### Calcium Channel Blockers

Block calcium(causes a stronger and harder contraction)
from entering the smooth muscle
cells of the heart and blood vessels.
decreasing the calcium, the hearts' contraction
is not as forceful.which reduce heart rate and lower
blood pressure.

#### Side effects

Palpitations Swollen ankles Constipation Headache Dizziness

#### Example

Amlodipine Bepridil Clevidipine Diltiazem Felodipine Lacidipine Lercanidipine Levamlodipine Isradipine Nicardipine Nifedipine Nimodipine Nisoldipine Verapamil

#### Beta-blockers

Reduce heart rate and force of pumping, heart pumps less blood through the blood vessels ,so blood pressure decreases.

#### Side effects

Insomnia Slow heartbeat Impotence Tiredness or depression Symptoms of asthm

#### Example

Acebutolol Atenolol Betaxolol Bisoprolol Celiprolol Carvedilol Labetalol Metoprolol Nadolol Nebivolol Penbutolol Propranolol Pindolol Sotalol

## ACE (Angiotensin Converting Enzyme)

#### Inhibitors

Help the body produce less angiotensin

(causes blood vessels to narrow)

which helps the blood vessels relax

and open up, which, in turn,

lowers blood pressure.

#### Side effects

Skin rash Chronic dry Kidney damage (Rare)

Hyperkalemia (Increased Potassium) Avoid Pregnancy (harm fetus)

#### Example

Benazepril Captopril **Enalapril Maleate** Fosinopril sodium Lisinopril Moexipril Perindopril Quinapril Ramipril Trandolapril

### Angiotensin II Receptor Blockers (ARBs)

Protects the blood vessels to become narrow by blocking angiotensin II, in result blood vessels dilate and blood pressure is reduced.

#### Side effects

Dizziness 4 Sinus problems Upset stomach Swelling Avoid Pregnancy (harm fetus)

#### Example

Candesartan Eprosartan Irbesartan Losartan Telmisartan Valsartan

Alpha-2 Agonists, Central-Acting

Side effects

Severe dryness Constipation Drowsiness. Impotence (male) Sudden drop in BP Preventing brain from sending signals to nervous system to speed up heart rate, heart doesn't pump as hard and blood flows more easily, resulting BP low.

#### Example

Clonidine Guanabenz Guanfacine Methyldopa Lofexidine

#### Vasodilators

Side effects

Heart palpitations Headaches Swelling Joint pain Relax and widen the walls of the blood vessels, allowing blood to flow more easily. causes blood pressure to drop

#### Example

Diazoxide Hydralazine Minoxidil Nitroprusside

#### Renin Inhibitors

#### Side effects

Angioedema Hyperkalemia Dizziness Hives Stuffy nose Block renin. this helps to widen blood vessels, which lowers blood pressure.

Example

Aliskiren

#### Diuretics

Flush excess water and salt from the body through urine. This reduces the volume of blood that needs to pass through blood vessels, which lowers blood pressure.

#### Side effects

Increased blood sugar.
Leg cramps
Decrease potassium
Gout attack after prolonged use
Impotence

#### Example

Amiloride Bendroflumethiazide Bumetanide Chlorothiazide Chlorthalidone Ethaerynic acid Furosemide Hydrochlorothiazide Indapamide Methyelothiazide Metolazone Piretanide Spironolactone Torsemide Triamterene