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Q: What are benzodiazepines?

A: Benzodiazepines are a class of central nervous system depressant drugs that have anxiolytic, anticonvulsant, muscle relaxant, and sedative effects (Bounds & Patel, 2024; United States [U.S.] Drug Enforcement Agency, 2024). They are considered an important treatment for seizures and are approved by the U.S. Food & Drug Administration (FDA) to also treat some anxiety disorders and sleep disorders (2020).

Q: What is the mechanism of action underlying benzodiazepines for the treatment of PTSD?

A: PTSD is associated with neurobiological changes, including individuals having normal to low levels of cortisol (the “stress” hormone) but high levels of corticotropin-releasing factor (CRF), which releases norepinephrine (Cleveland Clinic, 2023). This increased activity in the sympathetic nervous system elevates heart rate, blood pressure, and contributes to the hyperarousal symptoms (e.g., exaggerated startle response) seen in those with PTSD. Gamma-amino butyric acid (GABA) is an inhibitory neurotransmitter that reduces excitatory activity in the CNS. Benzodiazepines bind to receptors modulating GABA, lowering the threshold at which it is released and creating the anxiolytic clinical effects (Nutt et al., 2002).

Q: Are benzodiazepines recommended as a treatment for PTSD according to the VA/DOD clinical practice guidelines (CPGs)?

A: No The 2023 VA/DOD Clinical Practice Guideline for the Management of Posttraumatic Stress Disorder and Acute Stress Disorder strongly recommends against benzodiazepines, citing a paucity of evidence for its effectiveness. The CPG also noted that benzodiazepines are associated with misuse and long-term side effects (e.g., cognitive changes) that outweigh any theoretical benefit.

The VA/DOD CPGs were jointly developed by the Department of Veterans Affairs and the Department of Defense to inform best clinical practices. They are developed under the purview of clinical experts and are derived through a transparent and systematic approach that includes, but is not limited to, systematic reviews of the literature on a given topic and development of recommendations using a graded system that takes into account the overall quality of the evidence and the magnitude of the net benefit of the recommendation. A further description of this process and CPGs on specific topics can be found on the VA clinical practice guidelines website.

Q: Do other authoritative reviews recommend benzodiazepines as a treatment for PTSD?

A: No. The American Psychological Association recommends against benzodiazepines for the treatment of PTSD (APA, 2025). No relevant Cochrane reviews on benzodiazepines for PTSD were found.

Other recognized organizations publish CPGs or conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the American Psychological Association, and United Kingdom's National Institute for Health and Care Excellence. Additionally, Cochrane is an international network that conducts high-quality reviews of healthcare interventions.

Q What conclusions can be drawn about the use of benzodiazepines as a treatment for PTSD?

A: Benzodiazepines are not recommended as a treatment for PTSD by authoritative sources, as their effectiveness (particularly in the long-term) has not been demonstrated, but their potential for harm (misuse, cognitive side effects) are evident in the literature.

References

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