POST-TRAUMATIC STRESS DISORDER
Comorbidity and Treatment

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Major Teaching Points

• PTSD develops in a substantial minority of individuals exposed to severe trauma

• PTSD is highly comorbid with other psychiatric disorders

• SSRI medications have FDA approval for PTSD and efficacy for some PTSD subpopulations

• Other antidepressants, mood stabilizers and new generation antipsychotic medications have a role in treating some PTSD cases

• Psychotherapy is an important intervention for PTSD
Pre-Lecture Exam
Question 1

True or False:

1. The prevalence of PTSD is higher in women than men.
Question 2

True or False:

2. Combat-related PTSD is not responsive to treatment.
Question 3

1. Pharmacological agents that have evidence for efficacy in PTSD include all but which of the following:

A. SSRI’s
B. TCA’s
C. MAOI’s
D. Benzodiazepines
E. Anticonvulsants
Question 4

1. The psychosocial PTSD treatment with the strongest evidence for efficacy is:
   
   A. EDMR
   B. Breathing relaxation
   C. Exposure
   D. Thought-stopping
Overview

I. Epidemiology
II. Diagnosis
III. Psychiatric Comorbidity
IV. Treatment
Post-Traumatic Stress Disorder (PTSD)

Lifetime prevalence in community of 1% to 14%, recent estimates from NCS of 7-8%

PTSD is associated with sexual abuse, physical assault, military combat, torture, accidental trauma, natural or man-made disasters, diagnosis of threatening illness

American Psychiatric Association, 1994
Kessler et al., '95, 05
POST-TRAUMATIC STRESS DISORDER

A characteristic set of symptoms following exposure to extreme traumatic stress

1. experience, witness, or confronted with actual or threatened death or injury

2. Response involves intense fear, helplessness, or horror

Duration more than one month

Significant functional impairment
POST-TRAUMATIC STRESS DISORDER

Experiencing symptoms (1 necessary)

1. intrusive recollections
2. trauma-related nightmares
3. flashbacks
4. psychological distress with reminders
5. physiologic reactivity with reminders
POST-TRAUMATIC STRESS DISORDER

Avoidance symptoms (3 necessary)

1. avoid thoughts/feelings/conversations
2. avoid activities, places, people
3. inability to remember
4. diminished interest
5. feelings of detachment
6. restricted affect
7. foreshortened future
POST-TRAUMATIC STRESS DISORDER

Arousal symptoms (2 necessary)

1. impaired sleep initiation/maintenance
2. irritability
3. concentration
4. hypervigilance
5. exaggerated startle
PTSD

Associated Features

1. Alcohol/drug problems
2. Aggression/violence
3. Suicidal ideation, intent, attempts
4. Dissociation
5. Distancing
6. Problems at work
7. Marital problems
8. Homelessness
## Lifetime Prevalence of DSM-III-R Major Psychiatric Disorders
### NCS Data

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mood Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Major depressive episode</td>
<td>17.1%</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>6.4%</td>
</tr>
<tr>
<td>Manic episode</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Anxiety Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Social phobia</td>
<td>13.3%</td>
</tr>
<tr>
<td>Simple phobia</td>
<td>11.3%</td>
</tr>
<tr>
<td>PTSD</td>
<td>7.8%</td>
</tr>
<tr>
<td>Agoraphobia without panic</td>
<td>5.3%</td>
</tr>
<tr>
<td>GAD</td>
<td>5.1%</td>
</tr>
<tr>
<td>Panic disorder</td>
<td>3.5%</td>
</tr>
<tr>
<td><strong>Substance Use Disorders</strong></td>
<td></td>
</tr>
<tr>
<td>Alcohol abuse/dependence</td>
<td>23.5%</td>
</tr>
<tr>
<td>Drug abuse/dependence</td>
<td>11.9%</td>
</tr>
</tbody>
</table>

Adapted from: Kessler et al. Arch Gen Psychiatry. 1994;51:8–19.  
Lifetime Prevalence of PTSD

5. About 30% of people exposed to trauma developed PTSD

PTSD
Risk Factors for PTSD

Severity of trauma (ie, threat, duration, injury, loss)
Prior trauma
Gender
Prior mood and/or anxiety disorders
Family history of mood or anxiety disorders
Education
**PTSD**

Rates Related to Specific Traumas

<table>
<thead>
<tr>
<th>Trauma</th>
<th>Percentage</th>
<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td>Natural Disaster</td>
<td>65.0</td>
<td>3.7</td>
<td>5.4</td>
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<tr>
<td>Criminal Assault</td>
<td>38.8</td>
<td>1.8</td>
<td>21.3</td>
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<tr>
<td>Combat</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rape</td>
<td>45.9</td>
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</table>

