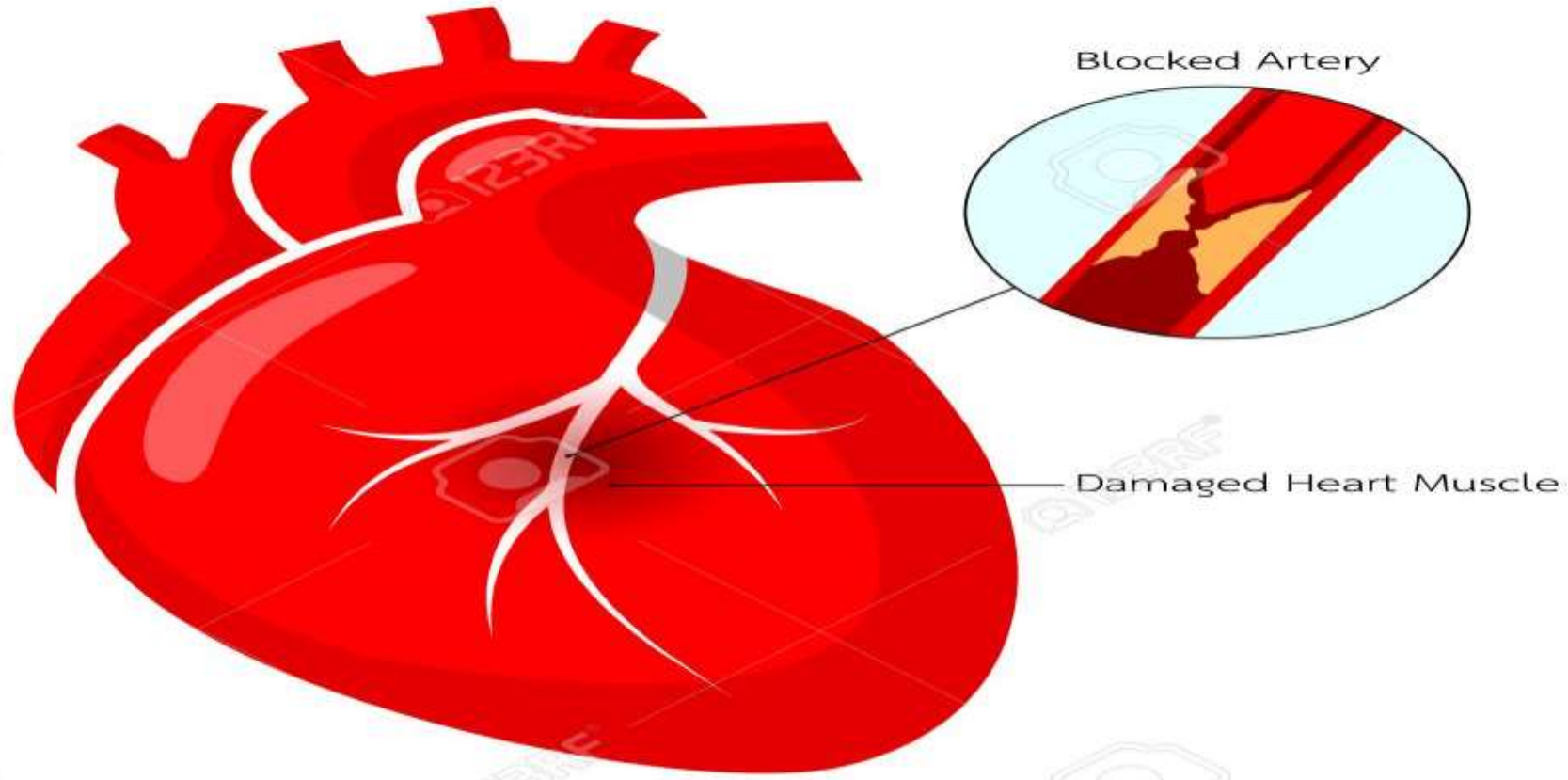
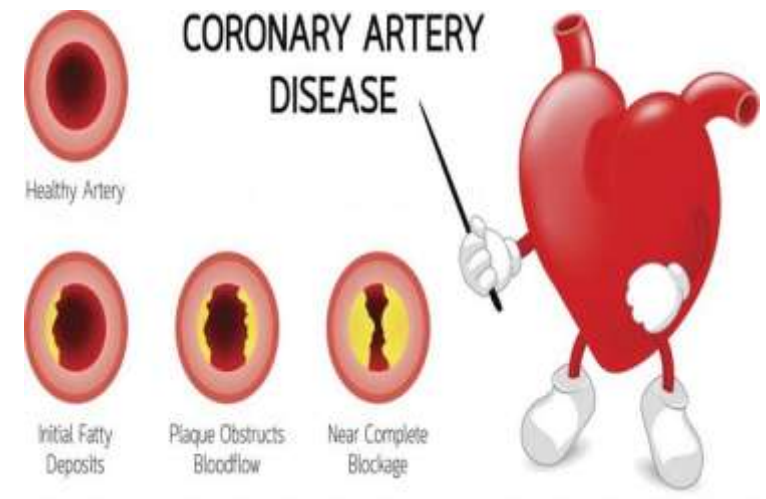


