THE NORTHERN HOSPITAL

POST TRAUMATIC STRESS DISORDER (PTSD)

Confederate States of America War Flag (1861-65) "And I saw men in Gray and Brown clothes running through the camp. And I saw something else too, something I had never seen before…a gaudy sort of thing with red bars…a Rebel flag" (Union soldier)…..Years afterward, a Union veteran said the most a soldier could say of any fight was "I was worse scared than I was at Shiloh"

It was fought in early April. The trees where leafed out, and the roads were meandering cowpaths. Nobody knew north from south, east from west. They'd never been in combat before, most of them, especially on the Southern side. So it was just a disorganized, murderous fistfight, of 100,000 men slamming away at each other. (Shelby Foote, Civil War Historian)

In early April, as McClellan continued to sit in front of Yorktown, 42,000 Union troops under General Ulysses S. Grant were encamped on the west side of the Tennessee River near Pittsburgh Landing. Grant's invasion of Tennessee had practically cut the state in

two, and now he was waiting for Don Carlos Buell's Army of the Ohio to join him. Their combined forces were then to plunge into the heart of Mississippi. But Buell was late, and at Corinth Mississippi, 22 miles away, the commander of the Western Department of the Confederate Army, Albert Sidney Johnston, saw no reason to wait. Their armies were still evenly matched, and he would attack and end Grant's invasion. "Tonight we will water our horses in the Tennessee", Johnston told his staff officers on the morning of April 6. The Confederates quietly moved towards the Union lines.

"It was a most beautiful morning…It really seemed like Sunday in the country at home. The boys were scattered around camp, polishing and brightening their muskets and brushing up and cleaning their shoes, jackets, and trousers for inspection" (Private Leander Stilwell).

At the head of one Union division was William Tecumseh Sherman, who had shaken off the melancholy that had sent him home the previous year. His Ohioans were encamped on a hill not far from a little log built Methodist church called Shiloh when the 6th Mississippi attacked.

"I saw men in Gray and Brown clothes running through the camp. And I saw something else too, something I had never seen before…a gaudy sort of thing with red bars…a Rebel flag" (Union soldier)

"We were crowding them; one more charge and their lines waver and break. They retreat in wild confusion. We were jubilant and the officers could not curb their men to keep them in line" (Sam Watkins; Confederate private). The Battle extended along a 3 mile front. The worse fighting was in the center, where rebels came on like "maddened demons", a Union soldier said.

The generals didn't know their jobs. The soldiers didn't know their jobs. It was just pure determination to stand and fight and not retreat. And the bloodiness of it was just astounding to everyone. It also corrected a Southern misconception which had said, "One good Southern soldier is worth 10 Yankee hirelings". They found out that wasn't true by a long shot. (Shelby Foote, Civil War Historian)

In a peach orchid, the federals lay flat beneath the blossoming trees, firing as the rebels came, soft pink petals raining down on the living and the dead. By late morning, thousands of untried federal troops had seen enough. Most did not stop running until they reached the river, where almost 5,000 men cowered beneath the bluff. "We are sweeping the field", General Johnston told his second in command, Beauregard, "And I think we shall press them to the river" Grant's back was to the Tennessee. There was no sign of Buell and nowhere else to go, but a thin federal line held in the center, Illinois and Iowa farm boys mostly, prone along a sunken road. Their commander Benjamin Prentiss, understood the deadly seriousness of Grant's order to "Maintain that position at all costs". The Confederates launched a dozen massive assaults against what became known as the "Hornet's Nest". Albert Sidney Johnston himself led the last charge.

He came out of it with bits of his clothing nicked all up. One boot sole was shot in half and he flapped this on horseback there, and said, "They didn't trip me up that time!" And

very soon after that, they saw him reel in the saddle and realized he was hurt, and someone said, "General are you wounded?" And he said "Yes, and I fear seriously" and he was shot behind the knee, in the femoral artery I suppose, and bled to death. They saw blood pouring out of his boot. He could have easily been saved with a tourniquet, but he had sent his surgeon off to take care of some federal prisoners. (Shelby Foote, Civil War Historian)

"Advancing a little further, we saw General Albert Sidney Johnston surrounded by his staff. We saw some little commotion amoung those who surrounded him, but we did not know at the time that he was dead. That fact was kept from the troops" (Sam Watkins, Confederate Private).

