Nonselective Alpha-Blockers

Phentolamine and phenoxybenzamine are drugs which lower blood pressure by inhibiting vasoconstriction through their action at ?₁, while also having action at ?₂ receptors. Phentolamine is a reversible drug which is useful in treating hypertensive crisis and is indicated for diagnosing pheochromocytomas. Phenoxybenzamine is indicated for treating pheochromocytomas, due to its slow onset and long duration of effects.Both of these medications vasodilate because of their action at ? receptors, and can lead to the side effect of orthostatic hypotension. Blockade at these receptors also leads to increased sympathetic tone, which can lead to reflex tachycardia.



PLAY PICMONIC

Indications

Phentolamine
Phantom-toe
Phentolamine is a reversible drug with action at both α receptors, which is used to treat hypertensive emergencies and in cases of pheochromocytoma.

Reversible
Reversed-hat
Phentolamine is reversible and dissociates from adrenergic receptors.

Pheochromocytoma (Diagnosis)
Fiat-chrome
This drug is reversible, and thus is indicated making it ideal for the diagnosis of a pheochromocytoma.

Hypertensive Crisis
Hiker-BP Crying
Phentolamine is indicated for patients on MAO inhibitors who eat tyramine-containing food, in order to treat hypertensive crisis. This drug also has use in cocaine-induced hypertension, as this drug is helpful in avoiding the unopposed alpha effects of other drugs that may be used to treat cocaine intoxication.

Phenoxybenzamine
Phantom-ox
Phenoxybenzamine is a non-selective α blocker which is non-reversible. It is often used to treat pheochromocytomas and has a slower onset and longer effect than other α blockers.

Pheochromocytoma (Treatment)
Fiat-chrome
Phenoxybenzamine is indicated for the treatment of symptoms from pheochromocytomas, which effect the adrenal gland, as this is drug has a longer effect than other α blockers.

Side Effects

Orthostatic Hypotension
Oar Hippo-BP
As these medications inhibit α1 and α2 adrenergic receptors, they decrease vasoconstriction and vessel tone. This leads to orthostatic hypotension in patients taking these drugs.

Reflex Tachycardia
Reflex-hammer Tac-heart-card
Patients taking this medication may experience reflex tachycardia. This occurs because the hypotension and added α2 inhibition are countered physiologically by increased sympathetic tone.

Sign up for FREE at picmonic.com