Reversible Cerebral Vasoconstriction Syndrome and Complex PTSD:

A Case Report Highlighting Pharmacological Considerations

Note: This patient provided a Release of Information for this information to be shared at the Academy of Consultation-Liaison Psychiatry's annual meeting.

What is RCVS?

- Recurrent thunderclap headaches, seizures, strokes, and non-aneurysmal subarachnoid hemorrhage are part of RCVS
- The hallmark is often severe headaches, with or without other symptoms, and segmental constriction of cerebral arteries that resolve within 3 months typically
- Possibly due to a transient disturbance in the control of cerebrovascular tone
- More than half the cases occur post partum or after exposure to adrenergic or serotonergic drugs[4]

What is Complex PTSD?

PTSD affects about **eight million American** adults in a given year—the problem is especially acute among war veterans.[3]

Complex PTSD includes the common symptoms of **intrusion memories** including dreams, **negative mood and cognitions** and arousal states of **hypervigilance and sleep disturbances**.

Complex PTSD is typically associated with **chronic and repeated traumas** and disturbances in self-organization reflected in emotion regulation, self-concept and relational difficulties.[3]

Complex PTSD has been highly debated, and there is discussion whether is it is a separate disorder or simply Borderline Personality Disorder comorbid with PTSD. **The patient in this case report has both conditions, with trauma predating the military** and then the addition of Military Sexual Trauma during her enlisted years further exacerbated her baseline symptomatology.

Case Report

An older female veteran with a PMH of Hypothyroidism, OSA compliant w/CPAP, Chronic Migraines, Hypothyroidism, HLD, Syncopal episodes and PPH of Borderline Personality Disorder, Chronic PTSD with Military Sexual Trauma, History of Childhood Abuse who was seen routinely in clinic for psychiatric followup and care.

She was stabilized on **sertraline 200mg qday**, **trazodone 200mg qhs** and **deuterabenazine 6mg qday** for tardive dyskinesia symptoms from long-term administration of Abilify. After having multiple suicide attempts and psychiatric hospitalizations, this patient began to stabilize. She engaged in psychotherapy and developed a core group of friends. She became active in the community. She taught art classes, attended church and participated in a variety of service organizations.

This patient suffered the **"worst headache of my life"** one night and woke up vomiting. She was transported to a local ER where a subarachnoid hemorrhage was discovered. In the following months, this patient had multiple small brain hemorrhages and strokes, including a left frontal hemorrhage that was evacuated. Her neurologist reduced her sertraline to 100mg. Brain biopsies to ascertain vasculitis were inconclusive. She **grew very frustrated** with her new limitations, which included driving restrictions. Her speech was stammering and her gait was halting and her mood worsened.

Eventually, this patient was sent to a stroke neurologist and was diagnosed with RCVS. This presented a problem as she had been stabilized for some time on her medication regimen.

Since serotonergic agents were contraindicated with her new found diagnosis, she was tapered and weaned off sertraline. With her complex PTSD, she suffered for years from troubling nightmares and profound insomnia, but trazodone had to be stopped as well.

Discussion

For patients diagnosed with PTSD, the FDA-approved pharmacotherapies are sertraline and paroxetine.

With a diagnosis of RCVS, serotonergic agents have to be replaced with other, possibly less effective, agents. This patient was trialed on lamotrigine, but she immediately developed mouth ulcers, so this was stopped. She was on Depakote for seizure prophylaxis already. Working with her stroke neurologist, we began her on **eszopiclone for insomnia**, which was helpful. She was started on a **low dosage of lithium**, which was gradually titrated up to 600mg. She began having some relief from her symptoms and her **overall functionality improved**. She began to drive again and work out with her personal trainer. Her speech and gait improved and her mood began to brighten. A significant death of her primary abuser from childhood also occurred during this time, which appeared to provide the patient with the relief of closure

It should be noted that this patient continued psychotherapy throughout her ordeal and benefits now from "Transforming Trauma" group therapy. Her therapeutic alliance with her therapist was a prominent feature in her success.

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