

Angina.

Angina Pectoris

↓
A type of chest pain

[DEPTH OF BIOLOGY]

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Results from reduced blood flow to the heart.

* usually happens due to narrowing or blocking of one or more of heart's arteries. :

also called tsh Ischemia

* Angina pectoris is a clinical condition resulting from less blood supply to heart leading to severe chest pain. [DEPTH OF BIOLOGY]

characterized by paroxysmal pain in the substernal or precordial region of chest

* caused by or increases with increase in demand of heart.

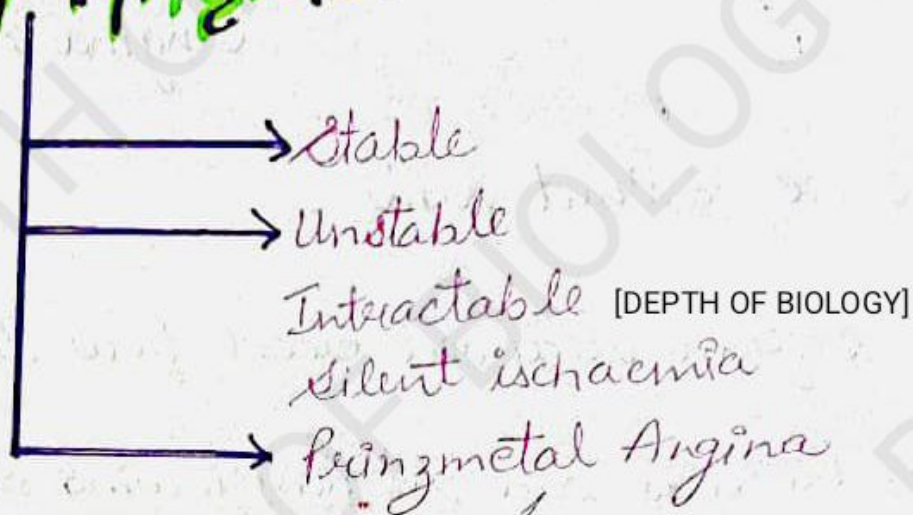
* relieved by decrease in the work of heart.

* often pain radiates to left arm, neck, jaw or right arm.

[It is more common in Men.]

[DEPTH OF BIOLOGY]

Types of Angina



I. Stable Angina: Most common type.

occurs when heart is working harder than usual. It has a regular pattern of occurrence. pain usually goes away a few minutes after you rest or after consuming angina medicine.

stable angina isn't a Heart Attack but it suggests that heart attack is likely to occur in future.



[DEPTH OF BIOLOGY]

Atherosclerosis → stable Angina

II. Unstable Angina: Does not follow a particular pattern.

• It is more severe and may occur more often than stable angina.

- Rest or medicine may not relieve pain

- It is a sign that heart attack may happen soon and requires emergency treatment.

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Atherosclerosis
+
Blood Clot
↓
unstable angina

III. Variant (Prinzmetal's) Angina

- It is very rare variant caused by spasm in coronary artery.
- It occurs when patient is at rest and pain becomes severe — usually, b/w midnight and early morning.
- It can be relieved by medicines.

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coronary spasm.



