

Vessel Blockage in Women Differs from Men

Standard diagnostic testing can miss the warning signs of heart disease in women, according to a report in the *Journal of the American College of Cardiology*.

This is because plaque tends to collect in the smaller vessels in women, while it builds up in the major arteries in men.

As many as 3 million US women may have this condition, called coronary microvascular syndrome, which puts them at an increased risk of heart attack and even death, experts say.

Coronary microvascular syndrome occurs when very small coronary arteries, usually too small to be seen with standard diagnostic tests, become blocked.

Unfortunately, routine angiographies tend to pick up only significant blockages in major arteries, researchers say. The results come from the National Institutes of Health (NIH) - the Women's Ischemia Syndrome Evaluation (WISE) study, initiated in 1996 to look at heart disease in women.

"This just increasingly validates that we're learning more and more about women every day, and that it calls for a mechanism of heart disease that frequently goes undiagnosed," says Dr. Nieca Goldberg, chief of women's cardiac care at Lenox Hill Hospital in New York City.

Testing May Differ for Women

Dr. George Sopko, WISE project officer for the National Heart, Lung, and Blood Institute (NHLBI) says, "Women and physicians should pay attention to symptoms related to the heart."

Ischemic heart disease (IHD) is the leading cause of death in the US, with women bearing a disproportionate burden of the illness.

Some 250,000 women die each year from IHD and its related conditions, the report says. More than one third (38 percent) of all deaths in women are related to coronary heart disease.

And, since 1984, more women than men have died each year from IHD. IHD is the leading killer of women of all ages, the report notes.

Yet, traditional disease management seems to overlook problems in women. In particular, coronary angiography, an X-ray examination of the blood vessels and chambers of the heart, is not specific enough to detect problems in women, the researchers say.

"The coronary angiogram provides anatomical information about the location of the blockages, and how much they block," says Dr. Sopko. "The angiogram doesn't provide information about what happens within the wall."

WISE investigators found that a majority of women who were given an all-clear on their angiograms continued to have symptoms along with repeated testing and hospitalizations and a declining quality of life.

"We found that women who have no significant blockages but have evidence of ischemia are at a high risk for future heart attacks, repeat hospitalization, or even death," explains Dr. Sopko.

Pay Attention to Heart Symptoms

Dr. Goldberg, author of The Women's Healthy Heart Program, says, "When women go for an angiogram and they don't find blockages, it doesn't mean they don't have a problem. It means the problem's not caused by build-up of plaque."

Dr. Goldberg continues, "It doesn't mean that the symptoms aren't coming from the heart. They can come from very small blood vessels that we don't see in standard testing."

The question: What do you do in women who have symptoms but no significant blockages?

The answer: Don't ignore the problem.

"This is looking at women who might have been discarded," says Dr. Sopko. "Now we're saying you don't have the big blockages but you've got some problems, so let's go look. You don't neglect or deny medical therapy to these women."

An added problem, however, is that there is not much non-standard testing to detect these kinds of problems, notes Dr. Goldberg.

"Unfortunately, for this particular mechanism we don't yet have all the tools we need," she says. "Clearly, when it comes to women and heart disease, we can't take for granted that it's going to be exactly to the same script as men."

Always consult your physician for more information.