The command of the Western Army now passed to General Beauregard

Albert Sidney Johnston was looked on by many people at the time of Shiloh, and especially before Shiloh while he was holding that line up in Kentucky, as the South's number one field soldier. Jefferson Davis viewed him as that, and when he lost Albert Sidney Johnston, he said "I realized our strongest pillar had been broken" (Shelby Foote, Civil War Historian)

Meanwhile the center of the Union line bent back on itself but would not break. The Confederates trained 62 cannon at point-blank range and opened fire. The Hornet's Nest exploded in a hail of splintered trees and shattered men. At 5.30 Prentiss and the 2,200 survivors of his division surrendered. They had held up the Southern advance for nearly 6 hours and it was growing dark. Beauregard wired Jefferson Davis that he had won a complete victory. "I had General Grant just where I wanted him", he said, "And could finish him up in the morning". Everywhere, wounded men lay in agony. Neither army had yet devised a system for gathering or caring for them on the field. Scores of wounded collapsed and died drinking from a mud hole near the peach orchid, staining the water red. It began to rain, and flashes of lightning showed hogs feeding on the ungathered dead.

"Some cried for water, others for someone to come and help them. I can hear those poor fellows crying for water. God heard them, for the heavens opened and the rain came". (Union private)

Grant spent that night beneath a tree rather than listen to the screams of the wounded men in his headquarters. It was there that Sherman found him. 'Well Grant", he said, "We've had the devils own day, haven't we…" "Yes", said Grant. "…Lick 'em tomorrow though"

"Never to me was the sight of reinforcing legions so welcome as on that Sunday evening when Buell's advance column deployed on the bluffs of Pittsburg landing. (Union private)

During the night Buell's army finally arrived. The Union men marched ashore as a band played Dixie. At dawn, the Union force, now 70,000 strong, drive into Beauregard's 30,000. The Confederates fell back, counter attacked, fell back again, and began to

withdraw. The Union held the field. Covering the Confederate retreat was Nathan Bedford Forrest, who now turned to lead one last cavalry charge headlong into the pursuing Northern army.

And he landed square in the main body of the Union troops. He was surrounded - one gray uniform in a sea of blue, and they began to holler, "Kill him. Kill the goddam rebel. Knock him off his horse". And one soldier did stick his rifle out into Forrest's side, and pulled the trigger and lifted Forrest clear off the saddle with the impact of the bullet, and Forrest meantime was slashing with his saber, his horse kicking and turning, and Forrest sawed him around and got clear and took off, and they were shooting after him, so he reached down and grabbed one Union soldier and swung him up behind him on the crupper of the horse to use as a shield. And when he got out of range he threw the man off and rode back to join his command. That was the last shot fired in the Battle of Shiloh. (Shelby Foote, Civil War Historian)

The ground, Grant said, was so covered with dead that it would have been impossible to walk across the clearing in any direction, stepping on dead bodies without a foot touching the ground. "When the grave was ready, we placed the bodies therein, two deep. All the monument reared to those brave men was board upon which I cut with my pocket knife the words, 125 Rebels". (Union private). 2,477 men were killed at Shiloh. There were 23,000 casualties overall - more than all the America casualties in all previous American wars combined. And it was only the beginning….

And Grant shortly before Shiloh said "I consider this war practically over. There're ready to give up. And the day after Shiloh he said, "I saw that there was going to have to be a war of conquest if we were to win". Shiloh did that. And it sobered the nation up something awful due to the realization that they had a very bloody affair on their hands. And it called for a huge reassessment of what this thing was going to be. (Shelby Foote, Civil War Historian)

Years afterward, a Union veteran said the most a soldier could say of any fight was "I was worse scared than I was at Shiloh"

Shiloh is a Hebrew word meaning "Place of Peace"

David McCullough and Shelby Foote in Ken Burns', "The Civil War", 1990.

