



Magellan Clinical Practice Guideline
for the Assessment and Treatment of Patients with
Posttraumatic Stress Disorder and Acute Stress Disorder

Magellan Clinical Practice Guideline Task Force

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Table of Contents

Purpose of This Document	1
Obtaining Copies of the American Psychiatric Association Guidelines	1
Provider Feedback	2
Posttraumatic Stress Disorder in Adults	3
Assessment	3
Patient and Family Education	6
Psychotherapy Treatment	7
Complementary and Alternative Treatment	10
Pharmacotherapy Treatment	11
Combined Treatments	15
Monitor Progress and Address Sub-optimal Recovery	16
References	18
Acute Stress Disorder in Adults	20
Assessment	20
Patient and Family Education	21
Supportive Interventions	22
Psychotherapy Treatment	22
Pharmacological Treatments	23
Combined Treatments	24
Monitor Progress	24
References	25

Purpose of This Document

Magellan Health Services (Magellan) has adopted the American Psychiatric Association (APA) (2004) *Clinical Practice Guideline for the Assessment and Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, the APA (2004) *Treating Patients with Acute Stress Disorder and Posttraumatic Stress Disorder: A Quick Reference Guide*, and the APA *Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, for use by providers working with Magellan members who may have these disorders. The *APA Guideline Watch* provides additional information that has become available since publication of the guideline.

The APA guidelines are research-based documents that cover psychiatric management of patients with posttraumatic stress disorder (PTSD) and acute stress disorder (ASD), including psychotherapy and pharmacotherapy, clinical features and epidemiology, and treatment planning.

The purpose of this document is to provide an introduction, as well as a summary, of recommendations from a literature review conducted after the APA guidelines were drafted, and highlights from various sources, such as the U.S. Department of Veterans Affairs / Department of Defense (2004) *Clinical Practice Guideline for the Management of Post-Traumatic Stress, Version 1.0, Module C: Management of PTSD in Mental Health Specialty Care*. The rationale for this summary, which is in table format, is to avail clinicians of evidence- and consensus-based guidance on assessment and treatment of PTSD and ASD in one location for ease of use and reference. However, clinicians also should obtain and become familiar with the adopted APA guidelines.

As with all guidelines, this document is intended to augment, not replace, sound clinical judgment. As a matter of good practice, clinically sound exceptions to this practice guideline should be noted in the member's treatment record, with documentation of the clinical reasoning for making the exception. Magellan periodically requests treatment records from providers in order to monitor compliance with clinical practice guidelines. Additionally, this guideline does not supersede Food and Drug Administration (FDA) determinations or other actions regarding withdrawal or approval of specific medications or devices, and their uses. It is the responsibility of the treating clinician to remain current on medication/device alerts and warnings that are issued by the FDA and other regulatory and professional bodies, and to incorporate such information in his or her treatment decisions.

Obtaining Copies of the APA Guidelines

Copies of the *Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, *Treating Patients with Acute Stress Disorder and Posttraumatic Stress Disorder: A Quick Reference Guide* and *Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder* may be obtained through the APA at www.appi.org by calling (800) 368-5777, or by U.S. mail at:

American Psychiatric Publishing, Inc.
1000 Wilson Blvd., Suite 1825
Arlington, VA 22209-3901

Provider Feedback

Magellan welcomes feedback on our clinical practice guidelines. All suggestions and recommendations are taken into consideration in our ongoing review of the guidelines. Questions or comments may be submitted via mail or e-mail to:

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Posttraumatic Stress Disorder in Adults: Table of Recommendations Based on Guideline and Recent Literature Review

Magellan Health Services (Magellan) has adopted the American Psychiatric Association (APA) (2004) *Clinical Practice Guideline for the Assessment and Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, the APA (2004) *Treating Patients with Acute Stress Disorder and Posttraumatic Stress Disorder: A Quick Reference Guide*, and the APA *Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, for use by providers working with Magellan members who may have these disorders. The *APA Guideline Watch* provides additional information that has become available since publication of the guideline. Key relevant recommendations from these sources are summarized here. Magellan encourages providers to familiarize themselves with this information, as well as the information in the APA guideline and Guideline Watch.

Recommendations for pharmacotherapy are presented in this review in tiers, according to the strength of clinical evidence and consensus, as noted in the APA (2004) *Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*¹ the *APA Guideline Watch (March 2009)*² and the U.S. Department of Veterans Affairs / Department of Defense (2004) *Clinical Practice Guideline for the Management of Post-Traumatic Stress, Version 1.0, Module C: Management of PTSD in Mental Health Specialty Care*.³ Where the source of a recommendation was not any of these documents, a specific reference is provided.

