

Posttraumatic Stress Disorder: Review Questions

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QUESTIONS

Choose the single best answer for each question.

Questions 1 through 3 refer to the following case study.

A 20-year-old female college student was raped 10 days ago. Since the rape, she has experienced high levels of anxiety, persistent and vivid nightmares about the rape, and a reluctance to leave her home. She has stopped attending her classes and has lost interest in many of the activities she once enjoyed. She startles at even the slightest noise and alternates between feelings of irritability and numbness. Often, she feels like she is "in a daze." She reports difficulty in talking about the rape, stating that she honestly cannot remember much of what happened.

- 1. Which of the following disorders is she most likely experiencing?**
 - A) Acute stress disorder
 - B) Adjustment disorder with mixed emotional features
 - C) Bipolar II disorder
 - D) Major depression
 - E) Posttraumatic stress disorder (PTSD)
- 2. If this patient continued to experience these symptoms 6 months after the rape, which of the following treatments would be considered optimal?**
 - A) Cognitive behavioral therapy alone
 - B) Cognitive behavioral therapy in combination with an antidepressant
 - C) Trauma-focused psychodynamic therapy alone
 - D) Trauma-focused psychodynamic therapy in combination with an anxiolytic
 - E) An antidepressant in combination with an anxiolytic
- 3. If a medication is deemed necessary, which of the following would be a first-line choice?**
 - A) Alprazolam
 - B) Bupropion
 - C) Buspirone
 - D) Lithium
 - E) Sertraline
- 4. Brain magnetic resonance imaging studies of patients with PTSD have revealed atrophy in which of the following areas of the brain?**
 - A) Amygdala
 - B) Frontal lobes
 - C) Hippocampus
 - D) Hypothalamus
 - E) Reticular formation

(turn page for answers)

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EXPLANATION OF ANSWERS

1. **(A) Acute Stress Disorder.** Acute stress disorder (ASD) is characterized by a constellation of symptoms that occur in the acute aftermath of a trauma, such as the rape experienced by this young woman. A traumatic event is described in the *DSM-IV-TR* as one in which “the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.”¹ The patient’s response to the traumatic event involves “intense fear, helplessness, or horror.” Following the traumatic event, patients typically experience symptoms of dissociation (eg, numbing, detachment, or absent emotional responsiveness), persistent re-experiencing of the trauma (eg, flashbacks, nightmares), avoidance of stimuli that arouse recollections of the trauma, and marked symptoms of anxiety and hyperarousal. ASD can occur at any time, up to a month following the traumatic event. After a month, patients who experience these symptoms are diagnosed as having post-traumatic stress disorder (PTSD).

One might be tempted to diagnose her with adjustment disorder, but the stress of a rape is one that is considered extreme. The adjustment disorder diagnosis could be assigned if she had the same symptoms from a lesser stress, such as losing a job, or if the rape evoked distressing symptoms but not ones of sufficient severity to meet the criteria for ASD.

This patient is at high risk for developing a depressive episode but does not meet the criteria of major depression at this time, since her symptoms began only 10 days ago. Approximately 50% of patients with PTSD will develop major depression.

2. **(B) Cognitive behavioral therapy in combination with an antidepressant.** The most extensively investigated psychosocial therapies for PTSD are the cognitive behavioral and behavioral therapies. These treatments are a mainstay for treatment of PTSD. Many other types of psychosocial therapies have also proved to be useful, including trauma-focused psychodynamic therapy, hypnosis, eye-movement desensitization reprocessing, and relaxation therapies. Psychotherapy is an important component in the treatment of most people who suffer from PTSD.

A variety of medications have also been tried for patients with PTSD. In controlled trials, the tricyclic antidepressants, monoamine oxidase inhibitors, and selective serotonin reuptake inhibitors (SSRIs) have all proved to have efficacy in reducing symptoms of PTSD. Anxiolytics such as the benzodi-

azepines have not proven to be as helpful in controlled trials. A significant number of patients with PTSD do not achieve full remission with either medication or psychotherapy alone, so the combination of treatments is recommended.

3. **(E) Sertraline.** Sertraline is an SSRI indicated for the treatment of PTSD. Research evaluating individuals with PTSD has demonstrated that sertraline is significantly more effective than placebo in reducing the PTSD symptoms of avoidance/numbing and increased arousal.² Alprazolam may be helpful in reducing symptoms of overall anxiety, but like most benzodiazepines, it is best used on a short-term basis. There is no solid research supporting the role of benzodiazepines as a first-line treatment of PTSD. Bupropion is an antidepressant that tends to be highly activating and can actually increase anxiety in patients. It is generally avoided as a first-line choice for patients with anxiety disorders. Buspirone, a non-benzodiazepine anxiolytic, is indicated for the treatment of generalized anxiety disorder. No positive controlled trials support its use as a first-line agent, although it may be a helpful adjunct, particularly in patients with a history of substance abuse in whom benzodiazepines would be contraindicated. Lithium, a mood stabilizer, may also be helpful as an adjunctive medication for PTSD, particularly in combination with a serotonergic antidepressant. It is not recommended as a first-line treatment.

4. **(C) Hippocampus.** The hippocampus is a part of the brain significant in learning, memory, and regulation of emotion. Studies of nonhuman primates have demonstrated that severe stress can decrease hippocampal neurogenesis and produce cell atrophy and death. Based on these findings, researchers have examined the brains of individuals with PTSD. Magnetic resonance imaging studies show that hippocampal volume is reduced in patients with PTSD.³

REFERENCES

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3. Bremner JD, Randall P, Vermetten E, et al: Magnetic resonance imaging-based measurement of hippocampal volume in posttraumatic stress disorder related to childhood physical and sexual abuse—a preliminary report. *Biol Psychiatry* 1997;41:23–32.