At the outbreak of the American Civil War in April of 1861, the North was supremely confident in its vast hegemony in men and material resources over the South. It would be a 3 month war, no more. Defeat at the First Battle of Bull Run however sent shock waves through the north as did the number of casualties, over 5,000 - this would be no 90 day war. But Bull Run would be minor in comparison to what was to follow over the next four years. In the next major battle - the Battle of Shiloh - there were 23,000 casualties overall - more than all American casualties in all previous American wars combined. The Rebel Flag was seen and the rebel yell was heard, for the first time in the west. The psychological trauma of Shiloh would remain deeply ingrained in the American collective psyche.....and yet it was only the beginning.....

POST TRAUMATIC STRESS DISORDER (PTSD)

Introduction

Exposure to traumatic events commonly results in a degree of **psychological distress.**

In most instances psychological symptoms of distress settle down in the days to weeks following the event.

However, a some people exposed to traumatic events may have persisting symptoms and develop:

1. **Acute stress disorder**

And/or

2. **Post traumatic stress disorder (PTSD)**

Drug and **alcohol** problems, and **major depression**, are very common comorbidities in PTSD and will often require treatment in their own right

Terminology:

Acute Stress Disorder:

Acute stress disorder may occur during the early weeks following exposure to a severe traumatic event.

Symptoms include:

1. Re-experience
2. Heightened arousal
3. Dissociative symptoms such as:
    - Detachment
    - Depersonalization.

These spontaneously remit in the majority of people.

PTSD:

PTSD is characterised by 3 main clusters of symptoms, which persist for more than **1 month** after exposure to a traumatic event, which are:

1. Re-experiencing symptoms:

- Intrusive thoughts
- Disturbing dreams/ nightmares
- Flashbacks

2. Hyperarousal phenomena:
    - Exaggerated startle response
    - Irritability
    - Anger
    - Sleep disturbance
    - Poor concentration and memory
3. Avoidance and numbing:
    - Deliberate attempts to keep the traumatic event out of mind
    - Loss of interest in activities that formerly brought enjoyment
    - Detachment or estrangement from others
    - Restricted emotional responses.

Trauma focused **psychological therapies** should be offered as the first line of treatment for post traumatic stress disorder. Usually 8 - 12 sessions are needed for a therapeutic effect. [1]

If drug treatment is needed, **selective serotonin reuptake inhibitors** are currently considered to be the first line agents, although other agents including antipsychotics and some anticonvulsants are also commonly used. [1]

History

During the **First World War,** large numbers of soldiers from all involved armies, developed symptoms of severe mental stress when subjected to the unprecedented and unrelenting artillery bombardments that were characteristic for that war. The term "**Shell shock"** was coined for these cases, the first medical recognition of a condition now known to medical science as **PTSD.**

Many cases were so severe that some medical opinion held that the shock waves of high explosive cordite actually caused *physical* brain damage (hence "shell shock"). There was little sympathy amoung high ranking military commanders of the First Word War

however, who simply attributed the soldiers' symptoms to a lack of "moral fiber" - an easy accusation for generals who in those days usually "led" from the safety of headquarters many kilometres from the frontline trenches.

At the beginning of Second World War , the term "shell shock" was banned by the British Army.

The US Army, however recognized a condition it termed "**combat stress reaction** or **battle fatigue**".

This however was not a condition that **General George Patton** accepted. In a famous incident during the Sicilian campaign in 1943 he slapped a private across the face who he was told was suffering from severe "battle fatigue" and ordered the mentally broken man back to the front. Word of the incident reached Dwight D. Eisenhower, who severely reprimanded Patton and forced him to apologize to the private and the all the troops under his command. It was probably the first high-level military recognition of PTSD.

The modern term **Post Traumatic Stress Disorder** first appeared in the DSM-III, of 1980.

Epidemiology

The estimated 12 month prevalence rate for post traumatic stress disorder in the Australian community is 5.2%, compared with 8.3% in the Australian Defence Forces.

Australian GPs are likely encounter a new cohort of currently and recently serving military personnel and following deployments in the recent wars in Iraq and Afghanistan.

Women are four times more likely to develop PTSD than men. Sexual assault is the most frequent type of trauma experienced by women with PTSD.

Pathophysiology

Individuals with **PTSD** are hypothesized to develop cognitive and behavioural avoidance strategies in an attempt to avoid distressing emotional reactions.

These extensive avoidance responses can interfere with the fear resolution by limiting the amount of exposure to *realistically safe r*eminders of the traumatic event.