PTSD
Persistence Over Time

(Untreated Group)

% Without Recovery

Years

PTSD

Function and Quality of Life
In Vietnam Veterans With and Without PTSD

## PTSD

### Psychiatric Comorbidity

<table>
<thead>
<tr>
<th>Condition</th>
<th>Men</th>
<th></th>
<th>Women</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>PTSD</td>
<td>Non-PTSD</td>
<td>PTSD</td>
<td>Non-PTSD</td>
</tr>
<tr>
<td>Depression</td>
<td>48</td>
<td>12</td>
<td>48</td>
<td>19</td>
</tr>
<tr>
<td>Mania</td>
<td>12</td>
<td>1</td>
<td>6</td>
<td>1</td>
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<td>Panic Disorder</td>
<td>7</td>
<td>2</td>
<td>13</td>
<td>4</td>
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<td>Social Phobia</td>
<td>28</td>
<td>11</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>GAD</td>
<td>17</td>
<td>3</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Alcohol Abuse/Dependency</td>
<td>52</td>
<td>34</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td>Substance Abuse/Dependency</td>
<td>34</td>
<td>15</td>
<td>27</td>
<td>8</td>
</tr>
<tr>
<td>Any Diagnosis</td>
<td>88</td>
<td>55</td>
<td>79</td>
<td>46</td>
</tr>
</tbody>
</table>

Comorbidity in PTSD
National Comorbidity Study

MEN

WOMEN

1 Other Diagnoses
2 Other Diagnoses
3 Other Diagnoses
No Other Diagnosis

1 Other Diagnoses
2 Other Diagnoses
3 Other Diagnoses
No Other Diagnosis
PTSD

Impact of Comorbid PTSD in Subjects With Other Anxiety Disorders

DIAGNOSTIC SPECTRUMS

PTSD

Depression
Psychosis
Personality Disorder
Panic Disorder
Obsessive Compulsive Disorder
Substance Use Disorders
Somatization
Dissociation
PTSD

Model Sequence of Comorbidity

PTSD  Substance Abuse  GAD  MDD  PANIC

Age 23  24  25  30

Lifetime History of Suicidal Attempts by Anxiety Disorder

General US population lifetime rates of suicide attempts range from 2.9% to 4.6%.

Disability Weights (Rating Scale)

Sanderson K and Andrews G, Australian and New Zealand Jnl of Psych 2001
PTSD: Unmet Medical Need

Few Are Treated

% Lifetime Prevalence

Depression 18
Social phobia 14
PTSD 12
GAD 10
Panic disorder 8
OCD 6

% untreated 50% 90% 75% 80% 50% 30%
PTSD

Treatment Options

Psychotherapy
Pharmacotherapy
Multimodal treatment
PTSD
Impact of Treatment on Recovery

Median Months to Recovery

(N = 459)

Treated

Untreated

PTSD
Considerations for Psychotherapy

1. Capacity to tolerate distress with exposure
2. Motivation/preference
3. Ability to participate and follow structure
4. Problems with interpersonal adjustment
# ANXIETY MANAGEMENT TREATMENT/COMBINATIONS*

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Comparison</th>
<th>Results</th>
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<tr>
<td>Resick et al., 1988</td>
<td>Female rape victims</td>
<td>WL vs SIT vs supportive vs assertion training</td>
<td>All active treatments superior to PBO</td>
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<tr>
<td>Resick &amp; Schnicke, 1992</td>
<td>19 rape victims</td>
<td>Combined vs WL</td>
<td>Combined superior to wait list</td>
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<tr>
<td>Foa et al., 1995</td>
<td>Women rape victims</td>
<td>E vs SIT vs combined</td>
<td>All 3 effective</td>
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<tr>
<td>Marks et al., 1998</td>
<td>87 civilian trauma victims</td>
<td>Relaxation vs SIT vs cognitive restructuring vs combination</td>
<td>All superior to relaxation</td>
</tr>
</tbody>
</table>

*Combined = exposure + anxiety management techniques
<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Comparison</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boudewyns et al., 1993</td>
<td>Veterans</td>
<td>EMDR vs E vs milieu</td>
<td>All negative</td>
</tr>
<tr>
<td>Pitman et al., 1996</td>
<td>17 Vietnam veterans</td>
<td>EMDR vs EMDR without eye movement</td>
<td>No difference between groups</td>
</tr>
<tr>
<td>Wilson et al., 1995</td>
<td>80 male &amp; female trauma victims</td>
<td>EMDR vs delayed treatment</td>
<td>EMDR superior</td>
</tr>
<tr>
<td>Vaughan et al., 1994</td>
<td>36 male &amp; female with PTSD</td>
<td>EMDR vs E vs muscle relaxation vs WL</td>
<td>All active treatments effective</td>
</tr>
<tr>
<td>Jensen et al., 1994</td>
<td>25 Vietnam veterans</td>
<td>EMDR vs milieu</td>
<td>No difference</td>
</tr>
<tr>
<td>Rothman, 1995</td>
<td>21 female victims</td>
<td>EMDR vs WL</td>
<td>EMDR superior</td>
</tr>
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</table>
### EXPOSURE STUDIES

