Increased TV Viewing May Raise CVD Mortality

BY ROXANNA GUILFORD-BLAKE

Increased time spent watching television is associated with higher mortality in general and increased cardiovascular disease–related death in particular, according to findings from an Australian population-based cohort study.

Each hour spent in front of the television daily was associated with an 18% increased risk of cardiovascular disease–related death and an 11% increase of death from all causes, wrote David Dunstan, Ph.D., of the Baker IDI Heart and Diabetes Institute in Melbourne, Australia, and colleagues.

Participants who watched television 4 or more hours daily had an 80% increased risk for cardiovascular disease–related death and a 46% higher risk of death from all causes when compared with those who watched less than 2 hours a day (DOI: 10.1161/CirculationAHA.109.894824).

The risks "were independent of traditional risk factors such as smoking, blood pressure, cholesterol, and diet, as well as leisure-time exercise and waist circumference," Dr. Dunstan and his colleagues noted.

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Each hour spent watching TV was linked to an 18% higher risk of cardiovascular disease–related death.

Investigators examined the relationship between television viewing time and mortality in a national population-based cohort from the Australian Diabetes, Obesity and Lifestyle Study. The participants were enrolled during 1999-2000 and followed through 2006.

A total of 8,800 participants (3,846 men and 4,954 women, a mean age of 50 years) met all inclusion criteria for the analysis. Everyone had undergone testing for glucose levels, fasting serum triglycerides, total cholesterol, and HDL cholesterol. Those with a history of cardiovascular disease or stroke were excluded.

At enrollment, participants reported television-viewing habits for the previous 7 days and were grouped into one of three categories: less than 2 hours daily, between 2 and 4 hours, and more than 4 hours daily. Timeframes when the television was on, but participants were otherwise engaged, did not count.

During the median follow-up of 6.6 years, 284 deaths occurred; 87 were due to cardiovascular disease.

The study was limited by the fact that it assessed a single behavior. However, time spent watching television "has been shown to be a reasonable proxy measure of an overall sedentary behavior pattern," the authors stated.

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Effect of White-Coat Hypertension Seen

ORLANDO — White-coat hypertension is often shrugged off as a benign condition, but an Italian study suggests it is anything but.

Indeed, 184 young adult Italians with white-coat hypertension at baseline experienced a greater increase in 24-hour ambulatory blood pressure during 8.5 years of follow-up in the Hypertension and Ambulatory Recording Venetia Study (HARVEST) than did 286 other participants with baseline sustained hypertension, Dr. Lucio Mos reported at the annual scientific sessions of the American Heart Association.

Moreover, the white-coat hypertensives were as likely to develop left ventricular hypertrophy as were subjects with sustained hypertension. Plus, HARVEST participants with white-coat hypertension gained twice as much weight during follow-up.

This evidence of problematic trends in a variety of surrogate risk markers implies an increased risk of future cardiovascular events in patients with white-coat hypertension. Tighter control of their 24-hour blood pressure along with close target organ surveillance is warranted, according to Dr. Mos of Sant'Antonio Hospital in San Daniele del Friuli, Italy.

HARVEST is a multicenter prospective Italian study that began in the 1990s. The HARVEST participants in this analysis averaged 33 years of age at enrollment and had never been treated for hypertension. During follow-up, 8.2% of the group with white-coat hypertension and 6.3% with sustained hypertension developed echocardiographic left ventricular hypertrophy.

Ambulatory blood pressure rose by an average of 7.9/5.6 mm Hg from a baseline of 120.9/76.3 mm Hg in the white-coat hypertension group, and by 1.2/1.9 mm Hg from a baseline of 135.5/83.4 mm Hg in the sustained hypertension group.

Subjects in the white-coat hypertension group gained an average of 3.5 kg, which was twice that seen in the group with sustained hypertension.

Dr. Mos disclosed having no financial conflicts of interest in connection with the government-funded study.