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS		
Procedure	Recommendations	Recommended Resources
Assessment	<ul style="list-style-type: none"> ~ The APA Guideline Watch (March 2009) indicated that factors predicting the development of Acute Stress Disorder (ASD) or Posttraumatic Stress Disorder (PTSD) have still not been established and reported that research results found that ASD was a poorer predictor of getting PTSD than just having PTSD criteria alone in the acute stage.² ~ Determine if symptoms are occurring in response to a direct personal experience of a severe traumatic event, e.g., an event that involves actual or threat of death or injury, or threat to integrity, of the patient, or the patient's witnessing actual or threatened death or injury in another, with a reaction involving intense fear, helplessness, and/or horror^{1,3} ~ Identify signs and symptoms of and/or PTSD, falling into three clusters^{1,3} <ul style="list-style-type: none"> o Persistent re-experiencing symptoms, which can include nightmares o Increased arousal symptoms, e.g., hyper-vigilance; pronounced startle response, sleep disturbance o Avoidance of stimuli associated with the event with or without poor recall of event, numbing of general responsiveness, dissociative symptoms, and/or restricted range of affect ~ Determine time of most recent traumatic event and duration of symptoms^{1,3} <ul style="list-style-type: none"> o If event occurred four weeks ago or less, and symptoms have lasted two days to four weeks, consider diagnosis of ASD. If symptoms were present prior to event, determine presence of prior traumatic event and consider PTSD or other disorder 	<p>Decision tree for differential diagnosis of Anxiety Disorders in American Psychiatric Association (2000) <i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision</i>³</p> <p>Diagnostic criteria for ASD and PTSD in American Psychiatric Association (2000) <i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision</i>³</p> <p>Breslau et. al (2005) The structure of posttraumatic stress disorder: latent class analysis in 2 community</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ○ If event occurred more than four weeks ago, and symptoms last more than four weeks, consider diagnosis of PTSD ~ Determine presence or absence of exposure to prior traumatic event(s) that could increase risk or severity of PTSD; differentiate between “simple PTSD” in which trauma consists of one or more isolated episodes (e.g., calamitous event, transportation accident, crime / assault), and “complex PTSD” in which trauma occurs repeatedly and escalates over duration (e.g., childhood abuse, prisoner of war or refugee status, human trafficking).^{1,3,4} A recent study analyzing data from two community samples revealed that emotional numbing occurred primarily in the presence of pervasive disturbance and rarely in trauma-exposed subjects with intermediate disturbance.⁵ ~ Consider military deployment status and history in the assessment process: <ul style="list-style-type: none"> ○ Data from a recent study showed that witnessing atrocities had the strongest association with mental disorders and service use. A dose-response relationship between exposure to traumatic events and PTSD suggests that the exposure to traumatic experiences during deployment – rather than deployment per se, increases the risk of mental health problems after deployment.⁶ ○ After adjusting for exposure to combat and witnessing atrocities, participation in peacekeeping operations was not associated with increased likelihood of mental health problems. Peacekeeping operations can have a variety of negative and positive aspects.⁶ ○ Ill treatment during captivity (e.g., psychological manipulations, humiliating treatment, etc.) does not seem to be substantially different from physical torture in terms of the severity of mental suffering they cause, the underlying mechanism of traumatic stress and the long-term psychological outcome.⁷ ~ Exclude other disorders that could account for symptoms^{1,3} <ul style="list-style-type: none"> ○ Substance use disorders, (e.g., substance intoxication or withdrawal) ○ Other anxiety disorder ○ Psychotic disorder, mood disorder with psychotic features, delirium 	<p>samples. <i>Arch Gen Psychiatry</i>. Dec;62(12):1343-51</p> <p>Sareen J et. al (2007) Combat and peacekeeping operations in relation to prevalence of mental disorders and perceived need for mental health care: findings from a large representative sample of military personnel. <i>Arch Gen Psychiatry</i>. Jul;64(7):843-52</p> <p>Başoğlu M, et. al (2007) Torture vs other cruel, inhuman, and degrading treatment: is the distinction real or apparent? <i>Arch Gen Psychiatry</i>. 2007 Mar;64(3):277-85</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ~ Assess for co-morbid conditions. High rates of co-morbid psychiatric and medical disorders occur in those with PTSD^{1,3} <ul style="list-style-type: none"> ○ Mood disorders ○ Substance use disorders ○ Eating disorders ○ Sleep disorders ○ Somatoform disorders ○ Personality disorders ○ Psychotic disorders ○ Physical conditions, e.g., trauma- or stress-related injury or illness (especially traumatic brain injury), infectious disease, including HIV and other sexually-transmitted disease. ~ Consider the effect of assessment interview procedures on the patient's mental status, distress level, and avoidance motivation. Adapt interview procedures accordingly and emphasize a sense of trust and safety regarding the therapeutic environment and relationship. The interviewer may defer discussion of intense anxiety-producing aspects of trauma until stabilization is achieved, unless there is a legal or other reason why specifics must be assessed immediately. ~ Normalize the distress-producing aspects of assessment and treatment.¹ ~ Assess present risk status.^{1,8} <ul style="list-style-type: none"> ○ Suicidal thought or behavior, (if present, perform suicide risk assessment)⁸ ○ Self-injurious behavior such as self-mutilation, not related to suicidal thought or intent ○ Aggressive behavior, including thoughts, plans, or intentions of harm and access to means ○ Environmental safety (i.e., risk of further exposure to trauma or danger - e.g., military duty, domestic violence, gang-related violence) ○ Nicotine Dependence (Recent analysis of data on members of the Vietnam Era Twin Registry revealed that pre-existing nicotine dependence is associated with a two-fold increased risk of PTSD when exposed to traumatic events such as combat.)⁹ 	<p>Risk assessment in <i>Magellan Clinical Practice Guideline for Assessing and Managing the Suicidal Patient</i> (2004).⁸ www.magellanhealth.com/provider</p> <p>Koenen KC et. al (2005) A twin registry study of the relationship between posttraumatic stress disorder and nicotine dependence in men. <i>Arch Gen Psychiatry</i>. Nov;62(11):1258-65</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ~ Assess current stressors - e.g., loss of loved ones, loss of property or livelihood, loss of physical functioning, legal system involvement.^{3,10} ~ Use structured clinician interview tools, such as the Clinician-Administered PTSD Scale and the Structured Interview for PTSD; and self-report instruments, such as the PTSD Checklist.⁹ These documents are available for civilian and for military personnel, are in the public domain, and may be of benefit in eliciting information that patients might hesitate to share verbally.^{1,10} ~ Assess patient resiliency, strengths, family / social supports and adaptive coping strategies.^{1,10} ~ Assess psychosocial needs (e.g., housing, employment) and other factors that, if destabilized, will reduce likelihood of treatment success.¹⁰ 	<p>U.S. Department of Veterans Affairs / Department of Defense (2004) <i>Clinical Practice Guideline for the Management of Post-Traumatic Stress Version 1.0, Module C: Management of PTSD in Mental Health Specialty Care</i>¹⁰</p>
<p>Patient and Family Education</p>	<ul style="list-style-type: none"> ~ Consider adding education and motivation enhancement components to early PTSD treatment to improves outcomes, since studies have found that patients become more motivated to change some symptoms, such as anger¹¹ and have more satisfaction and optimism about treatment.¹² ~ Education should be targeted to both the patient and the family whenever possible, and should address the disorder, common symptoms, and the range of available and effective treatments, both pharmacologic and non-pharmacologic. ~ Education also should address any co-morbid medical or psychiatric disorders, how co-morbid symptoms may affect core PTSD symptoms or be affected by them, and how the treatment plan will be adapted to address co-morbidity.¹⁰ ~ Education includes normalizing patient experiences, reducing anxiety about them, and offering hope that with time and treatment, symptoms can be overcome.¹⁰ ~ If medications are prescribed, education should address the regimen, effects and side effects, and the importance of adherence even when symptoms begin to abate.¹ ~ The tension between motivation for treatment and the symptoms of avoidance must be discussed Early, as some psychotherapies can temporarily increase subjective in-session and between-session distress, which can lead to early dropout.¹ ~ Education about the positive impact of reducing social isolation and identifying family and/or other social supports are important early in treatment. Assistance also should be provided in identifying appropriate self-help or treatment groups in which peer-to-peer assistance can be obtained, and in identifying strategies for overcoming avoidance in family or other close relationships.¹³ 	<p>Murphy et al. (2004) Readiness to change PTSD symptoms and other problems among veterans participating in a motivation enhancement group. <i>Behavior Therapist</i> 27(2):33-36¹¹</p> <p>Gray MJ et al. (2004) Enhancing patient satisfaction and increasing treatment compliance: patient education as a fundamental component of PTSD treatment. <i>Psychiatric Quarterly</i> 75(4):32-332¹²</p> <p>Jovanovic AA, et al. (2004) Family hardiness and social support as predictors of Post-traumatic Stress Disorder. <i>Psychiatry, Psychology and Law</i> 11 (2):263-268¹³</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
