



Coronary artery
Disease

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-:Outline:-

- **Definition**
- **Etiology**
- **Epidemiology**
- **Risk factor**
- **Sign and symptoms**
- **Clinical management**
- **Medical management**

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- **Surgical intervention**
- **Pathophysiology**
- **Prevention**
- **Nursing management**
- **Summary**

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Definition

- Coronary artery disease is the narrowing or blockage of the coronary arteries, usually caused by atherosclerosis.
- It is the accumulation of plaque in artery.
- CAD is also known as **Cardiovascular heart disease**.

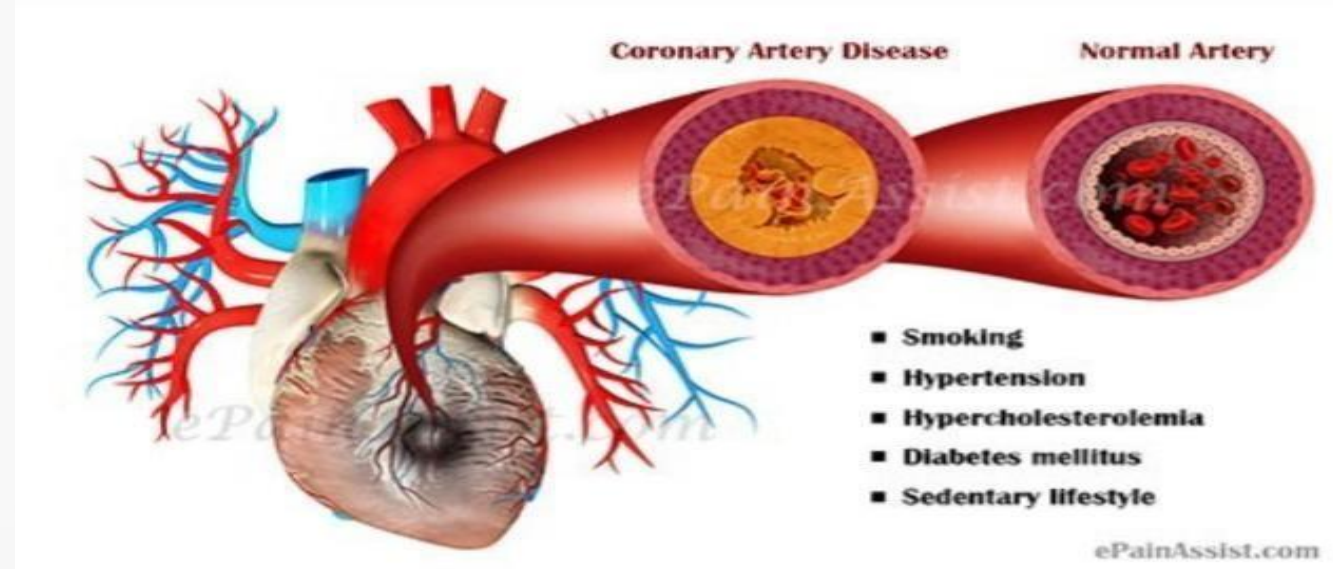
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Etiology

- **Atherosclerosis is the main cause of Coronary heart disease.**
- **Atherosclerosis (sometimes called “hardening” or “clogging” of the arteries) is the buildup of cholesterol and fatty deposits (called plaques) on the inner walls of the arteries.**

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Cause of Coronary artery disease



Epidemiology

- *Peak incidence* - 60 year for female 70 year for male
- *Gender* – Male are more affected than woman .
- *Family history* – *CAD* has been seen to run in families.
- *HOST :- Human being*

One person dies every 36 seconds in the United States from cardiovascular disease.

One in 4 deaths in India are now because of CVDs with ischemic heart disease and stroke responsible for >80% of this burden.

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- *Risk factor*

1. *Modifiable*

- cigarette smoking and tobacco chewing
- hypertension
- Obesity
- High blood cholesterol levels
- Stress
- Diabetics

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Non Modified

- **Age**
- **Sex**
- **Family history**
- **Family history of CHD**
- **Genetic factor**

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Sign and symptoms

- **Chest pain**
- **Dizzynes**
- **Nausea**
- **Vomiting**
- **Dyspnea**
- **Tachycardia**

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Clinical management

- *Ischemia*

cardiac ischemia is the name for decrease Blood flow and oxygen to the heart muscle.

