Monoamine Oxidase Inhibitor (MAOI) Contraindications

Monoamine oxidase inhibitors (MAOIs) are a group of drugs that work by inhibiting the breakdown of the neurotransmitters serotonin, NE, and dopamine, thereby increasing their availability. They are indicated primarily for atypical depression but have been used for anxiety and panic disorders, bulimia, and personality disorders. Selegiline, a monoamine oxidase (MAO) type B inhibitor, may be effective in the treatment of Parkinson disease. These drugs should not be combined with tyramine-containing foods, such as large amounts of wine and cheese, as the combination of MAOIs with excess tyramine can lead to a hypertensive crisis. This severe increase in blood pressure occurs due to the release of large amounts of amine neurotransmitters (serotonin, NE, and dopamine), triggered by excess tyramine. Another contraindication of MAOI therapy is the use of the drug in combination with SSRIs, TCAs, meperidine, dextromethorphan, or St. John's Wort, as this may lead to serotonin syndrome. Serotonin syndrome is a life-threatening, rapidly presenting and progressing drug reaction which has a wide range of symptomatology. These symptoms include, and are not limited to hypertension, tachycardia, diaphoresis, hyperactive bowels, mental status changes, myoclonus, and hyperthermia.



PLAY PICMONIC

Contraindications

Wine and Cheese
Wine and Cheese
Wine and aged cheese are foods containing tyramine, which can lead to hypertensive crisis when ingested with MAOIs. Tyramine is metabolized by monoamine oxidase, and when foods high in tyramine are combined with therapy that inhibits MAO, excess stored monoamines (serotonin, NE and dopamine) are released. Patients taking MAOIs should avoid aged cheeses, red wine, beer, soy products, over-ripened bananas, and cured, smoked, aged, or pickled meats.

Hypertensive Crisis
Hiker-BP Crying
Combining excess amounts of wine and cheese, or other tyramine-containing foods with MAOI therapy leads to hypertensive crisis. This is characterized by a severe blood pressure increase which can lead to stroke.

Serotonin Drugs
Silver-tonic Pills
Caution should be taken with multiple drug therapy, as the use of SSRIs, TCAs, meperidine, and dextromethorphan are contraindicated in a patients taking MAOIs. When combined, there is a profound risk of serotonin syndrome.

Serotonin Syndrome
Silver-tonic Savage
This is a rapidly progressive, potentially life-threatening syndrome which can be caused by a drug interaction. It has a wide range of clinical findings, where patients may display hyperthermia, hypertension, myoclonus, mydriasis, overactive bowels, and mental agitation. This syndrome should not be confused with neuroleptic malignant syndrome, which is associated with the use of antipsychotic drugs.

Sign up for FREE at picmonic.com