<p>Psychotherapy Treatments</p>	<ul style="list-style-type: none"> ~ Initial interventions should include education about the disorder, common symptoms, and the range of available and effective treatments, including pharmacologic and non-pharmacologic. Initial choice of pharmacological, psychotherapeutic, or combined treatment is determined by clinician and patient preference in light of the manifesting symptoms and any co-occurring disorders, since research does not favor any one modality as first-line treatment.^{1,10} ~ Selection of a psychotherapeutic approach should be guided by the clinical circumstances, including co-occurring disorders, patient needs and preferences, and clinician skill level. While all therapy has supportive elements, psychotherapeutic approaches for PTSD represent a continuum, from supportive-only to trauma-focused. Supportive therapy has less reliance on structured techniques, and more emphasis on addressing current life issues, increasing coping, and fostering a sense of interpersonal comfort. Trauma-focused therapies directly address the patient's traumatic experiences, memories, and PTSD symptoms.¹⁰ <p>Although techniques and approaches may differ, overarching goals of treatment for PTSD are to¹</p> <ul style="list-style-type: none"> o Reduce frequency and intensity of distressing and intrusive symptoms o Reduce symptoms of co-occurring disorders o Improve functioning in daily life o Protect against relapse o Integrate the effects of the trauma into the patient's construct of risk, safety, prevention, and protection. <p>~ APA Guideline Watch (March 2009) reported that research published since 2004 supports exposure-based cognitive-behavioral therapies such as cognitive processing therapy and prolonged exposure therapy as effective treatments for PTSD when delivered in individual formats.²</p>	
	<ul style="list-style-type: none"> ~ Cognitive Therapy (CT) <ul style="list-style-type: none"> o CT has been shown in random, controlled trials to reduce distressing, trauma-related thoughts, which, when modified, can ameliorate symptoms and improve mood and functioning. CT may be especially helpful in cases with co-occurring depression and/or anxiety disorders.^{1,10} o A recent meta-analytic review of cognitive behavioral treatments (CBT) for anxiety in adults found that cognitive therapy and exposure therapy alone, in combination, or combined with relaxation training, were efficacious across the anxiety disorders - with no differential efficacy for any treatment components for any specific diagnoses. When comparing across diagnoses, outcomes for generalized anxiety disorder and PTSD were superior to those for social anxiety disorder.¹⁴ o A recent clinical trial showed that brief early CBT accelerated recovery of acute PTSD but did not influence long-term results.¹⁵ 	<p>Norton PJ et. al (2007) A meta-analytic review of adult cognitive-behavioral treatment outcome across the anxiety disorders. <i>J Nerv Ment Dis.</i> Jun;195(6):521-31</p> <p>Sijbrandij M et. al (2007) Treatment of acute posttraumatic stress disorder with brief cognitive behavioral therapy: a</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ○ CT targets trauma-related thoughts and beliefs, e.g., survivor guilt, self-blame, worries about functioning and/or the future.¹⁰ ○ CT emphasizes patient education about the effect of thoughts on mood and functioning, and includes techniques such as recording and systematically challenging distress-producing thoughts, modifying non-adaptive core beliefs that may maintain symptoms or poor functioning, stopping dysfunctional thoughts, and learning positive self-talk.¹⁰ ○ Contraindications for CT include psychosis, severe brain injury, and severe intellectual impairment. 	<p>randomized controlled trial. <i>Am J Psychiatry.</i> Jan;164(1):82-90</p>
	<p>~ Exposure Therapy (ET)</p> <ul style="list-style-type: none"> ○ ET has been shown in random, controlled trials to reduce fear associated with traumatic experiences¹⁰ and has been recommended as a quick-acting treatment for intrusive thoughts, flashbacks, trauma-related fears, panic attacks, avoidance, and generalized anxiety in patients with PTSD.¹⁰ ○ ET has been compared with Cognitive Behavioral Therapy (CBT), which adds a behavioral component to CT. ET has performed as well or better than CBT, with some reviews finding ET superior to CBT for PTSD¹⁰. ET is frequently combined with CT with good effect.^{10,16} ○ ET consists of therapist-guided repeated exposure, either imagined or actual, to feared stimuli, including traumatic memories, activities, objects, and places.¹⁰ ○ Because ET temporarily increases distress and may aggravate symptoms in the short-term, clinicians must screen patients carefully and present a clear rationale for using ET, explore patient concerns, and build realistic expectations.¹⁰ ○ Contraindications for ET include current unsafe life circumstances, health problems that could be aggravated by physiological arousal, current suicidal ideation, active substance use disorder, co-morbid psychosis, or lack of motivation.¹⁰ ○ In treating female active duty and veterans for PTSD, prolonged exposure was more effective in reducing symptoms than present-centered therapy.¹⁷ ○ APA Guideline Watch (March 2009) noted that Virtual Reality Exposure Therapy (VRET) shows promise in the treatment of disaster workers with PTSD but that larger randomized controlled trials are needed.² <p>~ Eye Movement Desensitization and Reprocessing (EMDR)</p> <ul style="list-style-type: none"> ○ EMDR has been found to be about as effective as other modalities for reducing symptoms of PTSD, although various studies have concluded that EMDR is more effective, less effective and about the same as no treatment and as other treatments for PTSD. ○ APA Guideline Watch (March 2009) reported the results of small studies of EMDR and indicated that brief EMDR in sexual assault victims and witnesses to vehicular accidents may be efficacious for 	<p>Bisson J, Andrew M (2005) Psychological treatment of post-traumatic stress disorder. <i>Cochrane Database Systematic Review (2):CD003388</i></p> <p>Schnurr PP et. at (2007). Cognitive behavioral therapy for posttraumatic stress disorder in women: a randomized controlled trial <i>JAMA.</i> Feb 28; 297(8):820- 30.</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<p>these groups but that these findings cannot be generalized to combat veterans.²</p> <ul style="list-style-type: none"> ○ EMDR may provide relief earlier than other modalities, and may be tolerated better than ET by some patients. A contribution by the eye or other physical movements to the treatment effect has not been proven.¹⁰ ○ EMDR is contraindicated for patients with a past history of dissociative disorder.¹⁰ <p>~ Stress Inoculation Training (SIT)</p> <ul style="list-style-type: none"> ○ SIT is a form of CBT that has been shown to be effective in treating PTSD related to sexual assault, but has been less successful in treating combat veterans. ○ Trials comparing SIT with a form of ET showed that ET was superior to SIT in the long-term, although they were equally effective in the short-term.¹⁰ ○ SIT is a set of techniques that emphasizes adopting skills to reduce fear and anxiety through progressive muscle relaxation, deep abdominal breathing, positive self-talk, assertiveness, and role playing.¹⁰ <p>~ Imagery Rehearsal Therapy (IRT)</p> <ul style="list-style-type: none"> ○ IRT has been shown to reduce chronic nightmares associated with PTSD, improve sleep quality, and decrease PTSD symptom severity in victims of crime and sexual assault, and in combat veterans, although no randomized controlled trials have been done.¹⁰ ○ In IRT, patients use imagery to master the threatening content of nightmares to change the meaning, importance, and effect of the nightmare. It deemphasizes exposure by minimizing direct discussion of the trauma-related content in favor of nightmare content.¹⁰ <p>~ Psychodynamic Therapies (PT)</p> <ul style="list-style-type: none"> ○ PT may be especially useful for treatment of PTSD in patients who experienced childhood sexual abuse.¹⁰ ○ Few controlled studies on the use of PT for PTSD exist, with most data coming from case reports.¹⁰ ○ APA Guideline Watch (March 2009) argued that although controlled studies of psychodynamic psychotherapy are lacking, clinical consensus reflects the idea that a psychodynamic approach is useful in helping the patient integrate past traumatic experience(s) into a more adaptive or constructive schema of risk, safety, prevention, and protection; thereby, reducing core symptoms of PTSD.² ○ In one randomized controlled trial, psychodynamic psychotherapy was compared with hypnotherapy, desensitization, and wait list control; patients in all three treatment groups improved compared with controls with comparable reduction in intrusive symptoms and 	