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Comparison</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brom et al., 1989</td>
<td>112 males &amp; females</td>
<td>E* vs psychodynamic vs hypnosis vs WL*</td>
<td>All active treatments superior to waitlist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standard treatment vs standard treatment + E</td>
<td>Exposure group increased improvement</td>
</tr>
<tr>
<td>Cooper &amp; Clum, 1987</td>
<td>26 Vietnam veterans</td>
<td>E vs WL</td>
<td>Exposure group more improved, especially re-experiences</td>
</tr>
<tr>
<td>Keane et al., 1989</td>
<td>24 Vietnam veterans</td>
<td>E vs WL</td>
<td>Exposure improved psychologically but not physiologically or PTSD symptoms</td>
</tr>
<tr>
<td>Boudewyns et al., 1990</td>
<td>Vietnam veterans</td>
<td>E vs individual counseling</td>
<td>SIT &amp; exposure improved on all PTSD clusters</td>
</tr>
<tr>
<td>Foa et al., 1991</td>
<td>Women civilian trauma</td>
<td>Supportive vs E vs WL vs SIT*</td>
<td>*E = exposure-based treatment W L = wait list control SIT = stress inoculation training</td>
</tr>
</tbody>
</table>
PTSD

Treatment of PTSD by Exposure and/or Cognitive Restructuring

IES Scores

Follow Up

1 mo 3 mos 6 mos

Treatment

r = relaxation
c = cognitive restructuring
e = prolonged exposure
ec = e + c

PHARMACOTHERAPY

Neurobiological basis

Evidence of efficacy

What responds
PTSD
related pathology

Who responds
Type of trauma
comorbidity
gender
culture
PTSD: Neurobiological Alterations of Memory Processing

Greater physiologic reactivity to trauma-related stimuli

Selective attention to trauma stimuli

Fragmentary trauma narratives

Deficits in standard tests of verbal memory

Suggested abnormalities from structural and functional brain imaging
PTSD: Hormones and Neurotransmitters

Cortisol: reduced secretion and increased sensitivity to feedback inhibition with PTSD (Yehuda et al., 1993)

Role of noradrenergic activity in fear-enhanced learning (Cahill, 1997)

Noradrenergic and serotonergic probes stimulate panic and flashback symptoms in combat-related PTSD (Southwick et al., 1997)
PTSD: Dysregulated sleep

Subjective

- Trauma-related nightmares
- Insomnia/nonrestorative sleep

Objective (EEG findings)

- Mixed findings regarding sleep maintenance and duration
- Increased REM density/ Disrupted REM sleep continuity
- Increased motor activity

Ross et al., 1994; Mellman et al., 1997, 2002, Breslau et al., ‘04
AIMS OF PHARMACOTHERAPY

- Reduce core symptoms
- Reduce associated symptoms
- Facilitate other therapy
Medication Treatment for PTSD: Nature of the Evidence

At least 7 published RCTs supporting efficacy of SSRIs for acute Rx of PTSD

Mean N participants = 236.3 (range: 47-551)

FDA approval for sertraline (’99), paroxetine (’01)

Maintenance efficacy established for sertraline for up to 52 weeks (Davidson et al. ‘01)

Improvement in all 3 sx clusters and QOL measures, treatments safe
Medication Treatment for PTSD: Nature of the Evidence

Efficacy supported by smaller RCTs
TCAs, MAOIs, lamotrigine; adjunctive olanzapine, risperidone, prazosin

Efficacy not supported by trials
benzodiazepines

Benefits suggested in open trials
Other SSRIs, Novel APs, AEDs, trazodone, nefazodone, noradrenergic suppressor/antagonists
Medication Treatment for PTSD: Recommendations

**1st Line**
SSRIs (sertraline, paroxetine, fluoxetine)

**2nd Line**
other novel and traditional ADs; noradrenergic agents; anticonvulsant/mood stabilizers; novel AP medications

**Not recommended**
traditional APs, benzodiazepines*

Friedman et al., 2000
SEXUAL TRAUMA-RELATED PTSD

![Bar Chart]

- Fluoxetine
- Placebo

**Response Rate**

- Sexual: p=0.09
- Nonsexual: p=0.01

Davidson et al., 1997
DOES COMORBID PERSONALITY DISORDER AFFECT THE RESPONSE TO AN SSRI?