Risk factors:

Many different types of trauma have been found to result in PTSD, including:

1. Sexual violence:
    - Rape
    - Childhood sexual abuse

- Intimate partner violence

2. Personal traumatic experiences:
   - Unexpected death of a loved one
   - Life-threatening illness of a child
   - Other traumatic events of a loved one.
3. Interpersonal violence:
   - Witnessing violence
   - Physical assault including:
     - ♥ Childhood physical abuse
     - ♥ Torture
   - Being threatened by violence
4. Exposure to organized violence:
   - Refugee
   - Kidnapping
   - Civilian in a war zone.
5. Direct involvement in violence:
   - Military combat.
   - Witnessing death or serious injury
   - Accidentally causing death or serious injury.
   - Purposefully causing death or serious injury.
6. Near death experience:

   Examples include:
   - Life-threatening motor vehicle collision
   - Natural disasters

- Toxic chemical exposure

Complications:

Individuals with PTSD symptoms are more likely to experience:

1. Occupational problems

2. Relationship problems:

    - In particular higher rates of problems in intimate relationships, including marital difficulties.

3. High rates of secondary psychological and psychiatric morbidities:

    - Alcohol and substance abuse
    - Major depression/ increased risk of suicide.
    - Chronic anxiety
    - Panic disorders
    - Somatization

Clinical assessment

A diagnosis of PTSD is made only after a month has passed since the traumatic event.

Prior to that time, patients with PTSD like symptoms and functional impairment are diagnosed with acute stress disorder.

The diagnosis of PTSD can be challenging because of the heterogeneity of the presentation and resistance on the part of the patient to discuss past traumas.

A **formal diagnosis** requires a comprehensive mental health assessment and preferably a disorder-focused interview such as the **Clinician Administered Posttraumatic stress disorder Scale** to improve diagnostic reliability.

Screening tool:

A useful screening tool is the **Primary care post-traumatic stress disorder screen (PC-PTSD)** [4] consisting of 4 directed questions as follows:

In your life, have you ever had any experience that was so frightening, horrible or upsetting that, in the past month, you:

1. have had nightmares about it or thought about it when you did not want to?

2. Struggled hard **not** to think about it or went out of your way to avoid situation that reminded you of it?

3. Were constantly on guard, watchful, or easily startled?

4. Felt numb or detached from others, activities or your surroundings?

Formal DSM - V Criteria for PTSD:

A diagnosis of **PTSD** is made for patients older than age six years who meet all of the following **DSM-5 criteria**:

A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

   1. Directly experiencing the traumatic event(s).

   2. Witnessing, in person, the event(s) as it occurred to others.

   3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.

   4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

      Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

   1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s). Note: In children older than six years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

   2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

      Note: In children, there may be frightening dreams without recognizable content.

3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)

   Note: In children, trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

   1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

   2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

   1. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

   2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world, for example:

      - "I am bad"
      - "No one can be trusted"
      - "The world is completely dangerous"
      - "My whole nervous system is permanently ruined"

   3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.

4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).

5. Markedly diminished interest or participation in significant activities.

6. Feelings of detachment or estrangement from others.

7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.

2. Reckless or self-destructive behavior.

3. Hypervigilance.

4. Exaggerated startle response.

5. Problems with concentration.

6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

F. Duration of the disturbance (Criteria B, C, D, and E) is more than **one month.**

G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H. The disturbance is not attributable to the physiological effects of a substance (e.g. medication, alcohol) or another medical condition.

Natural History:

Most individuals who develop PTSD experience its onset within **a few months** of the traumatic event

However, epidemiologic studies have found that in approximately 25 percent of cases there is a delayed onset of symptoms after 6 months or more.

PTSD is commonly a **chronic** condition, with only **one third** of patients recovering at **one year** follow-up and **one-third** still be symptomatic **ten years** after the exposure to the initiating event.

Investigations

There are no routine investigations required.

Management

In the first few days following a traumatic event, intervention should be limited to provision of practical and emotional support.

There have been no controlled drug trials specifically for **acute stress disorder**. Research does not support the use of medication to *prevent the onset* of PTSD, nor to treat PTSD symptoms in the first 4 (some believe 8) weeks following trauma, as the majority remit spontaneously.