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

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	<p>avoidance, and PT group patients showed improved coping ability and greater self-esteem.¹⁰</p> <ul style="list-style-type: none"> ○ One form of PT for PTSD emphasizes the effect of the traumatic experience on the patient’s self-object experiences, self-esteem, experience of safety, and loss of self-cohesiveness; another form of PT for PTSD emphasizes coping skills and defenses, and explores the meaning of the trauma in the context of existing psychological conflicts and developmental factors.¹ <p>~ Other Psychotherapies</p> <ul style="list-style-type: none"> ○ APA Guideline Watch (March 2009) reported that studies of other types of psychotherapy including group therapy, coping skills therapy, eclectic psychotherapy, psychodynamic psychotherapy, cognitive restructuring, and brainwave neurofeedback have been published. The Guideline Watch indicated that the utility and generalizability of conclusions from these studies are limited by methodological issues.² <p>~ Psychological First Aid (A Preventative Approach)</p> <ul style="list-style-type: none"> ○ APA Guideline Watch (March 2009) acknowledged that this modality is supported by considerable empirical evidence, but notes that questions remain regarding how this public health intervention should be delivered (i.e., type of format and responder). The Guideline Watch categorized this modality as evidence-informed rather than evidence-based.² 	
<p>Complementary and Alternative Treatment</p>	<p>~ Acupuncture</p> <p>A recent pilot trial indicated that acupuncture provided similar treatment effects as CBT in reducing symptoms of PTSD, anxiety and impairment in people diagnosed with DSM-IV PTSD. Effects of both treatments were maintained for three months. Study researchers note that interpretations from their findings need to be viewed with cautious optimism and that acupuncture should not be recommended as a treatment of PTSD unless further corroborative and more definitive data become available.¹⁸</p>	

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
<p>Pharmacotherapy Treatments</p>	<p>When beginning treatment of PTSD, initial interventions should include education about the disorder, common symptoms, and the range of available and effective treatments, both pharmacologic and non-pharmacologic, and elicitation of patient preferences. Initial choice of pharmacological, psychotherapeutic, or combined treatment is determined by clinician and patient choice in light of the manifesting symptoms of PTSD and any other disorders, since research does not favor any one modality as first-line treatment.^{1,10} Further, there is little definitive evidence to guide the clinician in choosing polypharmacy over monotherapy¹⁰ for amelioration of PTSD symptoms, so the choice of polypharmacy can be made in light of clinical presentation and symptoms of co-occurring psychiatric disorders.</p> <p>First Tier</p> <p>~ Serotonergic Agents (SSRIs):</p> <ul style="list-style-type: none"> o SSRIs have been widely recommended as first-line agents with clearly demonstrated efficacy in reducing PTSD global symptoms, as well as re-experiencing, avoidance/numbing, and hyperarousal^{1,10} APA Guideline Watch (March 2009) indicated that more recent research suggests that SSRIs may no longer be recommended with the same level of confidence for veterans with combat-related PTSD as for patients with non-combat related PTSD.² o APA Guideline Watch (March 2009) noted that further research is needed to answer why combat-related vs. non-combat-related populations have been shown to have differential responses to SSRI treatment.² o Patients with PTSD may have delayed response, with some not responding to an adequate trial until after the initial 12 weeks, so at least 12 weeks are recommended before changing the regimen.¹⁰ o Meta-analysis of dropout due to side effects among patients treated with SSRIs, TCAs, and MAOIs show no differences among groups.¹⁰ o Medication compliance checks are recommended (per Veterans Administration / Department of Defense dose guidelines¹⁰) for each contact with the patient¹⁰ <ul style="list-style-type: none"> o Sertraline (Zoloft) 50-200mg¹⁰ o Paroxetine (Paxil) 20-60mg¹⁰ o Fluoxetine (Prozac) 20-60mg¹⁰ o Fluvoxamine (Luvox) 50-150mg¹⁰ o Citalopram (Celexa) 20-60mg.¹⁰ <p>~ Serotonergic-Noradrenergic Agents (SN RIs)</p> <ul style="list-style-type: none"> o One randomized controlled trial found patients treated with venlafaxine ER showed significantly more improvement in PTSD than placebo for the symptoms of re-experiencing and avoidance/numbing, but not for hyperarousal (Davidson, Baldwin, 2006).¹⁹ Another randomized controlled trial found that remission rates were significantly greater with venlafaxine ER than with sertraline at weeks four and six of a 12-week course.²⁰ 	<p>Silverstone PH (2004) Qualitative review of SNRIs in anxiety. J Clinical Psychiatry 65(suppl 17): 1 7-28²⁰</p>

