Atherosclerosis
& Its Serious Consequences

Atherosclerosis can affect any artery in the body and can cause different diseases based on which arteries are affected:

- **Coronary artery disease (CAD):** Atherosclerosis that affects the coronary arteries that supply oxygen and nutrients to the heart muscle can cause heart attack.
- **Peripheral artery disease (PAD):** Atherosclerosis that affects the arteries of the legs can lead to decreased blood flow to the legs and feet.
- **Carotid artery disease:** Atherosclerosis that affects the arteries that supply blood to the brain can cause strokes.
- **Renal artery disease:** Atherosclerosis that affects the arteries to the kidneys can cause kidney disease.
- **Aortic arch disease:** Atherosclerosis that affects the arch of the aorta can cause chest pain.

**Complications**

- **Heart attack:** A complete blockage of a coronary artery can lead to heart muscle death.
- **Angina:** Pain or discomfort in the chest caused by insufficient blood flow to the heart.
- **Stroke:** A life-threatening emergency that occurs when blood flow to the brain is blocked or interrupted.
- **Heart failure:** A condition in which the heart is unable to pump blood effectively.
- **Aneurysm:** A weak area in the wall of an artery that is likely to rupture.

**Risk Factors & Symptoms**

- **Risk factors:**
  - High blood pressure
  - High cholesterol
  - Smoking
  - Unhealthy diet
  - Type 2 diabetes
  - Obesity
  - A sedentary lifestyle
  - Family history of heart disease

- **Symptoms:**
  - Angina (chest pain)
  - Fatigue
  - Shortness of breath
  - Irregular heart rhythm
  - Vomiting

**Diagnosis**

- **Non-invasive tests:**
  - Stress test
  - Electrocardiogram (EKG)
  - Ultrasound
  - Computerized tomography (CT) scan
  - Magnetic resonance imaging (MRI)
  - Positron emission tomography (PET) scan
  - Coronary angiography

- **Invasive tests:**
  - Coronary artery bypass grafting (CABG)
  - Angioplasty
  - Stenting
  - Heart valve surgery

**Prevention**

- **Healthy lifestyle:**
  - Regular exercise
  - Healthy diet
  - Weight control
  - Smoking cessation
  - Stress management

- **Medications:**
  -Statins
  - Blood pressure medications
  - Blood thinners

**Treating CAD & PAD**

- **Medical therapy:**
  - Medications like aspirin, statins, and blood pressure medications
  - Angioplasty and stenting
  - Coronary artery bypass grafting (CABG)
  - Heart valve surgery

**PAD Prevention with a Healthy Lifestyle**

- **Lifestyle changes:**
  - Regular exercise
  - Balanced diet
  - Stress management
  - Smoking cessation

**Treat CAD & PAD to vastly improve the universal human experience of aging and health.**