

Alzheimer's More Common in Blacks, Hispanics

BY MICHELE G. SULLIVAN

WASHINGTON — Alzheimer's disease is twice as likely to develop in blacks as it is in whites, and 1.5 times more common among Hispanics, a new national report has found.

The discrepancy appears to stem from a combination of higher rates of chronic illness and lower socioeconomic status in the minority populations, Maria Carrillo, Ph.D., said at a meeting of Alzheimer's disease activists on Capitol Hill.

"We can't pinpoint any known genetic factors as the cause of this discrepancy," said Dr. Carrillo, the senior director of medical and scientific relations for the Alzheimer's Association, which sponsored the meeting. "Instead, we think this is due to other factors, especially a higher prevalence of hypertension and diabetes in the minority communities, and socioeconomic risks that reduce access to health care."

The good news, she said in an interview, is that physicians have a chance to identify these risk factors and intervene early, minimizing the effects on cognition.

"Neurologists and general practice physicians need to understand the im-

portance of managing those risk factors. This is key to delaying cognitive decline and perhaps preventing Alzheimer's and other dementias."

The numbers were drawn from the Alzheimer's Association's report, "2010 Alzheimer's Facts and Figures." The report based its findings on several national studies of cognitive impairment and Alzheimer's disease in different groups, especially the 2006 Health and Retirement Study (HRS) and the Washington Heights-Inwood Columbia Aging Project (WHICAP).

The HRS study examined the prevalence of cognitive impairment in 16,273 Americans aged 55 years and older. The data can be extrapolated to represent 16 million Americans in that age group, the report noted.

The overall prevalence of cognitive impairment in the study was 11% for those aged 65 years and older. However, whites had the lowest rate (9%). The rate among blacks was 24%, and among Hispanics, 18%.

The discrepancies were higher among younger people. For example, among those aged 55-64 years, blacks were four times more likely to have cognitive impairment than whites; among those aged 85 and older, blacks were twice as likely

as whites to have cognitive impairment.

The report also described a similar discrepancy between Hispanics and whites. Among those aged 55-64 years, Hispanics were three times more likely to have cognitive impairment. Among those aged 85 and older, the difference dropped, with Hispanics 1.6 times more likely to have the problem.

The WHICAP study examined rates of Alzheimer's disease and other dementias in a random sampling of 2,126 healthy Medicare beneficiaries aged 65 years and older.

The prevalence of Alzheimer's was 8% in whites, 19% in blacks, and 21% in Hispanics. Again, the differences in prevalence were more pronounced in younger subjects.

According to the report, the HRS study is just one of several that have shown that comorbid hypertension, diabetes, cardiovascular disease, and stroke are more common among people with cognitive impairment than in those with normal cognition.

"It is clear that high blood pressure is

more common in African Americans overall and diabetes is more common in both African Americans and Hispanics compared with whites," the report said. "It is likely that the greater prevalence of these conditions in African Americans and Hispanics than in whites accounts for at least some of the differences among these groups in prevalence of Alzheimer's and other dementias."

Although Alzheimer's appears more common in both minority groups than in whites, it is much less likely to be formally diagnosed, the report noted. The HRS study showed that 46% of whites with cognitive impairment had a formal diagnosis of a "memory-related disease," compared with 33% of blacks and 34% of Hispanics.

"This is very worrisome," Dr. Carrillo said. "It means that these populations are unable to get access to medications that may be able to help them, especially in the early phases of the disease." ■

The full report is available at www.alz.org/alzheimers_disease_facts_figures.asp.

Dietary Pattern Linked to Risk for Alzheimer's Disease

BY MARY ANN MOON

A diet rich in certain foods such as nuts, fish, and vegetables and low in high-fat dairy foods and red meat appears to exert a preventive effect on the development of Alzheimer's disease, according to a study.

"Our findings provide support for further exploration of food-combination-based dietary behavior for the prevention of this important public health problem," wrote Yian Gu, Ph.D., of the Taub Institute for Research in Alzheimer's Disease and the Aging Brain at Columbia University, New York, and associates.