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

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	<p>Second Tier</p> <ul style="list-style-type: none"> ~ Tricyclic Antidepressants (TCAs) <ul style="list-style-type: none"> o Among TCAs, nortriptyline,¹⁰ amitriptyline¹ and imipramine¹ have published evidence supporting efficacy for PTSD, but other TCAs also are used. Therapeutic blood levels have not been established in the treatment of PTSD. o Meta-analysis of dropout due to side effects among patients treated with SSRIs, TCAs, and MAOIs show no differences among groups.¹⁰ o Medication compliance checks are recommended (per Veterans Administration / Department of Defense dose guidelines⁶) for each contact with the patient¹⁰ <ul style="list-style-type: none"> Nortriptyline (Pamelor) 50-150mg¹⁰ Amitriptyline (Elavil) 150-300mg¹⁰ Imipramine (Tofranil) 150-300mg¹⁰ Desipramine (Norpramine) 100-300mg¹⁰ Protriptyline (Vivactil) 30-60mg¹⁰ Clomipramine (Anafranil) 150-250mg.¹⁰ ~ Monoamine Oxidase Inhibitors (MAOIs) <ul style="list-style-type: none"> o Among MAOIs, there are data to suggest efficacy of phenelzine, moclobemide, and brofaromine (the latter two are not approved for use in the United States).¹ o In one study (n=60) on male combat veterans, phenelzine was found to be superior to the TCA Imipramine in reducing symptoms as measured on a self-report instrument.¹ o Meta-analyses of dropout due to side effects among patients treated with SSRIs, TCAs, and MAOIs show no differences among groups.¹⁰ o Medication compliance checks are recommended (per Veterans Administration / Department of Defense dose guidelines¹⁰) for each contact with the patient¹⁰ <ul style="list-style-type: none"> Phenelzine (Nardil) target 1 mg/kg¹⁰ Tranylcypromine (Parnate) target 0.7mg/kg¹⁰ Moclobemide (Manerix) [not currently available in the U.S.]^{1,10} ~ APA Guideline Watch (March 2009) summarized findings from studies that have been published since the 2004 APA Guideline, i.e., comparing nefazodone and sertraline, venlafaxine and sertraline, the SNRI reboxetine and fluvoxamine, and fluoxetine, moclobemide and tianeptine. The Guideline Watch concluded that these studies have generally demonstrated the superiority of antidepressants to placebo, but have done little to clarify the relative utility of these different antidepressants.² 	

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<p>~ Sympatholytics / alpha-adrenergic antagonists / beta-adrenergic blockers (per Veterans Administration / Department of Defense dose guidelines.¹⁰)</p> <ul style="list-style-type: none"> ○ The APA Guideline Watch (March 2009) noted that use of the alpha-adrenergic antagonist, prazosin, for the treatment of trauma-related nightmares and sleep disruption is among the most promising advances in the pharmacological treatment of PTSD as demonstrated in placebo-controlled augmentation trials.² ○ The APA Guideline Watch (March 2009) also indicated that prazosin trials allowed patients to continue maintenance medication, including SSRIs, since the primary outcome variables were related to sleep disturbance rather than daytime PTSD symptoms and recommends the following:² Effective dosage range: Prazosin 3-15 mg at night and further investigation may clarify an optimal dosage and titration for prozasin. ○ APA Guideline Watch (March 2009) specified that long-term efficacy of prazosin for this indication has not been established.² ○ A recent randomized controlled trial that compared guanfacine to placebo in veterans with chronic PTSD showed that the drug had no effect on PTSD symptoms, subjective sleep quality or general mood disturbances.²¹ ○ A study of clonidine in combination with a TCA was shown to be effective in treating PTSD with comorbid major depression and may be effective for severely depressed, traumatized patients.¹⁰ ○ Propranolol has been used to reduce stress and levels of recall of distressing memories, which can be intrusive in PTSD^{1,10} Propranolol (Inderal) 40mg.¹⁰ ○ APA Guideline Watch (2009) acknowledged the potential role for propranolol from earlier studies but reports new research findings where propranolol compared with gabapentin compared with placebo failed to demonstrate the superiority of either medication over placebo.² 	

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<p>Third Tier</p> <ul style="list-style-type: none"> ~ Benzodiazepines (per Veterans Administration / Department of Defense dose guidelines¹⁰) <ul style="list-style-type: none"> o Benzodiazepines are not recommended for monotherapy for PTSD.^{1,10} o Support for any use of benzodiazepines for treatment of PTSD is mixed, with some sources not supporting use at all¹⁰ and others supporting use for limited, early, short-term symptom relief, especially reduction in general anxiety level, hyperarousal, and sleep problems.¹ o Rebound anxiety after five weeks,^{1,10} and exacerbation of PTSD symptoms after discontinuation,¹ have been observed in studies of alprazolam <ul style="list-style-type: none"> Alprazolam (Xanax) 1.5-6mg¹⁰ Clonazepam (Klonopin) start 0.25mg <i>bid</i>, increase by 0.25mg <i>q1-2</i> days maximum 20mg¹⁰ Lorazepam (Ativan) 2-4mg¹⁰ Diazepam (Valium) 10-40mg.¹⁰ 	<p>Neylan TC et. al (2006) No improvement of posttraumatic stress disorder symptoms with guanfacine treatment <i>Am J Psychiatry.</i> Dec;163(12):2186-8</p>
	<ul style="list-style-type: none"> ~ Anticonvulsants (per Veterans Administration / Department of Defense dose guidelines¹⁰) <ul style="list-style-type: none"> o Mood stabilizers / anticonvulsants have shown some ability to treat hyper-arousal, re-experiencing and avoidance/numbing, but the quality of available evidence is not strong enough to support routine use of this class^{1,10} <ul style="list-style-type: none"> Valproate (Depakote) target 10-15mg/kg/d¹⁰ Carbamazepine (Tegretol) target 400-1600mg¹⁰ Lamotrigine (Lamictal) target 25-500mg; start 25mg <i>qod</i> x 2 weeks, then 25 mg <i>qd</i> x 2 weeks, then 25-50mg <i>qd</i> <i>q1-2</i> weeks to 400mg or as tolerated.¹⁰ ~ APA Guideline Watch (March 2009) summarized recent clinical trials (i.e., topiramate, tiagabine and divalproex compared with placebo) and noted limited efficacy of anticonvulsants despite some promising results in open label studies. The Guideline Watch noted these finding preclude any recommendations for change in practice.² ~ Second generation / atypical antipsychotics (per Veterans Administration / Department of Defense dose guidelines.¹⁰) <ul style="list-style-type: none"> o Atypical antipsychotics have not shown robust efficacy as monotherapy and there is insufficient evidence to recommend their routine use.^{1,10} o Olanzapine used to augment sertraline reduced PTSD, depressive, and sleep-related symptoms in one study.¹ o For patients with comorbid psychosis, Risperidone was used successfully in one small 	