- *Angina pectoris*

(chest pain)

- *Inadequate cardiac output*

- *Dysrhythmia*

abnormal heart beat or lack of rhythms

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Medical manegment

- *Pharmacology intervention*

Beta blockers :- Reducing blood pressure Calcium

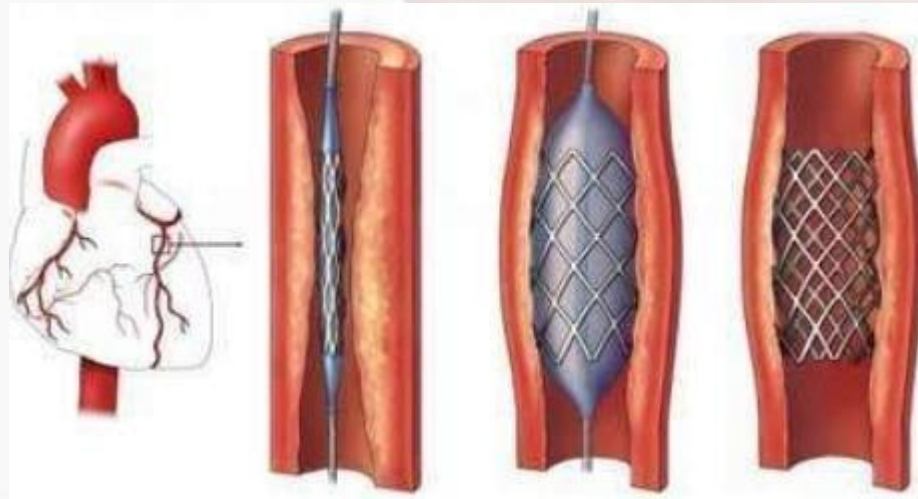
channel blockers :- Reduce calcium level Statins

Nitrates (ISD)

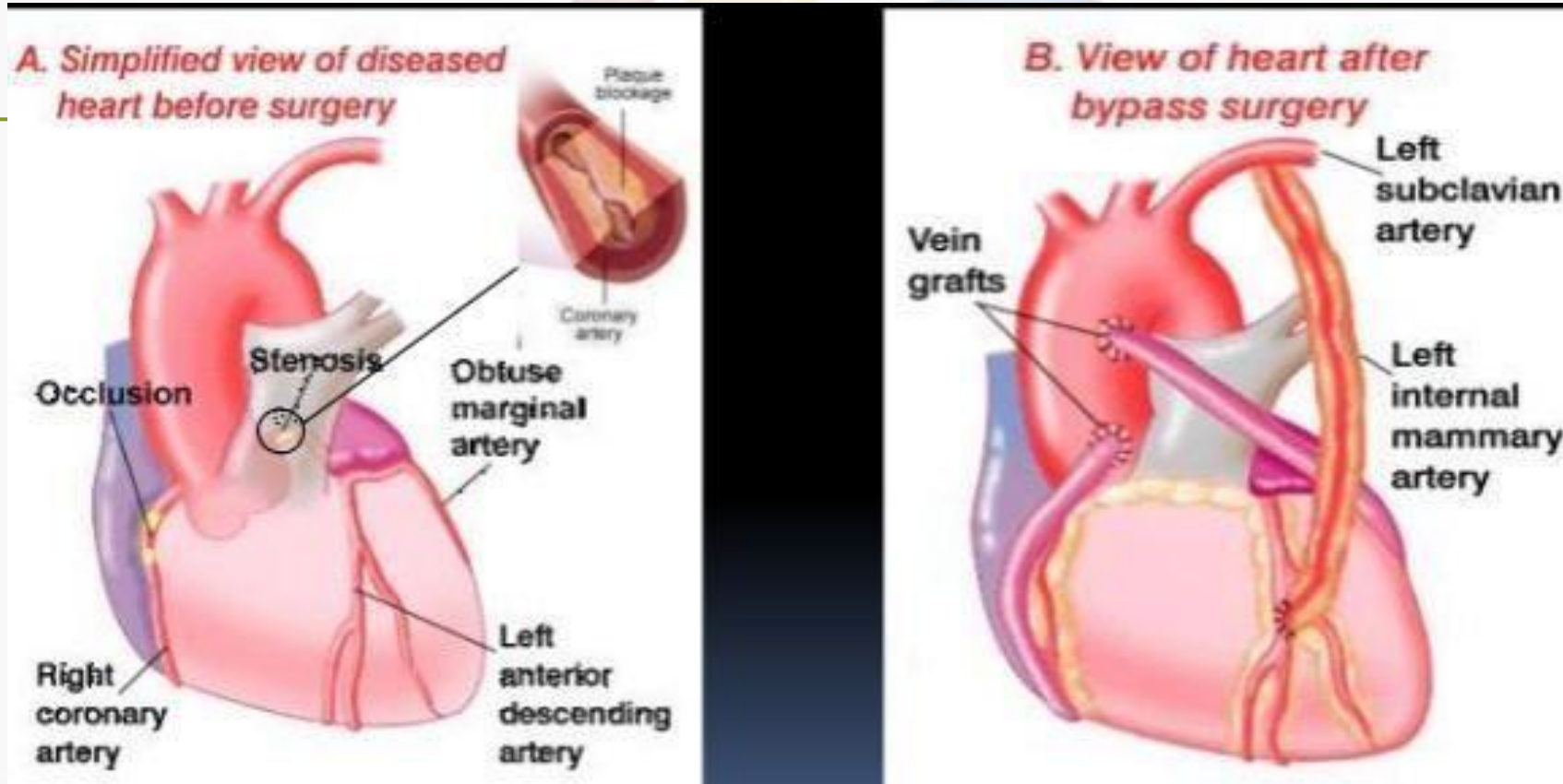
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Surgical intervention

