

Medications

Phenelzine

Isocarboxazid

Tranylcypromine

Selegiline (Transdermal MAOI)

Purpose

These medications block MAOI enzymes in the brain, thereby increasing the amount of norepinephrine, dopamine, serotonin, and tyramine available for transmission of impulses.

An increased amount of these neurotransmitters at nerve endings intensifies responses and relieves depression.

However, the increase in tyramine can cause heightened blood pressure or hypertensive crisis if dietary and medication restrictions are not implemented.

Onset of therapeutic action is not immediate, and usually takes 2 to 4 weeks.

Less frequently used in comparison to other antidepressants due to food/drug interactions and adverse effects.

Therapeutic Uses

Depression

Bulimia Nervosa

Panic Disorder

Social Anxiety Disorder

Generalized anxiety Disorder

Obsessive Compulsive Disorder

Post-traumatic Stress Disorder

Complications

CNS Depression

Nursing Action and Education

Anxiety, agitation, mania, or hypomania

Observe for effects and notify the provider if they occur

Orthostatic Hypotension

Monitor blood pressure and heart rate for orthostatic changes. Hold medication and notify the provider of significant changes. Instruct the client to change positions slowly.

Hypertensive crisis (resulting from intake of dietary tyramine, which could lead to a cerebral vascular accident)
Severe hypertension (as a result of intensive vasoconstriction and stimulation of the heart), headache, nausea, increased heart rate, and increased blood pressure.

Administer phentolamine IV (a rapid-acting alpha-adrenergic blocker) or nifedipine SL. Provide continuous cardiac monitoring and respiratory support as indicated

Local rash with transdermal preparation

Choose a clean, dry area for each application. Apply a topical glucocorticoid on the affected area

Contraindications/ Precautions

MAOIs are a pregnancy risk category C. Not generally recommended for use during pregnancy or breastfeeding. Notify the provider and they will determine if the risks of taking the medication outweigh the benefits

Contraindicated in clients taking SSRIs and in those who have pheochromocytoma, heart failure, cardiovascular, and cerebral vascular disease, and severe renal insufficiency.

Use cautiously in clients who have diabetes and seizure disorders or those taking TCAs

Transdermal selegiline is contraindicated for clients taking carbamazepine or oxcarbazepine, which can increase blood levels of the MAOIs

Interactions

Interaction	Client Education and Nursing Action
Indirect-acting sympathomimetic medications (ephedrine, amphetamine) promote the release of norepinephrine and can lead to hypertensive crisis	Avoid over the counter decongestants and cold remedies, which frequently contain medications with sympathomimetic action

Use of tricyclic antidepressants can lead to hypertensive crisis	Use MAOIs and TCAs cautiously
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Use of SSRIs can lead to serotonin syndrome	Avoid concurrent use
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Interactions (cont)

Antihypertensives have an additive hypotensive effects

Monitor blood pressure. Notify the provider if there is a significant drop in blood pressure. A reduced dosage of antihypertensive can be indicated

Use of meperidine can lead to hyperpyrexia

Use an alternative analgesic

Tyramine rich foods (aged cheese, avocados, salami, figs, bananas) can lead to hypertensive crisis

Assess for ability to follow strict adherence to dietary restrictions. Provide clients with written instructions regarding foods and beverages to avoid. Monitor for manifestations and notify the provider if they occur. Avoid taking any medications without approval of the provider. Dietary and medication restrictions should be continued for 2 weeks after the MAOIs have been discontinued.

Interactions (cont)

Concurrent use of vasopressors (phenylethylamine, caffeine) can result in hypertension

Avoid foods that contain these agents (caffeinated drinks, chocolate, fava beans, ginseng)

General anesthetics

MAOIs should not be used within 10 to 14 days before or after surgery.