	<p>sample,⁶ but does not appear to affect core PTSD symptoms¹</p> <p>Olanzapine (Zyprexa) 5-20mg¹⁰</p> <p>Quetiapine 300-800mg¹⁰</p> <p>Risperidone (Risperdal) 1-6mg.¹⁰</p>	
	<p>~ APA Guideline Watch (March 2009) summarized more recent research studies and reported encouraging findings for adjunctive treatment with second-generation antipsychotic in patients who have partially responded to an SSRI or an SNRI. The Guideline Watch emphasized monitoring of patients for side effects including weight gain and metabolic changes when using these agents.²</p> <p>~ First generation / typical antipsychotics (per Veterans Administration / Department of Defense dose Guidelines¹⁰)</p> <ul style="list-style-type: none"> o Chlorpromazine and thioridazine each have one case report of use in PTSD.¹⁰ There is insufficient evidence to recommend its routine use <p>~ Since publication of the adopted APA guideline, a Food and Drug Administration (FDA) Alert was issued on 6/16/08 notifying healthcare professionals that both conventional and atypical (SGA) antipsychotics are associated with an increased risk of mortality in elderly patients treated for dementia-related psychosis.</p>	<p>Accessed Web site:</p> <p>http://www.fda.gov/cder/drug/infosheets/HCP/antipsychoticsconventional.htm on April 14,2009</p>
<p>Combined Treatments</p>	<p>~ Combination treatment does not have evidence to support its use, but clinical consensus supports a combined approach.¹ One rationale is that medication can address symptoms of PTSD that would otherwise reduce the effectiveness of psychotherapy or discourage the patient from continuing any therapy.¹</p> <p>~ APA Guideline Watch (March 2009) revealed that pilot studies on the neurobiology of the traumatic stress response, emotional learning and impairment of extinction learning, suggest that psychotherapy may be facilitated by the pharmacological agent D-cycloserine (a partial agonist at the N-methyl-D-aspartate [NMDA] receptor). Published clinical trials using d-cycloserine and other pharmacological agents used to enhance psychotherapy in patients with PTSD are needed.²</p>	

POSTTRAUMATIC STRESS DISORDER (PTSD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ~ In patients with co-occurring psychiatric conditions, such as suicidal ideation, depression, or anxiety, combination treatment may be advisable for effective and timely improvement in clinical status.¹ ~ Problematic patterns of substance use, whether or not meeting threshold for a substance use disorder, should be addressed early and directly in the treatment plan, since substance use can exacerbate symptoms, complicate pharmacological treatment, reduce effectiveness of psychotherapy, and introduce new threats to well-being and recovery from PTSD. For patients with a substance use disorder, un-remitted PTSD symptoms can trigger relapse to substance use.¹ Also, in a recent clinical trial, patients diagnosed with both PTSD and alcohol dependence were treated with CBT targeting the alcoholism and either sertraline or placebo for the PTSD symptoms. Results showed that improvements in PTSD had a greater impact on improvement in alcohol dependence than the reciprocal relationship. Improvement in hyperarousal PTSD symptoms, in particular, was related to substantially improved alcohol use severity.²² ~ A stepped-care approach, in which either psychotherapy or psychopharmacology is used initially and if, after sufficient trials, acceptable remission has not been achieved, the complimentary strategy is added, This is supported by clinical consensus, although it has not been studied for PTSD.¹⁰ 	<p>Back SE et. al (2006) Symptom improvement in co-occurring PTSD and alcohol dependence. <i>J Nerv Ment Dis.</i> Sep;194(9):690-6</p>
<p>Monitor Progress and Address Sub-optimal Recovery</p>	<p>Treatment-Resistant Cases</p> <ul style="list-style-type: none"> ~ Because PTSD is a chronic disorder, patients may need to be on medication indefinitely and assessments for appropriateness of maintenance level treatment should be made periodically.¹⁰ ~ Treatment compliance may affect outcomes and should be discussed regularly with the patient, including medication side effects, reasons for non-adherence to medication and/or psychotherapy plan, and reasons for continuation of medication regimen.^{1,2,10} ~ In the natural course of treatment, there may be periods of symptom exacerbation that can discourage the patient and reduce coping and adaptation; reassurance about the nature of recovery, assistance with symptom management, and adjustments in the treatment plan (e.g., increase medication; switch from exposure modality to cognitive therapy; increase frequency of sessions) can be helpful at these points.¹⁰ ~ PTSD frequently co-occurs with other psychiatric disorders and clinical outcomes will be negatively affected if the other disorders are un-diagnosed, un-treated, or under-treated. Symptoms of co-occurring disorders may emerge and/or diminish, and new co-morbidities may develop, during the course of PTSD treatment. Co-morbid symptoms should be reassessed regularly.^{1,2} ~ Patients with PTSD may experience serious and/or chronic disruptions in social, occupational, and other life domains during the course of treatment that can impact treatment outcomes. Reassessment of psychosocial factors should be made periodically and at times of poor treatment Response.¹⁰ ~ Victims of Terror <ul style="list-style-type: none"> o A recent study compared the rehabilitation outcomes of terror victims with multiple traumas to the outcomes of patients with non-terror-related multiple traumas treated in the same facility. Victims 	<p>Schwartz I et. al (2007) Rehabilitation outcomes of terror victims with multiple traumas. <i>Arch Phys Med Rehabil.</i> Apr;88(4):440-8</p>

	<p>of terror spent longer periods in rehabilitation than the nonterror group; however, they regained most activity of daily living function similar to the non-terror group. In addition, despite the higher rate of PTSD, terror victims succeeded in returning to their previous occupations at a similar rate to that of the non-terror group.²³</p>	
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Acute Stress Disorder in Adults: Table of Recommendations Based on Guideline and Recent Literature Review

Magellan Health Services (Magellan) has adopted the American Psychiatric Association (APA) (2004) *Clinical Practice Guideline for the Assessment and Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, the APA (2004) *Treating Patients with Acute Stress Disorder and Posttraumatic Stress Disorder: A Quick Reference Guide*, and the APA *Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*, for use by providers working with Magellan members who may have these disorders. The APA Guideline Watch provides additional information that has become available since publication of the guideline.