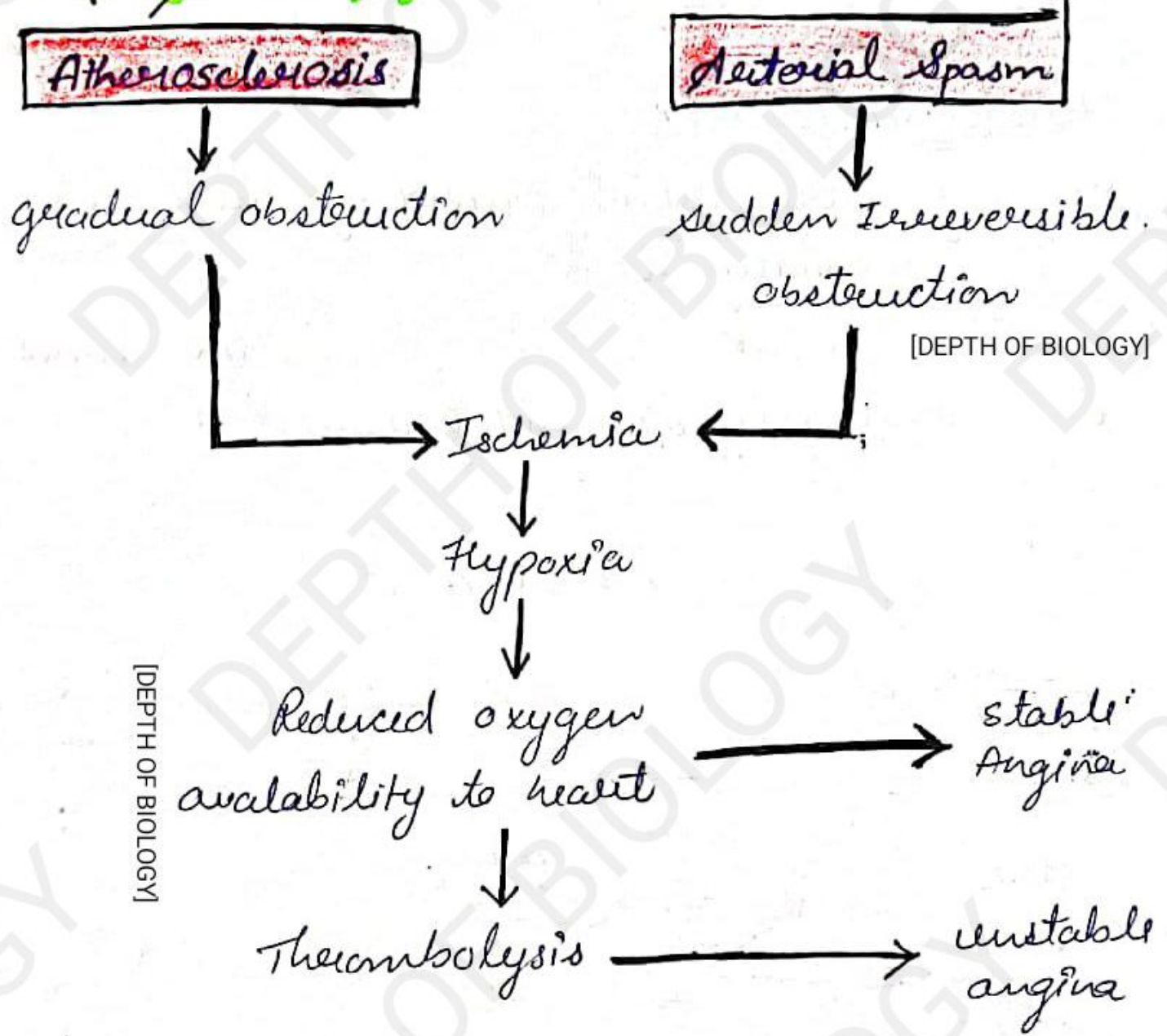
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Risk Factors

- Obesity
- History of Heart Disease
- Diabetes
- Smoking
- Sedentary lifestyle
- Large meals
- Vigorous physical workouts
- Extremely hot and cold weathers
- Atherosclerosis, MI

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Pathophysiology



Clinical Manifestations

- chest discomfort → pressure, heaviness, tightness, squeezing, burning, choking.
- Acute pain spreading from chest to
 - upper central abdomen
 - back, neck areas, jaw or shoulders.
- Pain gets accompanied by — [DEPTH OF BIOLOGY]
 - breathlessness, sweating and nausea

Diagnostic Evaluation

- History collection
- Physical Examination
- ECG
- Coronary Artery Angiography
- C-reactive protein test - cardiac marker for inflammation of vascular endothelium.
- X-ray
- CT scan
- Troponin level checks

[DEPTH OF BIOLOGY]

Management

[DEPTH OF BIOLOGY]

Medical Management

1. **Nitrates** - Nitroglycerin, ISMN & ISDN
2. **Beta Adrenergic blockers** - Metoprolol, carvedilol, etc.
3. **ACE** - Ramipril, captopril, etc.
4. **Calcium Channel blockers** - Amlodipine, verapamil, etc.
5. **Anticoagulants** - Heparin, Enoxaparin, etc.
6. **Thrombolytic agents** - urokinase, streptokinase, etc.
7. **Antiplatelet** - Aspirin, Clopidogrel

[DEPTH OF BIOLOGY]

Surgical Management

1. CABG - Coronary Artery Bypass Graft.

- procedure used to treat CHD

- It directs blood around the narrowed or clogged part of the major arteries. [DEPTH OF BIOLOGY]



To improve blood flow and O_2 supply to heart.

2. Cardiac Revascularisation - surgery to improve blood flow to heart.

Nursing Diagnosis [DEPTH OF BIOLOGY]

- Acute pain related to decreased myocardial blood flow.
- Decreased cardiac output related to alterations in rate / rhythm and electrical conduction.
- Anxiety related to chest pain and threatening environment.
- Activity intolerance related to abnormal pulse and ECG changes. [DEPTH OF BIOLOGY]
- Deficient knowledge related to the inaccurate information.