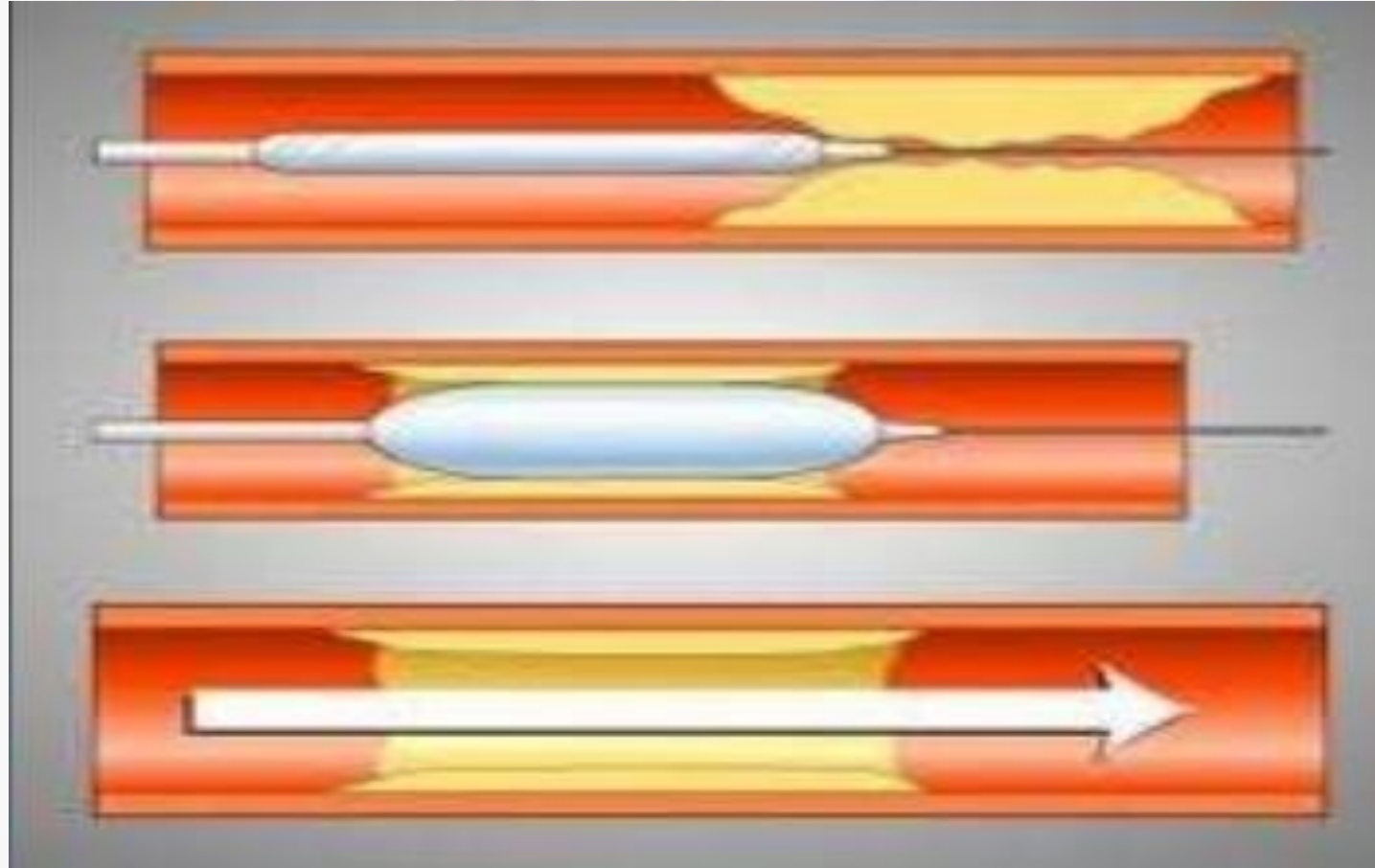
- *Coronary artery stent*



Coronary artery bypass grafting



PTCA



Prevention

- **Weight control**
- **Exercise**
- **Smoking cessations**
- **Healthy diet**
- **Regular medical check up**
- **Control hypertension**

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Nursing Management

- Instruct the client regarding the purpose of diagnostic medical and surgical Procedure.
- Assist the client to identify risk factor that can be modified , and set the goal that will promote Change in lifestyle to reduce the impact of risk factor.
- Instruct the client regarding diet.
- Stress that dietary changes are not temporary and must be maintained for life.
- Provide community resources to client Regarding smoking exercise and stress reduction.

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References

- Park - A Textbook of Social and Preventive Medicine, 2015, Banarsidas Bhanot
- Simrat - Community Health Nursing – I for B.Sc Nursing students, 2013, Lotus
- Basvanthappa B T- Essentials of Community Health Nursing, 2011, Jaypee
- Gulani - Community Health Nursing (principles and practice), 2012, Kumar

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