

# ANGINA PECTORIS MEDICATIONS



## Medications Used for Treatment of Angina Pectoris

Clinical effect:	Vasodilators		Cardiac depressants		
Class of medication:	Nitrates	Calcium channel blockers	Beta blockers	Anti-angina	Anti-ischemic
Examples:	Nitroglycerin	Verapamil	Propranolol	Ranolazine <sup>1</sup>	
	Isosorbid mononitrate	Nifedipine	Metoprolol		
		Diltiazem			

<sup>1</sup>Ranolazine: Not to be used as a single, primary medication. Ranolazine is used in conjunction with a  $\beta$ -blocker or calcium channel blocker. Can be used with nitrates. Mechanism of action is unknown.

## Nitroglycerin (NTG)

### Potential side effects:

HA, hypotension, increased heart rate (remember 3 H's).

**Storing NTG:** All forms store at room temp away from light. SL tablets store in original glass container.

**Tolerance:** Can develop rapidly, use lowest effective dose. NTG patches, remain patch free 8–12 hrs/day usually while sleeping. Do not abruptly stop use. Long-acting nitrates increase risk of tolerance.

**Call for help:** If pain is not improved after 3 doses of NTG, client should call emergency responders. Do not drive self to hospital.

Type of angina	Cause of problem	Goal of treatment	Medications
Stable	Demand issue	↑ Cardiac oxygen ↓ Cardiac demand	Nitrates, calcium channel blockers, $\beta$ -blockers
Unstable	Supply issue	Maintain cardiac oxygen ↓ Oxygen demand Prevent infarction	Nitrates, $\beta$ -blocker ACE inhibitor or ARB Antiplatelet (ASA), anticoagulant (LMW heparin), possible use of thrombolytics after diagnostics
Variant Prinzmetal	Supply issue	↑ Cardiac oxygen	Nitrates, calcium channel blockers

### CLINICAL TIPS:

- Short-acting nitrates are used for acute angina attacks. Long-acting nitrates are used to prevent chest pain.
- Antiplatelet drugs and anticoagulants increase risk for bleeding.
- $\beta$ -blockers are not used in variant angina. They can increase risk of coronary artery spasm.

Route of administration	Acute angina treatment	Long-term prophylactic treatment of angina	Abort ongoing attack & anticipation of exertion
Sublingual tablets	X		X
Translingual spray	X		X
Patches		X	
Ointment		X	
Sustained release oral capsules		X	

## Emergency Management Steps for Chest Pain:

<b>M</b>	Morphine	If O <sub>2</sub> SAT < 90% or in respiratory distress
<b>O</b>	Oxygen	
<b>N</b>	Nitrates	
<b>A</b>	Aspirin	

## NOTES

