

MEDICINAL CHEMISTRY-I – BP402T

UNIT: 2

CLASS: 9

TOPIC: ADRENERGIC BLOCKERS

4. Prazosin

Structure

IUPAC name

Uses

It is a alpha 1 blocker.

It works relaxing and widening blood vessels so blood can flow more easily.

It is used with or without other medications to treat high blood pressure.

Lowering high bp helps to prevent strokes, heart attacks and kidney problems.

Side effects

Dizziness, headache, drowsiness, lightheadedness, palpitations, nausea etc.

5. Dihydroergotamine

Structure

IUPAC name

Uses

It belongs to a group of alkaloids called ergot alkaloids.

It is a non selective alpha adrenergic antagonist.

It works by narrowing the blood vessels around the brain and affects blood flow patterns that are associated with certain types of headaches.

It is used as a vasoconstrictor.

It is used to treat migraine.

Side effects

Nausea, vomiting, dizziness, sore throat, changes in your sense of taste

6. Methysergide

Structure

IUPAC name

Uses

Alpha adrenergic antagonist. It is a potent serotonin antagonist.

It is used to treat chronic migraine

It has weak vasoconstrictive and oxytocic effects.

Side effects

Nausea, vomiting, heart burn, constipation, drowsiness, dizziness etc.

BETA ADRENERGIC BLOCKERS

These are the drugs that block beta receptors.

1. Propranolol

Structure

IUPAC name

Uses

Non selective beta adrenergic blocker

Used to treat high bp, irregular heart beats etc

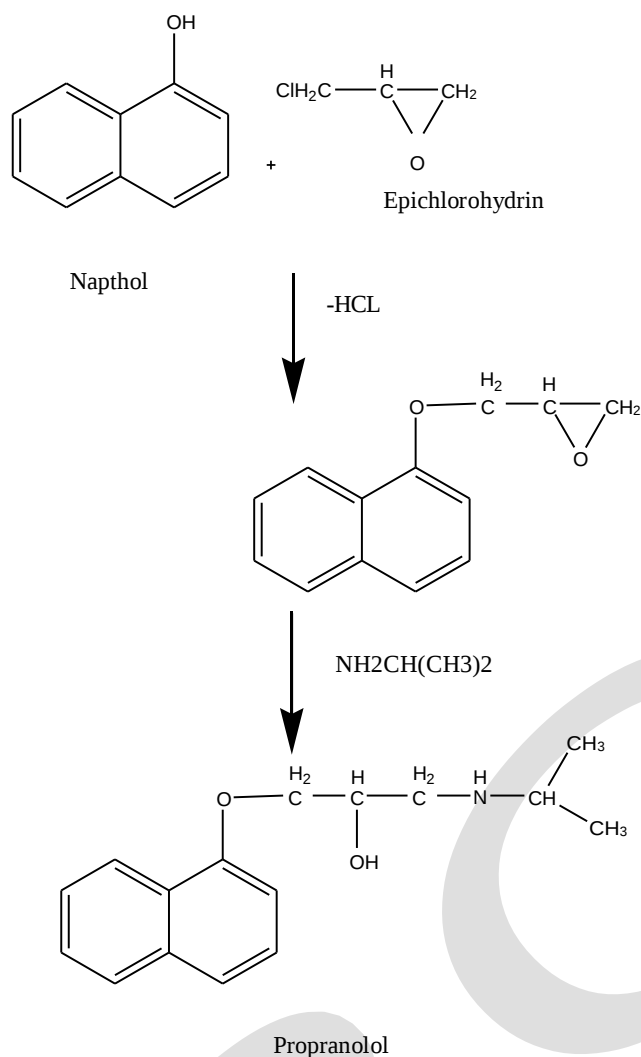
It is used after a heart attack to improve the chance of survival.

It is also used to prevent migraine headaches and chest pain

Side effects

Low bp, bradycardia, hypoglycaemia, restless sleep, constipation etc.

Synthesis



2. Metipranolol

Structure

IUPAC name

Uses

It is a beta blocker and works by decreasing the amount of fluid production within the eye.

It is used to treat high pressure inside the eye due to glaucoma or other eye diseases

Side effects

Temporary discomfort of eye, watery eyes, headache, drowsiness or dizziness may occur.

3. Atenolol

Structure

IUPAC name

Uses

It is a selective beta one blocker

It is used to treat hypertension, angina, acute myocardial infarction, supraventricular tachycardia and the symptoms of alcohol withdrawal.

Side effects

Type 2 diabetes.

4. Betazolol

Structure

IUPAC name

Uses

Used for the management of hypertension and glaucoma

Side effects

Dizziness, lightheadedness, drowsiness, headache, nausea, stomach upset, diarrhoea, weakness, dry eyes.

5. Bisoprolol

Structure

IUPAC name

Uses

Beta one adrenergic blocker

Treatment of high bp, congestive heart failure, arrhythmias.

Side effects

Overdose of bisoprolol leads to fatigue, hypotension, low blood sugar, bronchospasm and bradycardia.