For PTSD trauma focused **psychological therapies** should be offered as the first line of treatment for post traumatic stress disorder. Usually 8 - 12 sessions are needed for a therapeutic effect. [1]

If drug treatment is needed, **selective serotonin reuptake inhibitors** are currently considered to be the first line agents, although other agents including antipsychotics and some anticonvulsants are also commonly used. [1]

Psychological treatments:

These interventions must be undertaken with an experienced clinician specialized in performing trauma-focused psychological interventions.

Trauma-focused psychological treatments are the most effective evidence-based interventions for post-traumatic stress disorder.

These include trauma focused **cognitive behavioural therapy** that can involve prolonged exposure and cognitive processing therapy, or eye movement desensitisation and reprocessing.

Second-line psychological treatments that are not trauma-focused, but can be helpful, include stress inoculation training.

Typically, 8 - 12 trauma focused therapy sessions of 90 minutes duration are required to produce the best therapeutic effects.

This treatment is frequently demanding and logistically difficult, so there is considerable interest in recent work on an intensive two-week version.

As **GPs** will usually have the central coordinating and referral role, it is important for them to be aware that their patient is receiving evidence-based treatment.

Long-term supportive counselling is often appreciated by patients, however this approach is unlikely to have a positive impact.

The trauma-focused therapies will, by their nature, involve increasing the patient's level of anxiety and distress.

This occurs in a **safe** and **contained** manner, where the patient is taught strategies to manage this arousal, and the levels of distress drop to manageable levels by the end of the session.

It is vital that avoidance mechanisms and behaviours that are core symptoms of post-traumatic stress disorder are made overt and explicitly addressed in the therapy.

Pharmacological treatments:

Drug therapy may be used when:

1. Patients are unwilling or not in a position to engage in psychotherapy

2. Patients have a serious comorbid condition or associated symptoms, for example severe depression

3. Patients' circumstances are not sufficiently stable to commence trauma-focused psychotherapy, for example high risk of suicide or harm to others

4. The severity of patient distress cannot be managed by psychological means alone

5. There has been an insufficient response to psychotherapy alone

6. There is a past history of a positive response to medication.

7. When drugs are used, the patient's mental state needs to be reviewed regularly with a view to starting psychotherapy when appropriate.

5 drug classes have been advocated for the treatment of PTSD: [1]

1. Antidepressants:

   Selective serotonin reuptake inhibitors (SSRIs) are currently considered the first line choice of drug.

   Australian guidelines have found *insufficient* evidence to warrant recommending one selective serotonin reuptake inhibitor over another.

With respect to dosing, patients with post-traumatic stress disorder may be very aware of their somatic reactions, such as nausea or headache. It is therefore important to "**start low, go slow, aim high**" to minimise initial adverse effects and to achieve doses that are more likely to be effective.

When symptoms have failed to respond to a particular drug, consideration should be given to increasing the dose within approved limits.

Australian guidelines recommend that patients with post-traumatic stress disorder who have responded to drug treatment should continue on the dose that achieved remission for at least **12 months** before gradual withdrawal is attempted.

Patients who respond to antidepressant drugs usually show some improvement within the first two weeks of treatment with an adequate dose.

If there is no response, then consultation with a **psychiatrist** is advised and consideration should be given to changing to another **class** of antidepressant.

Specifically, if a patient has not responded to an **adequate trial of a selective serotonin reuptake inhibitor**, then consider:

- Another selective serotonin reuptake inhibitor

If the patient still does not respond, then switching to a different class of antidepressant is advised.

Options include:

- A serotonin- noradrenaline reuptake inhibitor, (after a suitable withdrawal and washout period for the SSRI).
- Mirtazapine
- Moclobemide
- A tricyclic antidepressant
- An irreversible monoamine inhibitor

2. Benzodiazepines:

In the absence of any evidence of benefit, current Australian guidelines do not mention benzodiazepines specifically.

They recommend that "appropriate sleep medication" should only be used cautiously and then only in the short term (for less than one month continuously) in those patients who have not responded to non-drug interventions.

Both US and Australian guidelines highlight the common problems of misuse, **tolerance** and **dependency** in patients taking benzodiazepines.

3. Antipsychotics:

The use of **antipsychotic** drugs for post-traumatic stress disorder is **not** well supported by research evidence.