Recommendations for pharmacotherapy are presented in this summary in tiers according to the strength of clinical evidence and consensus, as presented in both the APA (2004) *Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*¹ the APA *Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder*,² and the U.S. Department of Veterans Affairs / Department of Defense (2004) *Clinical Practice Guideline for the Management of Post-Traumatic Stress, Version 1.0, Module C: Management of PTSD in Mental Health Specialty Care*.⁴ Where the source of a recommendation was not either of these documents, a specific reference is provided.

ACUTE STRESS DISORDER (ASD) IN ADULTS		
Procedure	Recommendations	Recommended Resources
Assessment	<ul style="list-style-type: none"> ~ The Guideline Watch (March 2009): Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder reported that while early intervention studies for acute stress disorder (ASD) are currently in progress, no major research on the treatment of ASD has been completed since publication of the 2004 Guideline.² ~ The Guideline Watch (2009) indicated that factors predicting the development of ASD or posttraumatic stress disorder (PTSD) have still not been established and reported research results findings that ASD was a poorer predictor of getting PTSD than just having PTSD criteria alone in the acute stage.² ~ The rate of ASD occurring after a small- or large-scale trauma (e.g., physical/sexual assault, accident/fire, combat, terrorism- or disaster-related event) is much higher than the rate of PTSD; (e.g., as many as 90 percent of individuals who experience sexual assault have symptoms of ASD in the weeks following the event).^{1,3,4} ~ Adolescent trauma survivors have high rates of ASD. The Trauma Recovery Project in Adolescents presented findings from a prospective epidemiological study and reported a 40 percent ASD rate in adolescent survivors of serious injuries (e.g., motor vehicle crash, recreational: all-terrain vehicle/ skateboard/team sport, bicycle, intentional injuries, falls and pedestrian struck). Rates of ASD were higher in adolescent female patients versus male patients. Perceived threat to life and intentional or violence-related injury were significantly associated with ASD onset.⁵ 	<p>Diagnostic criteria for ASD and PTSD in American Psychiatric Association (2000) <i>Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision</i>³</p> <p>U.S. Department of Veterans Affairs / Department of Defense (2004) <i>Clinical Practice Guideline for the Management of Post-Traumatic Stress Version 1.0, Module C</i></p> <p>Holbrook TL et. al (2005) <i>High Rates of Acute Stress Disorder Impact Quality-of-Life Outcomes in Injured Adolescents: Mechanism and Gender Predict Acute</i></p>

ACUTE STRESS DISORDER (ASD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<ul style="list-style-type: none"> ~ If the traumatic event was very recent, evaluation for Acute Stress Reaction (ASR) may be appropriate. Identification of a patient with ASR is based on observation of behavior and function. There is no evidence to support any specific screening tool.⁴ ~ ASR features are considered normal in the sense of affecting most traumatized persons, being socially acceptable, psychologically effective, and self-limited. At this stage (less than four days after the trauma exposure), it is important not to portray these reactions as symptoms indicative of a mental disorder.⁴ <ul style="list-style-type: none"> o Physical: exhaustion, hyper-arousal, somatic complaints (gastrointestinal, genitourinary, musculoskeletal, cardiovascular, respiratory, nervous system), Conversion disorder symptoms, such as the involuntary loss of one or more bodily functions, e.g., blindness, paralysis or the inability to speak, in the absence of a physical cause⁶ o Emotional: anxiety, depression, guilt/hopelessness o Behavioral: avoidance, problematic substance use o Cognitive/mental: amnesic or dissociative symptoms, hyper-vigilance, paranoia, intrusive re-experiencing. ~ Manifestations of ASR varies. Some want and feel a need to discuss the event, and some have no such need. Respect individual and cultural preferences in the attempt to meet their needs as much as possible. Allow normal recovery, and monitor.⁴ ~ In the absence of ASR, the assessment for ASD is identical to the assessment for PTSD; see the Magellan adopted guidelines for PTSD. 	<p>Stress Disorder Risk. <i>J Trauma</i>. 59: 1126-1130.</p> <p><i>Management of PTSD in Mental Health Specialty Care</i>⁴ Medline Plus (2004). http://www.nlm.nih.gov/medlineplus/ency/article/000954.htm Accessed 01/31/2006⁶</p>
<p>Patient and Family Education</p>	<ul style="list-style-type: none"> ~ Education should be targeted to both the patient and the family whenever possible, and should address the disorder, common symptoms, and the range of available and effective treatments, both pharmacologic and non-pharmacologic. ~ Education also should address any co-morbid medical or psychiatric disorders, how co-morbid symptoms may affect core ASD symptoms or be affected by them, and how the treatment plan will be adapted to address comorbidity.^{1,4} ~ Education includes normalizing patient experiences, reducing anxiety, and offering hope that with time and treatment, symptoms can be overcome.⁴ ~ If medications are prescribed, education should address the regimen, the effects and side effects, and the importance of adherence even when symptoms begin to abate.¹ ~ Education about the positive impact of reducing social isolation and identifying family and/or other social supports is important early in treatment. Assistance also should be provided in identifying appropriate self-help or treatment groups in which peer-to-peer assistance can be obtained, and in identifying strategies for overcoming avoidance in family or other close relationships.⁷ 	<p>Jovanovic AA, et al. (2004) Family hardiness and social support as predictors of Post-traumatic Stress Disorder. <i>Psychiatry, Psychology and Law</i> 11(2):263-268⁷</p>

