Prevalence and Incidence of Cardiovascular Disease in 1160 Older Men and 2464 Older Women in a Long-term Health Care Facility

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CARDIOVASCULAR disease is the most common cause of death in older persons in a long-term health care facility (1). We report data from a prospective study investigating the prevalence of cardiovascular disease and the incidence of cardiovascular disease at 46-month mean follow-up in 1160 older men and 2464 older women in a long-term health care facility. The prevalences of atrial fibrillation and of PAD were higher in men than in women. However, the prevalences of atrial fibrillation and of PAD were higher in men than in women.

Methods. The prevalence of hypertension, chronic atrial fibrillation, pacemaker rhythm, coronary artery disease (CAD), thromboembolic stroke, and symptomatic peripheral arterial disease (PAD) and the incidence of new coronary events, thromboembolic stroke, and congestive heart failure (CHF) were investigated in 1160 men, mean age 80 ± 8 years, and in 2464 women, mean age 81 ± 8 years, in a long-term health care facility. Mean follow-up was 46 ± 30 months.

Results. The prevalences of hypertension, pacemaker rhythm, CAD, and thromboembolic stroke were similar in men and women. The prevalence of atrial fibrillation was higher in men (16%) than in women (13%; p = .019). The prevalence of PAD was higher in men (32%) than in women (26%; p = .0001). At the 46-month follow-up, the incidences of new coronary events, thromboembolic stroke, and CHF were similar in men and women.

Conclusions. Older men and women in a long-term health care facility have a high prevalence and incidence of cardiovascular disease. The prevalences of hypertension, pacemaker rhythm, CAD, and thromboembolic stroke and the incidences of new coronary events, thromboembolic stroke, and CHF were similar in men and women. However, the prevalences of atrial fibrillation and of PAD were higher in men than in women.
focal neurological signs of ischemic stroke were explained by loss of function in a restricted area of the brain corre-
sponding to a particular vascular territory (2). Ischemic
stroke was also confirmed by computerized axial tomogra-
phy in 766 of 787 persons (97%) with thromboembolic stroke.

Symptomatic peripheral arterial disease (PAD) was diag-
nosed if the person had a documented history of surgery for
PAD or if the person had ischemic pain at rest, ulceration
or gangrene in an extremity, intermittent claudication, num-
berness, coldness, cyanosis, or pallor in an extremity, or
trophic changes with dry, scaly, and shiny atrophic skin, di-
minished hair growth, thickened, brittle toenails, or subcuta-
neous atrophy in an extremity associated with absent or
weak arterial pulses (7). Congestive heart failure (CHF) was
diagnosed if two criteria were satisfied: (1) pulmonary basi-
lar rales were heard by at least two physicians, including the
senior investigator, and (2) pulmonary vascular congestion
was present on the chest x-rays interpreted by both an ex-
perienced radiologist and the senior investigator (8).

For analyses comparing the two groups of men versus
women, chi-square tests were used.

RESULTS

Table 1 shows the prevalences of hypertension, atrial fi-
bribillation, pacemaker rhythm, CAD, prior thromboembolic
stroke, and PAD in older men and in older women and, at
the 46-month mean follow-up, the incidences of new coro-
mary events, thromboembolic stroke, and CHF. Table 1 also
lists levels of statistical significance.

DISCUSSION

The data from the present prospective study showed that
the prevalence of hypertension was 60% in women (39%
with isolated systolic hypertension and 21% with systolic
and diastolic hypertension), mean age 81 years, and 57% in
men (37% with isolated systolic hypertension and 20% with
systolic and diastolic hypertension), mean age 80 years, in a
long-term health care facility. This difference is not signi-
cant.

The prevalence of a pacemaker rhythm was 5% in the
men and 5% in the women in this study. However, the pre-
valence of chronic atrial fibrillation was significantly higher
in the older men (16%) than in the older women (13%) (p =
.019).

The higher prevalence of chronic atrial fibrillation in
older men than in older women was present at all ages ≥60
years of age.

CAD is the leading cause of death of older persons in a
long-term health care facility (1). The data from the present
study showed that the prevalence of CAD was 43% in men
and 41% in women and the incidence of new coronary
events at the 46-month follow-up was 46% in men and 44%
in women. These differences are not significant. There was
no significant difference in prevalence or incidence of an-
gina pectoris or myocardial infarction between older men
and older women.

Our study also showed that the prevalence of prior throm-
boembolic stroke was 33% in men and 31% in women and
the incidence of new thromboembolic stroke was 23% in
men and 21% in women. These differences are not signifi-
cant. The incidence of CHF was also not significant be-
tween older men (29%) and older women (26%). However,
older men had a significantly higher prevalence of symp-
tomatic PAD (32%) than older women (26%; p = .0001).
The significantly higher prevalence of current cigarette
smoking in older men (21%) than in older women (9%; p <
.0001) contributed to the significantly higher prevalence of
symptomatic PAD in older men than in older women.

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