24 - 7. Psychiatric effects of non psychiatric dru

7. Psychiatric effects of non-psychiatric drugs

© SPMM Course High-potency benzodiazepines such as triazolam can cause anterograde amnesia. Paradoxical disinhibition is seen in a few patients especially when preexisting brain damage is present. Triazolam is banned in UK since 1991 following reports of disinhibition and aggression. Benzodiazepines can produce respiratory impairment especially in those with COPD or sleep apnea. Benzodiazepines are better avoided in those with myasthenia gravis, head injury or porphyria due to this risk. Alprazolam can cause weight gain via appetite stimulation. Cleft palate and lips are teratogenic effects associated with benzodiazepines; withdrawal syndrome is seen in a neonate with third trimester use. Z-hypnotics have more potential to cause upset stomach and diarrhea compared with benzodiazepines. Eszopiclone's unique temporary side effect is an unpleasant taste. It can also cause dry mouth especially in the elderly in a dose-dependent fashion. The occurrence of benzodiazepine withdrawal syndrome depends on The duration of treatment, The dosage prescribed, The rate of tapering and The half-life of the compound. Benzodiazepine withdrawal is characterized by anxiety, diaphoresis, kinaesthetic hallucinations, restlessness, irritability, light-headedness, tremor, insomnia, autonomic hyperactivity, and weakness. In severe cases, depression, paranoia, delirium, and grand mal seizures are seen. The syndrome can occur after 1 or 2 weeks in long-acting benzodiazepines. Alprazolam and lorazepam are associated with immediate and severe withdrawal syndrome and should be tapered gradually. Using prescribed benzodiazepines for 4 weeks or less rarely results in significant withdrawal symptoms. But if used for 4 months – 5-10% have withdrawals; in 2 years – 25-45% and in 68years – 75% develop withdrawal syndrome and dependence pattern (Law et al. 2004). Slow taper at a rate of 25% per week, use of longer acting agents when tapering, avoiding longterm use of short-acting benzodiazepines, use of carbamazepine to assist discontinuation are the various strategies employed to manage withdrawal symptoms. 7. Psychiatric effects of non-psychiatric drugs

© SPMM Course Non-psychiatric drugs Psychiatric side effects Beta-blockers Sedation, nightmares, dysphoria (nearly 50% in some samples) and depression. Psychiatric effects are seen only with lipophilic compounds e.g. metoprolol and propranolol. Angiotensinconverting enzyme (ACE) inhibitors Increased arousal, anxiety, fatigue, insomnia and increased psychomotor activity (4-8%)

Clonidine Sedation or lethargy (35%); anxiety (3%), agitation (3%), depression (1%), and insomnia (1%). Nitrates/nitrites Delirium, psychosis (including delusions), anxiety, restlessness, agitation, and hypomania. Digoxin Depression and delirium (even in therapeutic levels) Statins Uncertain association with depression (evidence inconclusive) Corticosteroids Mood changes (mania more than depression), anxiety, agitation, lethargy. Dose-dependent. 1 in 6 patients has psychiatric side effects if prednisolone is prescribed in doses above 80mg/day. Symptoms start within 2 weeks. More common in females and those with past psychiatric history. Anabolic androgenic steroids

Acute paranoia, delirium, mania or hypomania, homicidal rage, aggression, and extreme mood swings, as well as a marked increase in libido, irritability, agitation, and anger. Usually dose-dependent and resolve in 1-4 weeks after stopping the steroids. Gonadotropinreleasing hormone (GnRH) agonists (e.g. leuprolide) Depressive symptoms Interferon-alpha Nearly 40% develop psychiatric side effects; ~20% experience depression. Seen in first 12 weeks of treatment. Penicillin Sedation, anxiety and hallucinations Cephalosporins Delirium Ciprofloxacin and ofloxacin Restlessness, irritability, lethargy, tremors, insomnia, mania, depression, psychosis, delirium, seizures, or catatonia (incidence ≤1%) Isoniazid Delirium, mania, depression, and psychosis. Tetracyclines Depression, insomnia, and irritability at high dosages. Antihistamines and Atropine-like psychosis

 decongestants Proton pump inhibitors & H2antagonists used for peptic ulcer disease Confusion, agitation, depression, and hallucinations— mainly in geriatric patients with impaired hepatic-renal function.

Ondansetron Anxiety Isotretinoin Severe depression and suicidal behavior. Aminophylline and salbutamol Agitation, insomnia, euphoria, and delirium

Depressogenic drugs x Beta blockers x Calcium channel blockers x Interferons (alpha > beta) x Steroids x Cyproterone, progesterone x Varenicline x Isotretinoin x Ezetimibe Rimonabant: Two endocannabinoid receptors CB1 and CB2 are identified; based on the clinical observations of cannabis related increase in appetite (the “munchies”), researchers have studied the involvement of endocannabinoid system in the control of energy balance. Rimonabant, the first of the CB1-receptor antagonists, was developed as an anti-obesity agent on the premise that blocking central cannabinoid activity might reduce food intake. But there is compelling evidence that rimonabant is associated with the development of severe adverse psychiatric events (2.5 times more depression; suicidal ideas and 3 times more anxiety). Animal studies have consistently shown that pharmacological blockade of the CB1 receptor impaired the anti depressant-reducing or anxiety-reducing actions of endocannabinoids. FDA has issued a warning now on the use of this agent.

Revision #1
Created 2026-01-04 20:04:41 UTC by Omar Ayman
Updated 2026-01-04 20:04:41 UTC by Omar Ayman