$p = 0.002$

$ns$
DOES COMORBID DEPRESSION AFFECT THE RESPONSE TO AN SSRI?

$p = 0.003$

MDD

No MDD

$ns$
PTSD Treatment With SSRIs

Open-Label Sertraline in Comorbid PTSD and Alcoholism

IES Score

Pre | Post
--- | ---

Pre | Post

Alcohol Use

Standard Drinks/Week

(n = 9)

GLOBAL SEVERITY OF PTSD
Fluoxetine vs Placebo

Davidson et al., 1997
PTSD Treatment With SSRIs

Effect of Fluoxetine in Symptom Clusters

PTSD Treatment With SSRIs

**Effect of Fluoxetine**

**Effect of Trauma Population**

![Bar chart showing comparison between Fluoxetine and Placebo for Pre and Post scores in Trauma Clinic and VA (n = 24).](chart)

*van der Kolk BA, Fisler RE. Prim Care. 1993;20:417–432.*
WHICH SYMPTOMS RESPOND TO AN SSRI?

Davidson et al., 1997
EFFECT OF FLUOXETINE ON QUALITY OF LIFE (SF36) IN PTSD: Pre- to Post-Treatment

Davidson et al., 1997

**General Health**

**Mental Health**

- **Pre**
  - FLU
  - PBO

- **Post**
  - FLU
  - PBO

**p=0.006**

**ns**
IMPROVEMENT IN DISABILITY: Fluoxetine vs Placebo

Davidson et al., 1997
# SEQUENCE OF SYMPTOM IMPROVEMENT WITH FLUOXETINE (SIP)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Week 4</th>
<th>Week 8</th>
<th>Week 12</th>
</tr>
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<tbody>
<tr>
<td>Startle</td>
<td>**</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>Concentration</td>
<td>**</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Intrusive recollections</td>
<td>**</td>
<td></td>
<td>**</td>
</tr>
<tr>
<td>Physiological symptoms</td>
<td></td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Estrangement</td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Numbing</td>
<td></td>
<td></td>
<td>*</td>
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</table>

*p<0.05  *p<0.01
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<thead>
<tr>
<th>Symptom</th>
<th>Week 2</th>
<th>Week 4</th>
<th>Week 6</th>
<th>Week 8</th>
<th>Week 10</th>
<th>Week 12</th>
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</thead>
<tbody>
<tr>
<td>Hypervigilance</td>
<td>**</td>
<td>***</td>
<td>***</td>
<td>*</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>Poor concentration</td>
<td>**</td>
<td>***</td>
<td>***</td>
<td>*</td>
<td>***</td>
<td>**</td>
</tr>
<tr>
<td>Upset by reminders</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Estrangement</td>
<td></td>
<td>**</td>
<td>**</td>
<td>*</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Anhedonia</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Avoid thoughts</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Foreshortened future</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

Davidson et al., 1997
Paroxetine in PTSD

Efficacy of paroxetine in non-combat-related PTSD

Sertraline vs Placebo in Non-Combat-related PTSD

Week

Brady et al., JAMA 2000
# ADVANTAGES AND DISADVANTAGES OF SSRIs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective on all PTSD symptoms</td>
<td>Medication interactions</td>
</tr>
<tr>
<td>Abuse-free</td>
<td>GI, sexual, activating side effects</td>
</tr>
<tr>
<td>Once daily</td>
<td>May be ineffective in some types of PTSD</td>
</tr>
</tbody>
</table>
**PTSD**

Treatment With Benzodiazepines

Effect of Alprazolam

- **Alprazolam (n = 10)**
  - Pre: 30.9
  - Post: 26.6

- **Placebo (n = 10)**
  - Pre: 30.0
  - Post: 28.8

# Advantages and Disadvantages of BZDs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute relief of non-specific anxiety</td>
<td>No evidence of efficacy for PTSD</td>
</tr>
<tr>
<td></td>
<td>Possible disinhibition</td>
</tr>
<tr>
<td></td>
<td>Possible dependence</td>
</tr>
</tbody>
</table>

- **Advantages**: Acute relief of non-specific anxiety.
- **Disadvantages**: No evidence of efficacy for PTSD, Possible disinhibition, Possible dependence.
**PTSD**

Treatment With Tricyclics

Studies Comparing Amitriptyline and Imipramine With Placebo

- **Amitriptyline**
  - Placebo
  - % Responders
  - n = 22
  - n = 18
  - 47
  - 19

- **Imipramine**
  - Placebo
  - % Responders
  - n = 23
  - n = 18
  - 65
  - 28

Davidson J et al. *Arch Gen Psychiatry* 1990;47:259-266.