Ischemic Heart Disease

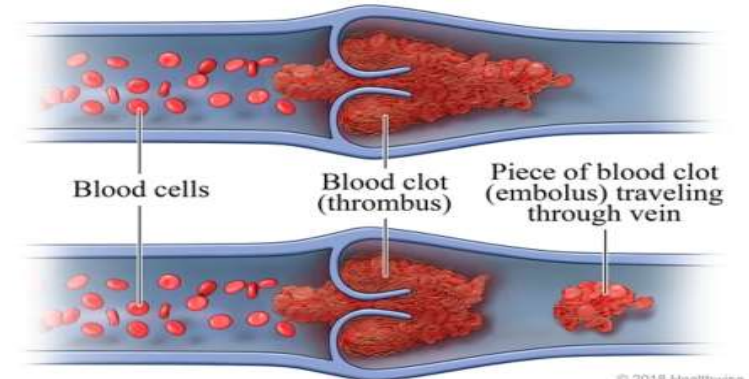


Introduction

- Ischaemic heart disease (IHD) is defined as acute or chronic form of cardiac disability arising from imbalance between the myocardial supply and demand for oxygenated blood.
- Since narrowing or obstruction of the coronary arterial system is the most common cause of myocardial anoxia, the alternate term ‘Coronary artery disease (CAD)’ is used synonymously with IHD.
- IHD or CAD is the leading cause of death in most developed countries (about one-third of all deaths) and somewhat low incidence is observed in the developing countries.
- Men develop IHD earlier than women and death rates are also slightly higher for men than for women until the menopause.



- In IHD, the vascular supply to the heart is impeded by atheroma, thrombosis or spasm of coronary arteries.
- This may impair the supply of oxygenated blood to cardiac tissue sufficiently to cause myocardial ischaemia which, if severe or prolonged, may cause the death of cardiac muscle cells.
- Similarities in the development of atheromatous plaques in other vasculature, in particular the carotid arteries, with the resultant cerebral ischaemia has resulted in the term cardiovascular disease (CVD) being adopted to incorporate CHD, cerebrovascular disease and peripheral vascular disease.



Causes

IHD is invariably caused by disease affecting the coronary arteries, the most prevalent being atherosclerosis accounting for more than 90% cases, while other causes are responsible for less than 10% cases of IHD.

Therefore, it is convenient to consider the etiology of IHD under three broad headings:

- i) coronary atherosclerosis;
- ii) superadded changes in coronary atherosclerosis; and
- iii) non-atherosclerotic causes.

