

# SEX DIFFERENCES IN ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

## Risk Factors

### Female

- HISTORY OF PRE-ECLAMPSIA
- >35" WAIST SIZE
- HISTORY OF GESTATIONAL DIABETES
- EARLY MENOPAUSE < 40-45 YEARS OLD
- HDL CHOLESTEROL <50 MG/DL
- >65 YEARS OLD

### Both

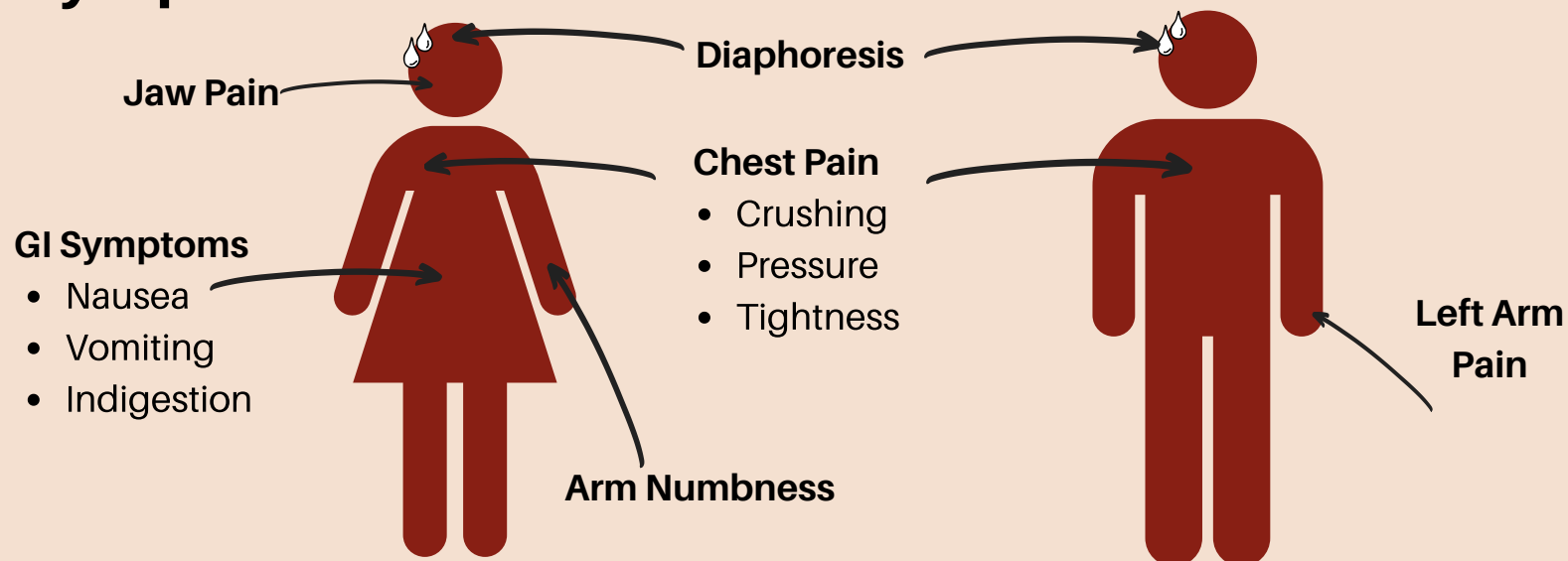
- FBS > 100MG/DL
- FH OF CVD
- LIFESTYLE CHOICES

### Male

- >40" WAIST SIZE
- HDL CHOLESTEROL <40 MG/DL



## Symptoms



## Pathophysiology

### Microvascular Coronary Artery Disease Primarily in Females

Microvascular Disease affects small coronary arteries. The plaque spreads evenly, resulting in arterial narrowing, but no obstruction on angiogram. Symptoms may result from spasm of the coronary arteries.

### Obstructive Coronary Artery Disease Primarily in Males

Large coronary arteries gradually fill with plaque. This plaque ruptures and causes blockage, inhibiting blood flow to the heart. Diagnosis is made by angiography.

## Diagnostics

### Microvascular Disease (non-obstructive)

- 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 in Females

### Obstructive Coronary Artery Disease

- Conventional tests are more accurate
- Arteriogram
- Exercise Stress Test
- Troponin level >22mg/L suggests MI in Males

## Prevention and Treatment

### Female

- Statins
- Blood Pressure Control
- Aspirin has more risk than benefit if used to prevent first MI in females
- Healthy Diet (with restricted calories if weight loss is needed)

### Male

- Statins
- Blood Pressure Control
- Low-dose daily Aspirin prevents first MI in males
- Healthy Diet (with restricted calories if weight loss is needed)

TO LEARN MORE OR GET INVOLVED

VISIT US AT [AMWA-DOC.ORG/SGHC](http://AMWA-DOC.ORG/SGHC) OR EMAIL US AT [SGHCSTUDENTS@AMWA-DOC.ORG](mailto:SGHCSTUDENTS@AMWA-DOC.ORG)