—Bruce Jancin

Framingham Risk Score Falls Short in RA

BY MITCHEL L. ZOLER

PHILADELPHIA — The Framingham risk score does a poor job of estimating future risk for cardiovascular disease events in patients with rheumatoid arthritis, according to a review of 550 unselected patients drawn from the general population.

Results from a second study reported at the annual meeting of the American College of Rheumatology suggested that adding three more risk markers (carotid disease assessment with ultrasound, erythrocyte sedimentation rate, and cumulative steroid dose) to the standard Framingham risk score (FRS) could significantly improve prognostic accuracy for coronary disease in patients with RA. And findings from a third study presented at the meeting indicated that treatment with methotrexate is an effective way to cut coronary disease risk in RA patients.

To assess the prognostic value of the FRS, Cynthia S. Crowson and her associates at the Mayo Clinic in Rochester, Minn., used data collected for the Rochester Epidemiology Project.

They included 550 people who presented during 1988-2008 with incident RA that matched the 1987 RA criteria and who also had no history of cardiovascular disease at the time of their initial RA diagnosis. The researchers calculated an FRS for each of these patients based on their medical records and used a revised FRS (introduced in 2008) that predicted risk for cardiovascular disease events including stroke and peripheral artery disease as well as coronary disease (Circulation 2008;117:743-53). The FRS estimates a person's risk for an event during the subsequent 10 years.

The Mayo researchers then compared the predicted rate of cardiovascular disease events against the actual rate observed during the first 10 years following RA diagnosis.

The study group included 491 RA patients who were aged 30-74 years, and 59 others who were aged 75 years or older. The FRS is designed for application to adults younger than 75.

Among the 341 women aged 30-74 years, the average predicted event rate was 5%, and the actual observed rate was 11%. Among the 150 men in this age range, the predicted rate was 12% and the observed rate was 26%, reported Ms. Crowson in a poster.

The researchers used a regression model to calculate a standard incidence ratio, in which the ratio of actual to expected events was 79% in women and 56% in men. Both differences were statistically significant. Further analysis showed that the largest differences between observed and expected rates were in women aged 55 years or older and in men aged 45 or older.

Although the FRS is not designed for use on people older than 74 years, Ms. Crowson and her associates applied the same analysis to the 59 RA patients in this age group. The results again showed a significant excess of observed events over expected events. In women, the observed event rate was 57%, compared with an expected 14% rate. In men, the observed rate was 87%, compared with an expected rate of 37%.

One way to improve cardiovascular risk assessment in RA patients may be to add additional risk factors to the FRS. A poster presented by Dr. Inmaculada del Rincon, a rheumatologist at the University of Texas Health Sciences Center in San Antonio, and her associates explored one way to do this. They compared the correlation between standard FRS assessment and an enhanced assessment model for predicting the risk of acute coronary syndrome events in 599 RA patients. During an average 5-year follow-up, 66 patients had acute coronary syndrome events.

To enhance the FRS predictive power, they added measures of carotid plaque and intima-media thickness by carotid ultrasonography, erythrocyte sedimentation rate, and cumulative glucocorticoid dose. The analysis showed that the standard FRS accounted for 70% of the events observed in the patients. The three additional risk markers boosted this rate to 76%, a statistically significant improvement, reported Dr. del Rincon and her associates in their poster.

A third poster at the meeting reviewed the ability of treatment with methotrexate to reduce cardiovascular risk in RA patients.

Dr. Janice Gupta, a rheumatologist at Tufts Medical Center in Boston, and her associates reviewed the literature for studies that compared the ability of methotrexate to lower cardiovascular events against other RA treatments. They identified six studies that involved a total of about 162,000 RA patients. The results showed a consistent pattern of reduced cardiovascular events in the patients who received methotrexate. The event risk was generally reduced by 15%-20%, compared with other RA treatments; the researchers did not calculate an overall summary risk-reduction rate. ■

Disclosures: *None of the investigators in the three studies had financial relationships to disclose.*