**SEX DIFFERENCES IN THE CARDIOVASCULAR CONSEQUENCES OF DIABETES MELLITUS**

**N.K. Wenger**

Emory University School of Medicine, Atlanta, GA, USA

Cardiovascular disease (CVD) is the leading cause of morbidity and mortality with type 2 diabetes mellitus (DM), accounting for > 75% of hospitalizations and >5% of deaths. Women have a 3-fold excess of coronary heart disease (CHD) risk compared to men, and diabetic women have a 2-fold excess fatal CHD risk compared to non-diabetic women. Myocardial infarction occurs earlier and has higher mortality in diabetic women than diabetic men. Diabetic women have a more adverse cardiovascular risk profile than their male peers, have lower revascularization rates with both PCI and CABG compared to men, and are less likely than men with DM to receive guideline-based outpatient and acute coronary syndrome therapies.

Incident heart failure is more common in diabetic women than in men. In the Framingham cohort, heart failure risk was increased 5-fold in diabetic women compared with 2-fold in diabetic men vs a nondiabetic population.

Diabetic women have a higher prevalence of risk factors, including hypercholesterolemia, physical inactivity and overweight, and are counseled less about nutrition, exercise, and weight control.

Diabetes increases stroke risk more in women than men, but with data on relationship between diabetes and stroke type and effect of DM duration or control on stroke incidence.

Little is known about sex differences in diagnosis, symptoms, and treatment of PAD in diabetic patients, although women fare worse than men. Women with PAD and DM respond less well to exercise training than women without DM and men with and without DM; women undergoing PAD revascularization have lesser long-term survival and excess post-surgical mortality.

Women with DM and heart disease have poorer control of both diseases and receive less intensive medical treatment than diabetic men, which may partly explain why CVD death has decreased among diabetic men but not women.