SEX AND GENDER DIFFERENCES
CARDIOVASCULAR DISEASE

RISK FACTORS

**Women**
- History of Pre-Eclampsia
- >35" Waist Size
- Total Cholesterol >170 mg/dl
- HDL Cholesterol <50 mg/dl
- >55 years old

**Both**
- BP >130/85
- FBS >100mg/dl
- FH of CVD
- Triglyceride >150 mg/dl
- LDL Cholesterol >100 mg/dl
- Lifestyle Choices

**Men**
- >40" Waist Size
- Total Cholesterol >200 mg/dl
- HDL Cholesterol <40 mg/dl

SYMPTOMS

- Diaphoresis
- Jaw Pain*
- Dry Mouth**
- GI Symptoms*
  - Nausea
  - Vomiting
  - Indigestion
- Chest Pain
  - Crushing
  - Pressure
  - Tightness
- Left Arm Pain
- Numbness

PATHOPHYSIOLOGY

**Microvascular Disease**
*Primarily in women*
MVD affects small coronary arteries. The plaque spreads evenly, resulting in arterial narrowing, but no obstruction on angiogram. Spasm is a possible etiology for this.

**Atherosclerotic Vascular Disease**
*Primarily in men*
ASVD affects large coronary arteries. These gradually fill with plaque. This plaque ruptures and causes blockage, inhibiting blood flow to the heart, and diagnosed with angiogram.

DIAGNOSTICS

**Microvascular Disease**
- Often missed by conventional testing
- 50% of women have no coronary artery blockage
- MINOCA (MI with No Obstruction of Coronary Artery)
- Better diagnostic tools are:
  - SPECT (Single Photon Emission Computerized Tomography)
  - High-Sensitive Troponin Test
  - HS Troponin > 14 mg/L suggests MI

**Atherosclerotic Vascular Disease**
- Conventional tests are more accurate
  - Arteriogram
  - Exercise Stress Test
  - Troponin level >22mg/L suggests MI

TREATMENT

**Women**
- Vasodilators (NTG, ACE inhibitors, ARBs)
- Glycoprotein 2b/3a Anticoagulants
- Statins have not been proven to prevent a first MI in women
- ASA has more risk than benefit if used to prevent first MI in women

**Men**
- Traditional antihypertensives
- Traditional anticoagulants
- Low-dose daily ASA prevents first MI in men

To Learn More or Get Involved
Visit us at amwa-doc.org/sghc or email us at sghcstudents@amwa-doc.org
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