



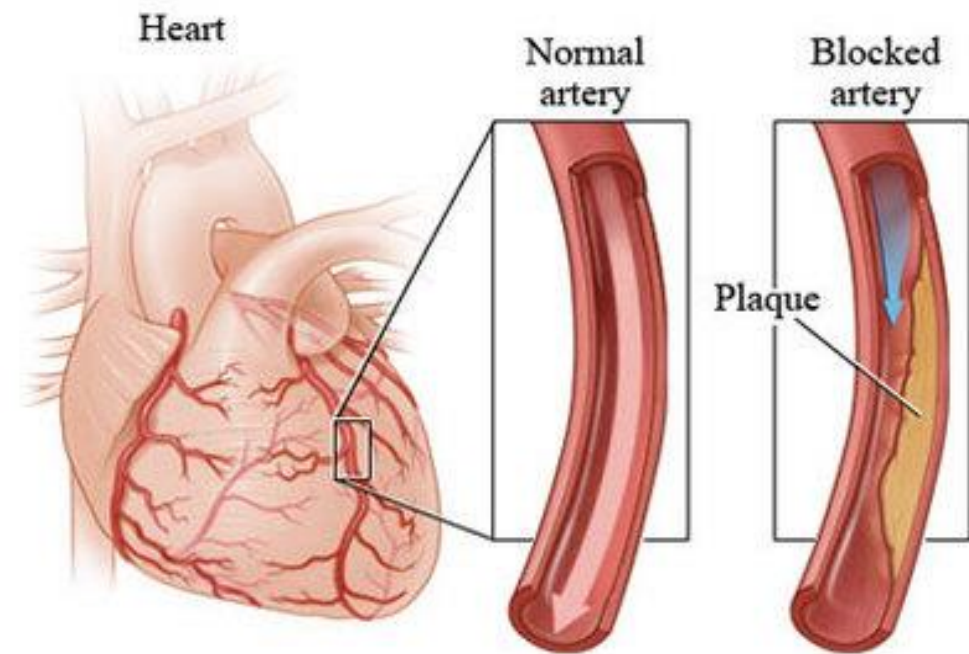
UNC REX  
HEALTHCARE

# Coronary Artery Disease and Interventions

UNC Rex Cardiac Rehabilitation

# What is Coronary Artery Disease (CAD)?

- CAD occurs when the arteries that supply blood to the heart muscle become hardened or narrowed.
- CAD is often caused by plaque.
  - Plaque is the buildup of fat, cholesterol and other waxy substances
- These can cause interrupted blood flow, which can result in a heart attack.



# CAD Symptoms

- Coronary artery disease often develops over decades.
- You might not notice a problem until you have a significant blockage.

- Decreased blood flow may cause:
  - chest pain (angina)
  - shortness of breath
  - tightness in your arms, back, neck, or jaw
  - other coronary artery disease signs



- Women may experience less typical signs and symptoms such as neck or jaw pain.

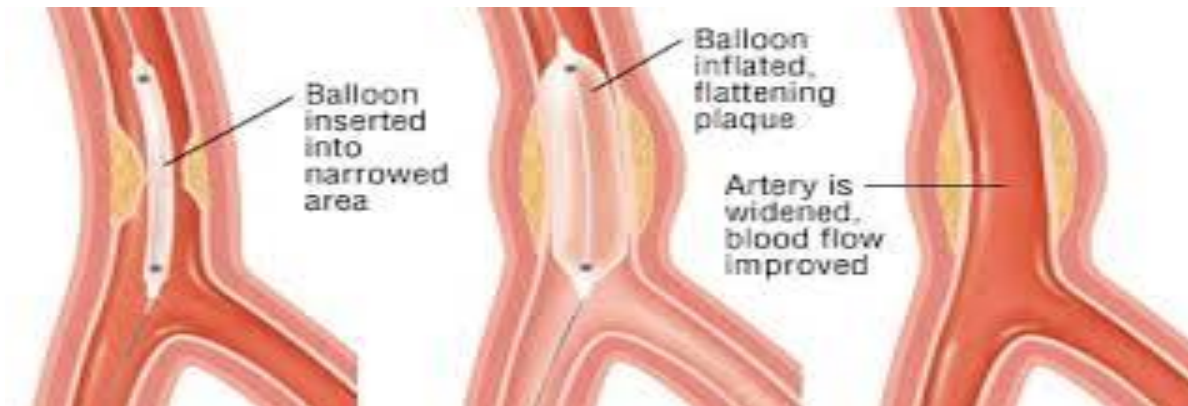
# CAD Treatment

- Medications can help control the condition.
  - Beta-blockers
  - Calcium channel blockers
  - Nitrates can help relieve angina
- Angioplasty
- Stents
- Coronary By Pass Graft Surgery



