



## PIC QUESTION OF THE WEEK: 7/02/07

Q: Why is prazosin given to patients suffering from post-traumatic stress disorder?

A. Post-traumatic stress disorder (PTSD) is a psychiatric condition that was first recognized in war veterans, but can also occur in anyone who has experienced a distressing event such as abuse, rape, or a natural disaster. Patients with PTSD often become socially detached while trying to avoid any situation that might remind them of the precipitating incident. Some also display irritability or aggressiveness. Most PTSD patients re-live their traumatic experience through daytime flashbacks and nightmares, with up to 70% suffering from sleep disturbances. This category of symptoms includes trouble falling asleep or staying asleep, as well as tormenting nightmares. Unfortunately these persistent, distressing dreams are frequently resistant to therapy. Historically, PTSD has been managed using cognitive-behavioral therapy and/or medications such as antidepressants, benzodiazepines, or antipsychotic compounds. Selective serotonin re-uptake inhibitors (SSRIs) such as paroxetine and sertraline are FDA labeled for treatment of PTSD, unfortunately, even these drugs often fail to eliminate the nightmares associated with PTSD. It has recently been determined that stimulation of alpha-1 adrenergic receptors in the CNS induces PTSD-related nightmares. This amplification of adrenergic activity is preventable with the use of an alpha-1 antagonist. Prazosin passes more readily into the CNS than other alpha-1 antagonists and has proven to be relatively effective in managing nightmares and other sleep disturbances associated with PTSD. The drug is currently labeled for the treatment of hypertension and is also used to treat benign prostatic hyperplasia. Various dosage regimens have been used for treating PTSD. In most cases, the initial dose is 1mg at *bedtime* to decrease the risk of “first-dose hypotension.” Subsequent titration is based on tolerance and response to therapy. Daily dosage may be increased by 2-3 mg every three days (or more) up to a maximum nightly dose of 15 – 20 mg. This total amount may also be given in divided doses for managing agitation, intrusive thoughts, and other daytime symptoms. In some studies, participants have experienced a  $\geq 50\%$  decrease in the number of recurring nightmares. With an increasing number of deployed soldiers returning home with PTSD, it is important to identify effective treatments for this condition. Prazosin appears useful for some of these patients, especially those with nightmares or other sleep disturbances.

### References:

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The PIC Question of the Week is a publication of the Pharmaceutical Information Center, Mylan School of Pharmacy, Duquesne University, Pittsburgh, PA 15282 (412.396.4600).