobias
    - Stronger genetic component
Specific Phobias

- **Situational Phobia**
  - Fear of specific situations
    - Transportation, small places
  - No uncued panic attacks
  - Onset = early to mid 20s
Specific Phobias

- **Natural Environment Phobia**
  - Heights, storms, water
  - May cluster together
  - Associated with real dangers
  - Onset = ~7
Specific Phobias

- **Animal Phobia**
  - Dogs, snakes, mice
  - May be associated with real dangers
  - Onset = ~7
Barophobia—Fear of gravity.
Auroraphobia—Fear of Northern lights.
Catoptrophobia—Fear of mirrors.
Ereuthrophobia—Fear of blushing.
Chronomentrophobia—Fear of clocks.
Didaskaleinophobia—Fear of going to school.
Dendrophobia—Fear of trees.
Macrophobia—Fear of long waits.
Novercaphobia—Fear of your step-mother.
Koniophobia—Fear of dust.
Sesquipedalophobia—Fear of long words.
Pelandophobia—Fear of bald people.
Zelophobia—Fear of jealousy
Ablutophobia—Fear of washing or bathing.
Zemmiphobia—Fear of the great mole rat.
Specific Phobias: An Overview

• Statistics
  – 8.7% (year)
  – Female : Male = 4:1 (it is likely more even but males probably just don’t tell anyone or incidentally do exposure therapy on selves!)
  – Chronic course
  – Onset = 7 (median)

The Mohawk
Specific Phobias: Causes

- Inherited vulnerability
  - Biological and evolutionary

- Traumatic exposure
  - Direct conditioning

- Observational learning

- Information transmission

- Social and Gender Roles
Specific Phobias: Treatment

• Cognitive-behavior therapies
  – Exposure
    • Graduated
      – Systematic desensitization example
        » Hierarchy of exposure
          • Paired with progressive muscle relaxation
    • Structured
    • Consistent
Social Phobia/Social Anxiety Disorder

Clinical Description
– Extreme and irrational fear/shyness
– Social/performance situations
  • Writing
  • Public speaking
  • Eating
  • Sports
– Significant impairment
– Avoidance or distressed endurance
– Generalized subtype

Interesting collectivist variant: Shinkeishitsu
Social Phobia

• Statistics
  – 6.8% (year)
  – Female : male = 1.4:1.0:
    • Why is this so much closer to even?
    • Males actually seek help because of career issues.
  – Onset = adolescence
    • Peak age of 15

2nd to specific phobia
As most prevalent disorder
Social Phobia: Treatment

- Psychological
  - Group therapy
    - Social skills
  - Cognitive-behavioral treatment
    - Exposure
    - Rehearsal
    - Role-play
    - Group settings

- Medications
  - Beta blockers!
    - Heart medicine that dampens physiological cues.
  - SSRI
  - D-cycloserine
    - Designed to augment CBT (facilitates extinction of fear by modifying glutamate system)
  - High relapse rates when d/c’d
Clinical Description

– Obsessions
  • Intrusive and nonsensical
  • Thoughts, images, or urges
  • Attempts to resist or eliminate

– Compulsions
  • Thoughts or actions
  • Suppress obsessions
  • Provide relief
OCD: Obsessions

- 60% have multiple obsessions
  - Contamination
  - Aggressive impulses
  - Sexual content
  - Somatic concerns
  - Need for symmetry
OCD: Compulsions

- Four major categories
  - Checking
  - Ordering
  - Arranging
  - Washing/cleaning

- Association with obsessions
  - Aggression/sex = checking
  - Symmetry = arranging or repeating
  - Contamination and germs = washing
Hoarding Disorder

Estimates of prevalence range between 2% and 5% of the population, which is twice as high as the prevalence of OCD.

Men = women

Individuals usually begin acquiring things during their teenage years and often experience great pleasure, even euphoria, from shopping or otherwise collecting various items.

OCD tends to wax and wane, whereas hoarding behavior can begin early in life and get worse with each passing decade.
Trichotillomania and Excoriation

The urge to pull out one’s own hair from anywhere on the body, including the scalp, eyebrows, and arms, is referred to as trichotillomania.

Excoriation (skin picking disorder) is characterized by repetitive and compulsive picking of the skin, leading to tissue damage. 1-5%

Habit reversal training, show best results.
Baxter Article!

• One test question on what article is about.

• Take home message:
  – Psychological (social) therapies can actually change the functioning and structure/activity in the brain!
Obsessive-Compulsive Disorder

• Statistics
  – 1% (year)
  – Female > Male
    • Reversed in childhood
  – Chronic
  – Onset = depends
    • Male = 13 to 15
    • Female = 20 to 24

Obsessed Clip (7:30)
Obsessive-Compulsive Disorder: Causes

Similar generalized biological vulnerability

Specific psychological vulnerability
- Early life experiences and learning
- Thoughts are dangerous/unacceptable
- Thought-action fusion

Distraction temporarily reduces anxiety
- Increases frequency of thought
The Zeigarnik Effect is the tendency to experience intrusive thoughts about an objective that was once pursued and left incomplete.

The automatic system signals the conscious mind, which may be focused on new goals, that a previous activity was left incomplete.