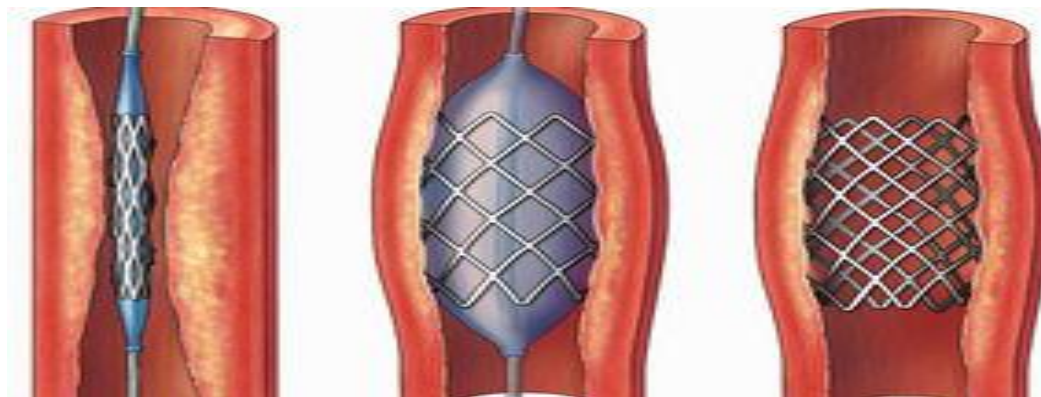
# Treatment: Angioplasty

- Balloon Angioplasty uses a catheter with a small balloon tip.
  - The catheter is guided to the narrowing in your artery.
- Cutting Balloon Angioplasty uses a catheter with a special balloon tip with small blades to score the plaque.
- Once in place, the balloon is inflated to push the plaque and stretch the artery open to boost blood flow to the heart.



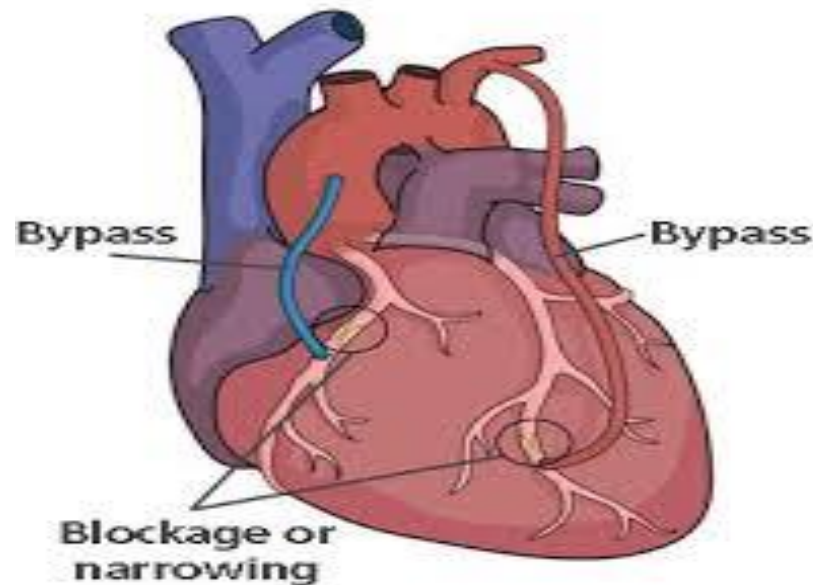
# Treatment: Stent

- A stent is a small tube that acts as a scaffold to support the inside of your coronary artery.
- A balloon catheter puts the stent into your narrowed coronary artery.
- Once in place, the balloon is inflated, and the stent expands to the size of the artery and holds it open.
- The balloon is then deflated and removed while the stent stays in place.
- Over several weeks, your artery heals around the stent.



# Treatment: Coronary Bypass Graft

- Surgery to create new pathways for blood to flow to the heart.
- The surgeon takes a healthy piece of vein from the leg or artery from the chest or wrist.
- The surgeon attaches the healthy piece to the coronary artery, just above and below the narrowed area or blockage.
- This allows blood to bypass (get around) the blockage.



# Taking Care of You

- Follow post surgery recommendations.
  - take medication as prescribed
  - attend follow-up appointments with your doctor
- Take action to control your risk factors.
  - quit smoking
  - control conditions such as high blood pressure, high cholesterol and diabetes
  - maintain a healthy weight
- Begin a regular exercise routine and stay physically active.
- Eat a low-fat, low-salt diet that is rich in fruits, vegetables and whole grains.
- Reduce and manage stress.