

Sleep Board Review Questions: Medications and Their Adverse Effects

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Question: Which of the following medications is **not** matched with a characteristic side effect?

1. Pramipexole -Pathological gambling
2. Eszopiclone - Unpleasant taste
3. Modafinil - Headache
4. Mirtazapine - Weight Loss

Correct!

4. Mirtazapine - Weight Loss

Pramipexole is a dopamine agonist used for treating Parkinson's disease and restless legs syndrome (RLS). Common side effects of pramipexole include nausea, orthostatic hypotension, insomnia, hallucinations, and at higher doses, excessive daytime sleepiness. Hence, patients on this medication should be warned about, and continually assessed for sleepiness, especially if they are on higher dose. Less common side effects include pathological gambling and hypersexuality (1).

Eszopiclone is a nonbenzodiazepine sedative hypnotic with a time to peak plasma concentration of about 1 hour and half-life of about 6 hours. It is approved by the U.S. Food and Drug Administration for long-term treatment of chronic insomnia. Common side effects of eszopiclone include bitter or metallic taste, headache, dizziness, sleepiness and dry mouth. There have been case reports of patients who have been on this medication, driving, cooking or having sex without vivid memory of the event. The concomitant use of alcohol and other CNS depressants appears to increase the risk of such behaviors.

Modafinil is used to treat sleepiness of different etiologies, including hypersomnias of central origin, residual sleepiness despite positive airway pressure therapy in obstructive sleep apnea and idiopathic hypersomnia (3). The peak plasma concentrations occur at 2-4 hours and elimination half life after multiple dosing is approximately 15 hours. Common side effects of modafinil include headache, nervousness, nausea, diarrhea and dry mouth (4).

Mirtazapine is an antidepressant with a novel mechanism that enhances serotonin and norepinephrine release through antagonism of serotonin 5-hydroxytryptamine-2 (5-HT₂) and 5-HT₃ and central alpha 2-adrenergic receptors. Apart from dry mouth and sedation, an increase in appetite and weight gain (rather than weight loss) is frequently seen (5).

References

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