

### **Question no : 3**

How Atherosclerotic plaque is developed in coronary artery ?

#### **Answer**

#### **ATHEROSCLEROTIC PLAQUE :**

- Atherosclerotic plaque is a disease in which plaque developed

Inside the arteries.

- Arteries are blood vessels that carries oxygenated blood to heart and all parts of body.
- Plaque made of fat,cholesterol,calcium.
- with the passage of time the plaque develops hardness to heart and narrowing of arteries.

#### **Symptoms :**

- Chest pain
- Shortness of breath
- Heart attack

#### **Treatment :**

Severe cases required surgery or medications such as aspirin or cholesterol reducing agents.

### **Question no 2**

Why are NSAIDS used for the treatment of PDA ?

#### **Answer**

#### **PATENT DUCTUS ARTERIOSUS :**

Patent ductus arteriosus is that condition in which ductus arteriosus fails to close after birth but in some cases pda close by its own.

#### **USES OF NSAIDS FOR TREATMENT:**

When surgery is not required then we use NSAIDS anti-inflammatory drugs to close the ductus .

E.g indomethacin or ibuprofen

NSAIDS inhibit the production of prostaglandins by decreasing the activity of cyclooxygenase (cox1 and cox2 )these are the enzymes that involves the synthesis of prostaglandins involve inflammation which are in clotting of blood but in some cases the NSAIDS therapy won't close pda(patent ductus arteriosus).

### **QUESTION NO: 1**

Briefly explain the Eisenmenger syndrome ?

## Answer

### **EISENMENGER SYNDROME :**

Eisenmenger syndrome is that disease in which hole (shunt) developed between two chambers in the heart and hole causes abnormal flow of blood and increase blood goes to lungs instead of body. The arteries become narrow in the lungs and pressure increase in the lungs causes damage of the lungs permanently because of abnormal flow.

OR

- Blood flow from left to right ventricle left to right ventricle shunt occur
- Blood flow from left ventricle to left atrium pulmonary pressure increases and blood goes back right ventricle hypertrophy occur and pressure increases blood goes back from right ventricle to left ventricle also called shunt reverse. This is called Eisenmenger syndrome.
- Also occur when the pressure in pulmonary arteries become high that cause oxygen poor to flow from right to left ventricle.
- Blood flow abnormally in lungs and heart.

**Main causes of Eisenmenger syndrome :**

#### **Ventricular septal defect**

Symptoms include :

- Cyanosis
- Shortness of breath while lying
- Chest pain
- Fatigue
- Palpitation
- High red blood cell amount

#### **IDENTIFICATION OF EISENMENGER SYNDROME BY ECG AND ECO AND OTHER HEART TESTS:**

Treatment :

Medical therapy

Severe cases required heart transplantation.

#### **Question no : 4**

Explain the classification of MI based on international consensus in 2012 ?

## Answer

### **International consensus in 2012**

Classification of myocardial infarction into five classes :

- Type 1 : This is related to plaque erosion or plaque dissection .
- Type 2 : This is related to ischemia mean low blood supply and also related with increase oxygen demands like anemia or low blood pressure .
- Type 3 : This is related to the cardiac heart death suddenly and the symptoms may refer myocardial infarction electro cardiography may be taken.
- Type 4 : This is related with angioplasty and also associated with thrombosis .

- Type 5 : This is related to the heart coronary artery by pass grafting.

**Mcqs**

**1 : c**

**2 : d**

**3 : d**

**4 : a**

**5 : b**

**6 : c**

**7 : a**

**8 : b**

**9 : b**

**10 : c**