Heart Disease in Women

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Heart Disease in Women

- Congenital Heart Disease
- Valvular Heart Disease
- Arrhythmias
- Cardiomyopathy
- Hypertension
- Coronary Artery Disease
Coronary Artery Disease
Heartbreaking Facts:
Coronary Artery Disease - Heartbreaking Facts¹:

- CHD is the single largest killer of American women.
- 2003-Combined cardiovascular diseases killed 483,842 women; breast cancer claimed about 43,844 lives that same year.
Heartbreaking Facts (Prevalence)

- 8,000,000 American women are currently living with heart disease
- 6,000,000 have had an MI and/or angina
Prevalence

- 13% of women 45 and over have had a heart attack.
- 435,000 American women have M.I.’s each year: 83,000 are under 65 and 9,000 are under 45.
Heartbreaking Facts
(Mortality)

- Leading cause of death in American women
- 43% of deaths in American women (nearly 500,000) caused by heart disease and strokes
Mortality

Heart attacks kill 6 times as many women as breast cancer each year.

62% of all CHF deaths are in women.
Heartbreaking facts:

- From ages 35 to 74, the age-adjusted death rate from CHD for black women is over 71% higher than that of white women.

- African American women ages 55-64 are twice as likely as white women to have a heart attack.
Compared with Men:

- Mortality rate for women younger than 65 years following acute MI is double that of men.
- For those who survive, the one-year mortality rate is still 1.5 times that of men.
Compared with Men:

- Women undergoing bypass have significantly higher rates of operative mortality than men.

  Female operative mortality = 4.52%

  Male operative mortality = 2.61%
Compared with Men:

- 38% of women and 25% of men will die within one year of a 1\textsuperscript{st} recognized heart attack.
- 38% of women, 18% of men—2\textsuperscript{nd} heart attack within six years.
- Women—less likely to receive beta-blockers or ACE inhibitors after M.I.
Compared with Men:

More women than men die of heart disease each year, yet women receive only:

- 33% of angioplasties, stents, and CABG’s
- 28% of implantable defibrillators
- 36% of open-heart surgeries
Compared with Men:

Women compromise only 25% of participants in all heart-related research.
Risk Factors for CAD

- Family History
- Male Gender
- Elevated Cholesterol
- Smoking
- Obesity
- Menopause
- Diabetes
Cholesterol

- Total Cholesterol
- High Density Lipoprotein
- Low Density Lipoprotein
- Cholesterol / HDL Ratio
Cholesterol

59% of non-Hispanic white women, 47% of non-Hispanic black women, and 43% of Mexican American women have total cholesterol levels of 200 mg/dL or higher.
HDL--
the “Good Cholesterol”

- Ideally, 35 mg/Dl or higher
- Usually higher in women than men
- Elevated by female hormones
- Elevated by exercise
LDL--The “Bad Cholesterol”

- Felt to play a part in coronary artery plaque formation

- Thought to be “weakened” by anti-oxidants (e.g., Vitamin E)
Menopause
Menopause

- Decreased hormonal levels
- Post-menopausal women lose the hormonal protective effect
- Decreased estrogen leads to decreased HDL
Hormone Replacement Therapy (HRT)

Still controversial

Yesterday--highly advocated

Today--warnings against it

Tomorrow??????
Magnesium

- Lacking in many women
- Decrease in unprocessed food intake (natural source of magnesium)
- Evidence that high blood levels of magnesium lower the risk of Coronary Artery Disease$^2$
Diabetes

- Insulin-dependent (Type I)
- Non-insulin dependent (Type II)
- Insulin resistance
- Metabolic syndrome X
Metabolic Syndrome X

- Obesity
- Hypertension
- Elevated cholesterol
- Elevated triglycerides
- Low HDL
- Insulin resistance
Cardiac Syndrome X

- Seen most often in younger (pre-menopausal) women
- No test will definitely prove the diagnosis of CSX
- Diagnosis lies primarily in excluding other causes of chest pain
- Does not seem to be associated with long-term cardiac disease
Cardiac Syndrome X

- Women with Cardiac Syndrome X actually do have coronary artery pathology involving “microvessels”
- Since the coronary arteries appear “normal” on cath, many women are given the diagnosis of “anxiety” and are dismissed from care
Pain Pattern

Often different from the characteristic anginal pain, causing symptoms to sometimes be overlooked by the physician.
Marital Stress

Married women who avoid conflict with their spouses have an increased risk of dying from any cause, including heart disease.
Most Recent News:

A new study shows heart attacks and strokes are more common in women infected with human papillomavirus, or HPV.\(^5\)

Very preliminary investigations to date; much larger study groups needed
HPV and Heart Disease

Women with HPV were more than twice as likely to say they'd had a stroke or heart attack, once researchers accounted for other heart risks including smoking, drinking and high blood pressure.
HPV and Heart Disease

It was only the cancer-causing HPV strains that were linked to an increased risk of cardiovascular disease. The researchers couldn't distinguish between chronic and short-lasting infections.
What’s a Woman to do?
Stop Smoking
Lower Cholesterol

No More Supersize!
Lose Weight
Control Blood Pressure
Exercise
Hormone Replacement Therapy?
References

1. National Center for Health Statistics: National Heart, Lung and Blood Institute; AHA’s 2002 Heart and Statistics Update


http://heartdisease.about.com/od/womenheartdiease/a/microx.htm

5. Journal of the American College of Cardiology, Online--October 24, 2011