When there is an inadequate symptom response to other drugs, the Australian guidelines recommend a **specialist opinion** to determine the appropriateness of using olanzapine or risperidone as augmentation strategies.

Anecdotal experience suggests that this class of medication can, in individuals with more severe and complex post-traumatic stress disorder, improve nightmares, insomnia, mood, anxiety, anger and dissociation.

Despite the lack of evidence, many clinicians prefer **quetiapine** to olanzapine and risperidone as an augmentation strategy, as it is less likely to cause metabolic or extrapyramidal adverse effects.

If atypical antipsychotics are used, metabolic monitoring should be undertaken and documented. This should include regular monitoring of blood pressure, waist measurement, body weight, lipids and fasting glucose.

4. Anticonvulsants:

Australian guidelines do not make specific recommendations about the use of anticonvulsants for post-traumatic stress disorder.

US guidelines advise **against** their use, especially valproate, topiramate and tiagabine, as monotherapy. They also concluded that there was insufficient evidence to recommend an anticonvulsant as an *adjunctive* treatment.

The likely clinical scenario that leads to **consideration** of using an anticonvulsant in the treatment of post-traumatic stress disorder is when the presentation is characterised by treatment **resistance, severity** and **complexity.**

Certain presenting symptoms such as anger, impulsivity and dissociation can be targeted with anticonvulsants, but the same precautions regarding risk and benefit as outlined for benzodiazepines are recommended.

5. Prazosin:

Prazosin, an alpha1 adrenoreceptor antagonist, has yielded mixed results in the treatment for post-traumatic stress disorder.

However, it has shown consistent efficacy in **improving sleep** and **reducing nightmares.**

As prazosin can cross the blood-brain barrier it may dampen the noradrenergic activity thought to contribute to nightmares.

Both the US and the Australian guidelines recommend prazosin as an **adjunctive** treatment.

A subsequent study confirmed its effectiveness with sleep symptoms and found prazosin was effective for overall post-traumatic stress disorder symptoms in a study over 15 weeks. Mean achieved total daily doses of 19.6 mg for males and 8.7 mg for females were well tolerated.

Postural hypotension, headache, dry mouth and fatigue are among the reported adverse effects.

There are no evidence-based recommendations for how long prazosin should be used in the treatment of post-traumatic stress disorder.

It is recommend that when used, its efficacy and tolerability be regularly reviewed, and when there is clear clinical evidence for ongoing benefit it should be continued.

Disposition:

A formal diagnosis of PTSD requires a comprehensive mental health assessment and preferably a disorder-focused interview such as the Clinician Administered Posttraumatic stress disorder Scale to improve diagnostic reliability.

Post-traumatic stress disorder symptoms that persist or cause significant distress or disability require **specialist referral.**

Ideally there should be a *multidisciplinary* assessment including:

1. Psychiatrists

2. Psychologists

And, where relevant:

3. Nursing

4. Social work

5. Occupational therapy input.

Consultation with a **psychiatrist** is recommended when: [1]

1. Diagnostic clarification is required

2. Comorbid conditions are present

3. Post-traumatic stress disorder is severe or complex with concern about patient safety

4. There is treatment resistance requiring consideration of augmentation strategies

5. Polypharmacy or the use of irreversible monoamine inhibitors.

Patient Resources

Beyond Blue Website:

- https://www.beyondblue.org.au/

Above: The Peach Orchid, a few years after the war, (Chicago Historical Society).

Left: The sunken road through the Hornet's Nest, a few years after the war.

References

1. Duncan Wallace, John Cooper. Update on the management of post‑traumatic stress disorder, Aust Prescr 2015; 38:55 - 9.

   Dr. Duncan Wallace (Psychiatrist Australian Defence Force Centre for Mental Health HMAS Penguin Mosman New South Wales) is a member of the Australian Centre for Posttraumatic Mental Health Multidisciplinary Panel that developed the Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder (2013).

   Dr. John Cooper (Psychiatrist Australian Centre for Posttraumatic Mental Health Department of Psychiatry University of Melbourne) is a staff member at the Australian Centre for Posttraumatic Mental Health where the Australian Guidelines for the Treatment of Acute Stress Disorder and Post traumatic Stress Disorder (2013) were developed.

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