

CASE 1: D

Tranlycypromine (Parnate) is an antidepressant in the class of Monoamine Oxidase Inhibitors (MAOIs). Other MAOIs include phenelzine (Nardil) and isocarboxazid (Marplan). Tyramine, vasoactive peptides found in wine, may interact with MAOIs. Foods that contain tyramine can be very dangerous when used in combination with MAOIs and in certain cases the combination even is potentially lethal. Both tyramine and MAOIs produce a raised level of noradrenaline. Examples of foods and drinks containing tryramine are: alcoholic beverages and particularly wine, aged cheeses, chocolate (cacao), beef and chicken livers.

CASE 2:

First part - A. phencyclidine

Phencyclidine intoxication has both psychiatric and physical manifestations. Intoxication may be viewed as occurring in three stages. Mild intoxication, the first and most common stage, is manifested primarily by psychiatric signs and symptoms. In the second stage, patients are stuporous to comatose, but they have intact deep pain responses. In the third stage, patients do not respond to deep pain stimuli. Treatment depends on the stage of intoxication

Second part – B. Assess the vitals and mental status in a quiet room every 2-4 hours.

CASE 3: A

According to the 2000 National Household Survey on Drug abuse, an estimated 8.8 million people (4.0 percent of the population) have tried methamphetamine at some time in their lives.

Data from the 2000 Drug Abuse Warning Network (DAWN), which collects information on drug-related episodes from hospital emergency departments in 21 metropolitan areas, reported that methamphetamine-related episodes increased from approximately 10,400 in 1999 to 13,500 in 2000, a 30% increase.

Although both methamphetamine and cocaine are psychostimulants, there are differences between them.

METHAMPHETAMINE:

Smoking produces a high that lasts 8-24 hours.

50% of the drug is removed from the body in 12 hours

COCAINE:

Smoking produces a high that lasts 20-30 minutes.

50% of the drug is removed from the body in 1 hour.

As a powerful stimulant, methamphetamine, even in small doses, can increase wakefulness and physical activity and decrease appetite. A brief, intense sensation, or rush, is reported by those who smoke or inject methamphetamines. Oral ingestion or snorting produces a long lasting high instead of a rush, which reportedly can continue for as long as half a day. Both the rush and the high are believed to result from the release of very high levels of dopamine into the brain's pleasure centers.

Methamphetamine has toxic effects. In animals a single high dose of the drug has been shown to damage nerve terminals in the dopamine-containing regions of the brain. The large release of dopamine produced by methamphetamine is thought to contribute to the drug's toxic effects on nerve terminals in the brain. High doses can elevate body temperature to dangerous, sometimes lethal, levels, as well as cause convulsions.

Long-term methamphetamine abuse may result in addiction. In addition to being addicted to methamphetamine, chronic methamphetamine abusers exhibit symptoms that can include violent behavior, anxiety, confusion, and insomnia. They also can display a number of psychotic features, including paranoia, auditory hallucinations, mood disturbances, and delusions (for example the sensation of insects creeping on the skin, which is called "formication"). The paranoia can result in homicidal as well as suicidal thoughts.

With chronic use, tolerance for methamphetamine can develop. In some cases, abusers forgo food and sleep while indulging in a form of bingeing known as a "run," injecting as much as a gram of the drug every 2 to 3 hours over several days until the user runs out of the drug or is too disorganized to continue. Chronic abuse can lead to psychotic behavior, characterized by intense paranoia, visual and auditory hallucinations, and out-of-control rages that can be coupled with extremely violent behavior.

REFERENCE: <http://www.drugabuse.gov/ResearchReports/methamph/methamph3.html>

CASE 4: B

The occurrence of agranulocytosis is a hazard of clozapine, but this hazard can be reduced by monitoring the white-cell count. The increasing risk of agranulocytosis with age and the reduced incidence after the first six months of treatment provide additional guidelines for the prescription and monitoring of clozapine treatment in the future. After the FDA approved clozapine, it became available for marketing in the USA in 1990. Potentially fatal agranulocytosis is estimated to occur in 1 to 2 percent of treated patients.

CASE 5: D

Hepatolenticular degeneration, also known as Wilson's disease, is a copper storage disease. In this disease, copper is stored in the liver resulting in chronic inflammation to the liver and eventually liver failure. Wilson's disease occurs because of a genetic mutation on chromosome number 13. Therefore, there is a familial history of Wilson's disease. Wilson's Disease may present with psychiatric changes including dementia, anxiety, depression, schizophrenia, manic depression, drooling, difficulty speaking and tremor.

Wilson's disease should be suspected in a young patient who presents with hepatitis or culminating hepatic failure even if Kayser-Fleischer rings are absent around the eye. Diagnostic criteria include: Low serum ceruloplasmin levels (<20 mg%) High liver copper levels (>250 mg/g) and high 24 hour urinary copper levels (>100 mg/d or >1.6 mmol/d).