ACUTE STRESS DISORDER (ASD) IN ADULTS

Procedure	Recommendations	Recommended Resources
Supportive Interventions	<p>~ If evidence of ASR is found, the patient may benefit most from supportive interventions⁴</p> <ul style="list-style-type: none"> ○ Review / link to support services for basic survival needs and comfort (e.g., liquids, food, shelter, clothing, heat/cooling) ○ Help patients achieve restful and restorative sleep ○ Preserve an interpersonal safety zone protecting basic personal space (e.g., privacy, quiet, personal effects) ○ Provide non-intrusive ordinary social contact (e.g., a "sounding board," judicious use of humor, small talk about current events, silent companionship) ○ Address immediate physical health problems or exacerbations of prior illnesses ○ Assist in locating and verifying the personal safety of separated loved ones or friends ○ Reconnect patients with loved ones, friends, trusted other persons (e.g., work mentors, health care, clergy) ○ Help patients take practical steps to resume ordinary day-to-day life (e.g., daily routines or rituals) ○ Help patients take practical steps to resolve pressing immediate problems caused by the traumatic event (e.g., loss of a functional vehicle, finance, housing) ○ Facilitate resumption of normal family, community, school, and work roles ○ Provide opportunities for grieving for losses ○ Help patients reduce problematic tension or anxiety to manageable levels ○ Support patients' helpers through consultation and training about common stress reactions and stress management techniques. 	
Psychotherapy Treatments	<p>~ Supportive interventions including education of the patient and family, identification of strengths and resources, and use of existing support networks, may be effective in reducing the need for further intervention.¹</p> <p>~ Cognitive-behavioral therapies, especially those that include exposure therapy components, have shown some effect in speeding recovery and reducing occurrence of ASD when administered over a few sessions beginning two to three weeks post-trauma.^{1,4}</p> <p>~ Single-session psychological debriefings are not recommended since they may increase symptoms and have not been shown effective in preventing subsequent PTSD.^{1,4}</p>	

ACUTE STRESS DISORDER (ASD) IN ADULTS

Procedure	Recommendations	Recommended Resources
Pharmacological Treatments	<ul style="list-style-type: none"> ~ For patients with ASD, there are few studies of pharmacological interventions to guide clinical decision-making,^{1,4} and very limited evidence that any specific pharmacological intervention can reduce likelihood of development of PTSD.^{1,4} ~ Pharmacological treatments for PTSD cannot be automatically recommended for use in ASD due to insufficient evidence.⁴ ~ Goals of pharmacological treatments are to reduce physical, psychological, and behavioral morbidity associated with acute stress reaction, hasten a return to full functioning, and diminish the likelihood of chronicity.⁴ ~ The use of medications for short-term treatment of targeted symptoms may be beneficial (e.g., insomnia).^{1,4} 	
	<p>First Tier</p> <ul style="list-style-type: none"> ~ Selective Serotonin Reuptake Inhibitors (SSRIs) <ul style="list-style-type: none"> ○ Data supporting the use of SSRIs as a treatment for ASD do not exist, but clinical experience and consensus support their use.¹ ~ Tricyclic Antidepressants (TCAs) (per Veterans Administration / Department of Defense dose guidelines⁴) <ul style="list-style-type: none"> ○ A single prospective, randomized, double-blind study in pediatric burn patients suggested that imipramine was effective in improving symptoms⁴ Imipramine (Tofranil) 150-300mg; up to 7 days to target hyper-arousal / panic symptoms.⁴ ~ Sympatholytics / alpha-adrenergic agonists / beta-adrenergic blockers (per Veterans Administration / Department of Defense dose guidelines⁴) <ul style="list-style-type: none"> ○ A single randomized study using very small sample demonstrated some benefit of propranolol administered within 6 hours of a traumatic event for post-event hyper arousal with some indication of reduced development of subsequent PTSD Propranolol (Inderal) 40mg qid; up to 10 days to target hyper-arousal / panic symptoms.⁴ 	

ACUTE STRESS DISORDER (ASD) IN ADULTS

Procedure	Recommendations	Recommended Resources
	<p>~ Benzodiazepines (per Veterans Administration / Department of Defense dose guidelines⁴)</p> <ul style="list-style-type: none"> ○ One small study (n=4) suggested that temazepam for ASD led to reduction in disturbed sleep and other stress symptoms, but another study (open-label, n=26) of clonazepam or aprazolam found that subsequent rates of PTSD were higher in the treatment than in the placebo group <p style="margin-left: 40px;">Temazepam (Restoril) administered 5 nights, tapered for 2 nights, then discontinued, to target sleep disturbance / insomnia⁴</p> <p style="margin-left: 40px;">Clonazepam (Klonopin) start 0.25mg <i>bid</i>, increase by 0.25mg <i>q1-2</i> days; maximum 20mg up to 5 days to target sleep disturbance / insomnia⁴</p> <p style="margin-left: 40px;">Lorazepam (Ativan) 2-4mg up to 5 days to target sleep disturbance / insomnia⁴</p> <p style="margin-left: 40px;">Diazepam (Valium) 10-40mg up to 5 days to target sleep disturbance / insomnia⁴</p> <p style="margin-left: 40px;">Alprazolam (Xanax) <i>avoid use in ASD due to short-acting nature.</i>⁴</p> <p>~ Other (per Veterans Administration / Department of Defense dose guidelines⁴)</p> <ul style="list-style-type: none"> ○ A single prospective, randomized, double-blind study in pediatric burn patients suggested that chloral hydrate was effective in improving symptoms, but not as effective as imipramine <p style="margin-left: 40px;">Chloral Hydrate (Noctec) up to 5 days for sleep disturbance / insomnia.⁴</p>	
Combined Treatments	<p>~ Combination treatment does not have evidence to support its use, but clinical consensus supports the combined approach.¹</p> <p style="margin-left: 40px;">In patients with co-occurring psychiatric conditions, such as suicidal ideation, depression, or anxiety, combination treatment may be advisable for effective and timely improvement in clinical status.^{1,4}</p> <p>~ Problematic patterns of substance use, whether or not meeting threshold for a substance use disorder, should be addressed early and directly in the treatment plan, since substance use can exacerbate symptoms, complicate pharmacological treatment, reduce effectiveness of psychotherapy, and introduce new threats to well-being and recovery from ASD.^{1,4}</p>	
Monitor Progress	<p>~ Symptoms of ASD may remit or may persist. If they persist, a diagnosis of PTSD is appropriate and treatment strategies targeting PTSD core symptoms should be initiated.^{1,3,4}</p> <p>~ If symptoms of ASD remit, any associated co-morbidities may persist, and treatment plan should be adapted accordingly.^{1,4}</p>	

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