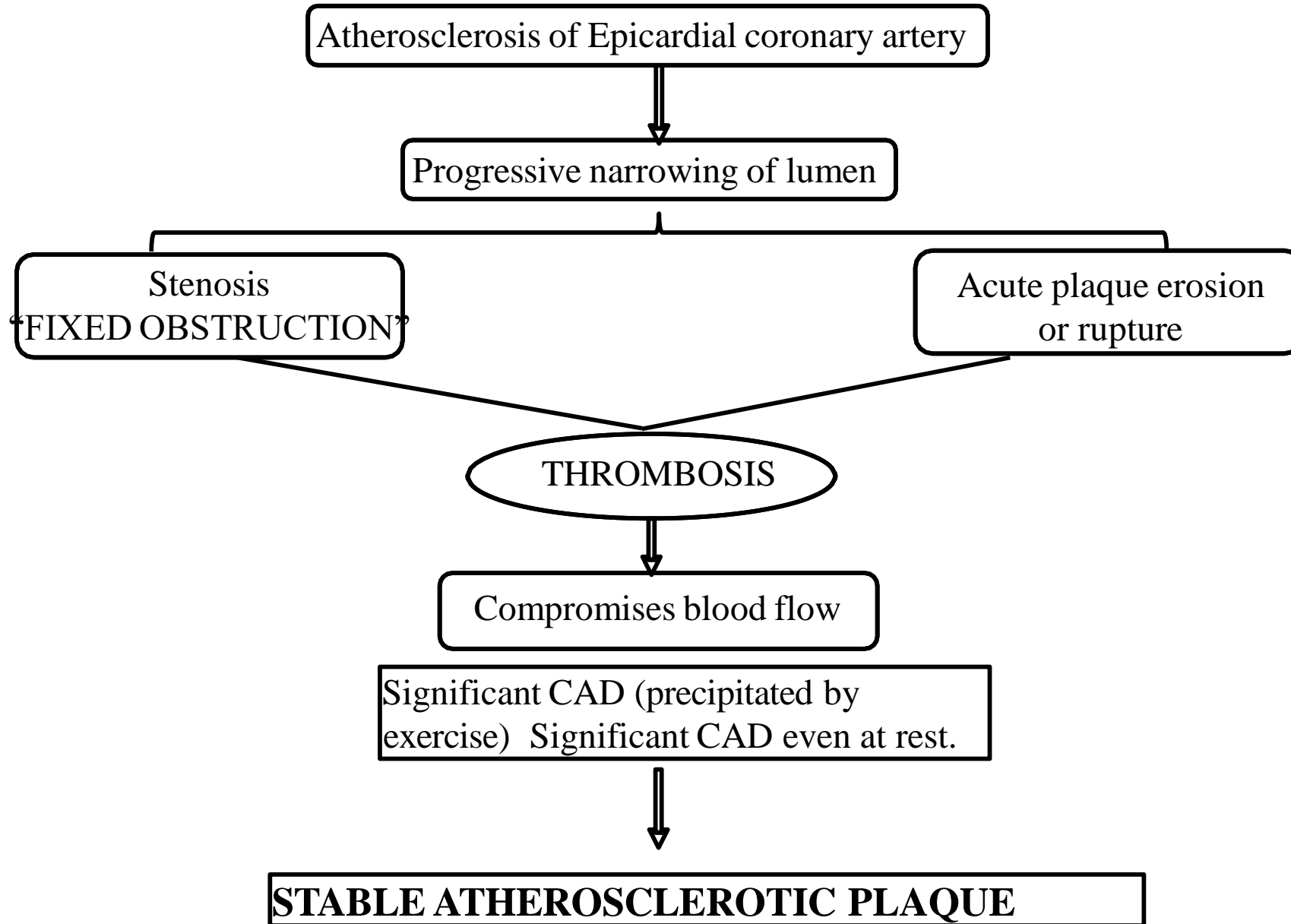
Risk factors

Factors that increase the risk of IHD

- Cigarette smoking
- Raised serum cholesterol
- Hypertension
- Diabetes
- Abdominal obesity
- Increased personal stress

Factors that decrease the risk of IHD

- Regular consumption of fresh fruit and vegetables
- Regular exercise
- Moderate alcohol consumption
- Modification of factors that increase the risk of CHD



STABLE ATHEROSCLEROTIC PLAQUE

Unpredictable and abrupt conversion to

Rupture, or Superficial erosion, or Ulceration, or Fissuring, or Deep Hemorrhage

Partially life threatening **ATHEROTHROMBOTIC** plaque

SUPERIMPOSED THROMBUS

Partially or Completely occludes the artery

IHD

