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## Posttraumatic Stress Disorder in a Young Adult Military Veteran

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A young man was referred by his Veterans Affairs (VA) primary care provider to the outpatient mental health clinic due to concerns for posttraumatic stress disorder (PTSD) and depression. He served in the military for 4 years, including a 6-month tour in Iraq. While in Iraq he worked as an assault vehicle operator and was involved in frequent foot patrols. He reported numerous traumatic experiences, including frequent receipt of incoming fire, multiple ambushes, and an explosion by an improvised explosive device (IED) that injured several fellow soldiers (see Theme 1, Fear Conditioning, in related Educational Review).<sup>1</sup>

He denied any psychiatric issues prior to his military service, but reported that since returning home “there ain’t a day that goes by that I don’t think about [these experiences].” The thoughts were highly distressing and he had frequent violent nightmares. He reported intense guilt relating to the belief that he should have detected the IED and been able to protect his colleagues. He reported a number of triggers (eg, walking down a city street; driving by a shooting range) that reminded him of his experiences in Iraq and induced panic-like symptoms (eg, fear, anxiety, racing heart, and feeling shaky). He avoided things that reminded him of these events and was reluctant to discuss his history (see Theme 1, Fear Conditioning, in related Educational Review).<sup>1</sup>

He felt numb and withdrawn from others, reported difficulty sleeping, and was always “on guard.” He startled easily and had angry outbursts. The patient was hopeless at times, but denied suicidal thoughts. He reported difficulty concentrating and had significant fluctuations in his weight. He denied mania, psychosis, or medical problems. He reported drinking more than 12 beers 2 to 3 times per week. He denied any other substance abuse history.

The patient was briefly in outpatient treatment while he was still in the military. He was prescribed a selective serotonin reuptake inhibitor (SSRI) but did not find it helpful and so

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he discontinued it. He was referred for psychotherapy but did not keep his appointments (see the last sentence of Theme 1, Fear Conditioning, in related Educational Review).<sup>1</sup>

The patient grew up in the suburb of a small city. Though the patient initially described his childhood as “great,” later data revealed a history of early traumatic experiences (see Theme 4, Epigenetic Considerations, in related Educational Review).<sup>1</sup>

## Diagnosis

Posttraumatic stress disorder requiring therapy

## What to Do Next

A. Trauma-focused psychotherapy

## Discussion

Trauma-focused therapies such as prolonged exposure therapy (PE) and cognitive processing therapy (CPT) have the best evidence to date in treating PTSD in military and veteran populations with 49% to 70% of patients attaining clinically meaningful symptom improvement.<sup>2</sup> Focusing on trauma-related memories or beliefs, both CPT and PE are time-limited, manualized therapies typically consisting of approximately 12 sessions. CPT focuses on reframing cognitive distortions about the trauma and providing skills for emotion regulation while PE provides patients with a graded exposure to trauma reminders and triggers in an attempt to undo a conditioned fear response (see Theme 1, Fear Conditioning, in related Educational Review)<sup>1</sup> (Audio).

The Department of Veterans Affairs and Department of Defense (VA/DoD) clinical practice guidelines recommend trauma-focused psychotherapies, including CPT and PE, as first-line treatment options for PTSD.<sup>3</sup> While trauma-focused therapies are almost universally recommended across treatment guidelines,<sup>3,4</sup> recommendations regarding other types of psychotherapy have been mixed. Non–trauma-focused psychotherapies (such as supportive psychotherapy, nondirective counseling, and psychodynamic therapy) are not as effective in treating PTSD symptoms<sup>5</sup> but may help by restoring interpersonal relationships and occupational functioning.<sup>6</sup>

Direct head-to-head comparisons of CPT and PE with pharmacotherapy for treatment of PTSD are limited. Two SSRIs, sertraline and paroxetine, are approved by the US Food and Drug Administration for the treatment of PTSD. The VA/DoD guidelines recommend SSRIs as first-line agents<sup>3</sup> while the World Health Organization recommends SSRIs only as a second-line treatment after psychotherapy or in the case of comorbid depression. An analysis of VA prescription drug records showed that pharmacologic approaches to treating PTSD are the first-line treatment in the majority of veterans, with SSRIs being the primary agents.<sup>7</sup> As with many anxiety-related disorders, the early adverse effects of increased anxiety can be marked with SSRIs in treating PTSD, so “starting low and going slow” with titration is important.

Second-generation antipsychotics are not recommended for the treatment of PTSD except in populations with comorbid psychosis. Historically, these medications have been used as an augmentation strategy for individuals with SSRI-resistant illness. However, in a recent double-blind, placebo-controlled trial, risperidone did not lead to improvements in PTSD, anxiety, or depression though patients treated with risperidone did show elevated rates of adverse effects.<sup>8</sup>

Prazosin and propranolol have been studied as a potential treatment based on the hyperadrenergic model of PTSD (see Theme 2, Dysregulated Circuits, in related Educational Review).<sup>1</sup> However, prazosin and propranolol have not been effective as primary treatment for PTSD. Prazosin is effective in reducing the frequency and intensity of nightmares in patients with PTSD and is recommended for this limited purpose.<sup>9</sup> Propranolol has been explored for preventing the original consolidation of fear learning and/or its potential to block the reconsolidation of fear memories (see Theme 3, Memory Reconsolidation, in related Educational Review).<sup>1,10</sup> While both of these ideas are active areas of investigation, neither is currently recommended.

PTSD is a heterogeneous and complex disorder. Evidence supports trauma-focused therapy as first-line treatment, but a significant portion of patients do not respond adequately and nonadherence is common.<sup>2</sup> Given these limitations, it is critical to expand our understanding of the underlying biological mechanisms that contribute to the development of PTSD in order to identify and develop more effective treatments.

## Patient Outcome

The patient's mental health fluctuated considerably over the next several years: he engaged in medication management but consistently declined to engage in trauma-focused psychotherapy. He did well when he was able to engage in recovery-oriented work activities that distanced him from the memory of his traumatic events. However, he struggled with alcohol dependence.

He eventually participated in a long-term inpatient program that focused on both alcohol dependence and offered exposure therapy for PTSD. He did well with this treatment and experienced a significant reduction in symptoms. He is currently clinically stable and sober.

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**WHAT WOULD YOU DO NEXT?**

- A. Trauma-focused psychotherapy
- B. Pharmacotherapy with risperidone
- C. Pharmacotherapy with prazosin
- D. Pharmacotherapy with propranolol