### ADVANTAGES AND DISADVANTAGES OF TCAs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective in PTSD</td>
<td>Numerous side effects</td>
</tr>
<tr>
<td>Abuse-free</td>
<td>Poorly tolerated</td>
</tr>
<tr>
<td>Once daily</td>
<td>Dangerous in overdose</td>
</tr>
<tr>
<td>Hypnotic effects</td>
<td>Wide dose range</td>
</tr>
</tbody>
</table>
**PTSD**

**Treatment With MAOIs**

Studies Comparing Phenelzine and Brofaromine With Placebo

<table>
<thead>
<tr>
<th>Drug</th>
<th>Placebo</th>
<th>Phenelzine</th>
<th>Brofaromine</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Responders</td>
<td></td>
<td>68</td>
<td>28</td>
</tr>
<tr>
<td>n</td>
<td>19</td>
<td>18</td>
<td>55</td>
</tr>
<tr>
<td>n</td>
<td>55</td>
<td>39</td>
<td>58</td>
</tr>
<tr>
<td>n</td>
<td>22</td>
<td>26</td>
<td>23</td>
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ADVANTAGES AND DISADVANTAGES OF MAOIs

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective in PTSD</td>
<td>Numerous side effects</td>
</tr>
<tr>
<td>May be particularly useful in complex cases</td>
<td>Poor tolerance</td>
</tr>
<tr>
<td></td>
<td>Dietary &amp; other restrictions</td>
</tr>
<tr>
<td></td>
<td>Dangerous in overdose</td>
</tr>
</tbody>
</table>
Antipsychotic Medications

• **Olanzapine**
  – Adjunct efficacy, ? primarily related to sleep weight gain (Stein et al., AmJ Psych, 2002)

• **Preliminary support also for risperidone as add on Rx** (Leyba ’98 Psych Serv)

• **Traditional Antipsychotic medications “not recommended”**
  – (Friedman et al. ISTSS Treatment Guidelines, 2000)
Mood Stabilizers

• Carbamazepine
  – Open clinical trial: decreased intrusions, flashbacks, insomnia, irritability, impulsivity, and violent behavior (Lipper et al., Psychosomatics, 1986)

• Valproic acid
  – Open trial: decreased hyperarousal and avoidance (Stein, J Clin Psych, 1995)

• Lamotrigine
  – Small controlled trial: decreased re-experiencing, numbing and avoidance (Hertzberg et al., Biol Psychiatry, 1999)
Medication Treatments for Traumatic Nightmares  
(No treatments are FDA approved for indication)

Prazosin (controlled trial)¹

Cyproheptadine — (positive results, open label; pilot placebo-controlled study, negative)²,³

Trazodone⁴

Nefazodone — (changes in qualitative features of dream recall)⁵

Clonidine/guanfacine — (have been used in children)⁶,⁷

Novel antipsychotics (adjunct use improves sleep)⁸

⁴ Ashford, Miller. 1996.
⁸ Stein MB et al., Am J Psychiatry. 2002; 159:1777-1779
Summary

1. PTSD is common
   Usually chronic
   Presentations vary
   Comorbidity is the rule

2. Comprehensive assessment of patients is critical to develop an individualized treatment plan

3. Treatment often involves multiple modalities
CONCLUSIONS

PTSD prevalent and *treatable* disorder

CBT effective

Antidepressant agents effective

SSRI, MAOI, TCA

Combined CBT & pharmacotherapy trial needed
PTSD: Unmet Medical Need

Few Are Treated

% Lifetime Prevalence

Untreated
Treated

% untreated
50%
90%
75%
80%
50%
30%

Depression
Social phobia
PTSD
GAD
Panic disorder
OCD
Post Lecture Exam
Question 1

True or False:

1. The prevalence of PTSD is higher in women than men.
Question 2

True or False:

2. Combat-related PTSD is not responsive to treatment.
Question 3

1. Pharmacological agents with proven efficacy in PTSD include all but which of the following:

A. SSRI’s
B. TCA’s
C. MAOI’s
D. Benzodiazepines
E. Anticonvulsants
Question 4

1. The psychosocial PTSD treatment with the strongest evidence for efficacy is:

A. EDMR
B. Breathing relaxation
C. Exposure
D. Thought-stopping
Answers to Pre & Post Competency Exams

1. True
2. False
3. D
4. C