It seems to be human nature to finish what we start and, if it is not finished, we experience dissonance.
Intrusive Thoughts Reported by Nonclinical samples without OCD

- Impulse to jump out a window
- Impulse to push someone in front of a train
- Wishing a person would die
- “If I say goodbye to someone, they will die”
- Catch a disease from a public pool / toilet seat, etc.
- My hands are too dirty
- Idea of swearing at my boss
- Thoughts of blurting out something in church
- Think I forgot to lock the house, turn off the iron, etc.
OCD: Treatment

Medications

- **SSRIs**
  - 60% benefit

- **Psychosurgery (cingulotomy)**
  - Cingulate bundle lesion
  - 30% benefit

- High relapse when d/c’d
OCD: Treatment

- **Cognitive-behavioral therapy**
  - Exposure
  - Response prevention
  - Reality testing

- Highly effective
  - 86% benefit

- No added benefit from combined treatment
  - Article: UCLA OCD Study
    - Metabolism changed the same way for both!
Post Traumatic Stress Disorder (PTSD)

Clinical description
Trauma exposure
Extreme fear, helplessness, or horror
Continued re-experiencing (e.g., memories, nightmares, flashbacks)
Avoidance
Emotional numbing
Reckless or self-destructive behavior
Interpersonal problems
Dysfunction
One month

### Posttraumatic Stress Disorder (PTSD)

**Subtypes**
- **Acute**
- **Chronic**
- **Delayed onset**
- **Acute stress disorder**

<table>
<thead>
<tr>
<th>TABLE 5.8</th>
<th>Posttraumatic stress disorder (PTSD) risk associated with specific traumas*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditional Risk of PTSD across Specific Traumas, % PTSD (SE)</td>
<td></td>
</tr>
<tr>
<td>Assaultive violence</td>
<td>20.9 (3.4)</td>
</tr>
<tr>
<td>Military combat</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Rape</td>
<td>49.0 (12.2)</td>
</tr>
<tr>
<td>Held captive/tortured/kidnapped</td>
<td>53.8 (23.4)</td>
</tr>
<tr>
<td>Shot/stabbed</td>
<td>15.4 (13.7)</td>
</tr>
<tr>
<td>Sexual assault other than rape</td>
<td>23.7 (10.8)</td>
</tr>
<tr>
<td>Mugged/threatened with weapon</td>
<td>8.0 (3.7)</td>
</tr>
<tr>
<td>Badly beaten up</td>
<td>31.9 (8.6)</td>
</tr>
<tr>
<td>Other injury or shock</td>
<td>6.1 (1.4)</td>
</tr>
<tr>
<td>Serious car crash</td>
<td>2.3 (1.3)</td>
</tr>
<tr>
<td>Other serious accident</td>
<td>16.8 (6.2)</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>3.8 (3.0)</td>
</tr>
<tr>
<td>Life-threatening illness</td>
<td>1.1 (0.9)</td>
</tr>
<tr>
<td>Child’s life-threatening illness</td>
<td>10.4 (9.8)</td>
</tr>
<tr>
<td>Witnessed killing/serious injury</td>
<td>7.3 (2.5)</td>
</tr>
<tr>
<td>Discovering dead body</td>
<td>0.2 (0.2)</td>
</tr>
<tr>
<td>Learning about others</td>
<td>2.2 (0.7)</td>
</tr>
<tr>
<td>Close relative raped</td>
<td>3.6 (1.7)</td>
</tr>
<tr>
<td>Close relative attacked</td>
<td>4.6 (2.9)</td>
</tr>
<tr>
<td>Close relative car crash</td>
<td>0.9 (0.5)</td>
</tr>
<tr>
<td>Close relative other accident</td>
<td>0.4 (0.4)</td>
</tr>
<tr>
<td>Sudden unexpected death</td>
<td>14.3 (2.6)</td>
</tr>
<tr>
<td>Any trauma</td>
<td>9.2 (1.0)</td>
</tr>
</tbody>
</table>

*Labels of traumas are abbreviated.*
Posttraumatic Stress Disorder (PTSD)

- **Statistics**
  - 6.8% (life); 3.5% (year)
  - Prevalence varies
    - Type of trauma
    - Proximity

- **Most Common Traumas** (close exposure)
  - Sexual assault
  - Accidents
  - Combat
PTSD: Causes

- Trauma intensity

- Why doesn’t everybody who has the same trauma get it?

- **Generalized biological vulnerability** (only some genetic component here)
  - Twin studies
  - *Reciprocal gene-environment interactions*

- **Generalized psychological vulnerability**
  - Uncontrollability and unpredictability

- Social support
PTSD: Causes

• Neurobiological model

  – Threatening cues activate CRF system

  – CRF system activates fear and anxiety areas
    • Locus cereleus
    • Amygdala (central nucleus)

  – Increased HPA axis activation
    • cortisol
PTSD: Causes

- Experience of trauma
- True alarm (or alternative intense basic emotions, such as anger, distress)
- Learned alarm (or strong, mixed emotions)
- Anxious apprehension (focused on reexperienced emotions)
- Avoidance or numbing of emotional response
- Moderated by social support and ability to cope

Post-traumatic stress disorder
PTSD: Treatment

• Medications
  – SSRIs

• Cognitive-behavioral treatment
  • Exposure
  • Imaginal
  • Graduated or massed

  – Increase positive coping skills
  – Increase social support

  – Highly effective