The researchers sought to assess food combinations rather than individual nutrients in relation to Alzheimer's risk, so they studied dietary data obtained by food frequency questionnaires in two multiethnic cohorts: elderly subjects participating in the 1992 and the 1999 Washington Heights-Inwood Columbia Aging Project (WHICAP). Their study included 2,148 individuals who underwent serial batteries of neuropsychological tests, assessments of social and occupational function, and specific testing for cognitive deficits and dementia.

During an average follow-up of 4 years, 253 of these subjects developed Alzheimer's. Subjects were diagnosed for dementia with criteria developed by the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer Disease and Related Disorders Association. Some of the patients also may have had a stroke.

The investigators calculated dietary

patterns based on variations in the content of seven key nutrients that have been most consistently related to dementia risk in the literature. Only one dietary pattern was found to be strongly associated with AD prevention: a diet rich in omega-3 polyunsaturated fatty acids, omega-6 polyunsaturated fatty acids, vitamin E, and folate and poor in saturated fatty acids and vitamin B₁₂.

This pattern correlated with high intakes of salad dressing, nuts, fish, tomatoes, poultry, cruciferous and dark leafy green vegetables, and low intakes of high-fat dairy foods such as butter, red meats, and organ meats, Dr. Gu and colleagues said (*Arch. Neurol.* 2010 April 12 [doi:10.1001/archneurol.2010.84]).

The protective effect of such a diet did not change after the data were adjusted to account for age, level of education, ethnicity, and sex. Further analysis adjusting for smoking status, body mass index, caloric intake, comorbidities, and apolipoprotein E genotype only slightly attenuated the results. Similarly, adding data on alcohol consumption and use of nutritional supplements did not substantially change the association between this dietary pattern and lower risk of AD. The results were "essentially unchanged" when the analysis was repeated in the subgroup of subjects who developed AD without concomitant stroke.

The study was limited by the use of a single measurement of diet that did not capture long-term dietary habits. ■

Disclosures: This study was funded by the National Institute on Aging. No financial conflicts of interest were reported.

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INDICATIONS AND USAGE

PATADAY™ solution is indicated for the treatment of ocular itching associated with allergic conjunctivitis.

CONTRAINDICATIONS

Hypersensitivity to any components of this product.

WARNINGS

For topical ocular use only. Not for injection or oral use.

PRECAUTIONS

Information for Patients

As with any eye drop, to prevent contaminating the dropper tip and solution, care should be taken not to touch the eyelids or surrounding areas with the dropper tip of the bottle. Keep bottle tightly closed when not in use. Patients should be advised not to wear a contact lens if their eye is red.

PATADAY™ (olopatadine hydrochloride ophthalmic solution) 0.2% should not be used to treat contact lens related irritation. The preservative in PATADAY™ solution, benzalkonium chloride, may be absorbed by soft contact lenses. Patients who wear soft contact lenses and whose eyes are not red, should be instructed to wait at least ten minutes after instilling PATADAY™ (olopatadine hydrochloride ophthalmic solution) 0.2% before they insert their contact lenses.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Olopatadine administered orally was not carcinogenic in mice and rats in doses up to 500 mg/kg/day and 200 mg/kg/day, respectively. Based on a 40 µL drop size and a 50 kg person, these doses were approximately 150,000 and 50,000 times higher than the maximum recommended ocular human dose (MROHD). No mutagenic potential was observed when olopatadine was tested in an *in vitro* bacterial reverse mutation (Ames) test, an *in vitro* mammalian chromosome aberration assay or an *in vivo* mouse micronucleus test. Olopatadine administered to male and female rats at oral doses of approximately 100,000 times MROHD level resulted in a slight decrease in the fertility index and reduced implantation rate; no effects on reproductive function were observed at doses of approximately 15,000 times the MROHD level.

Pregnancy:

Teratogenic effects: Pregnancy Category C

Olopatadine was found not to be teratogenic in rats and rabbits. However, rats treated at 600 mg/kg/day, or 150,000 times the MROHD and rabbits treated at 400 mg/kg/day, or approximately 100,000 times the MROHD, during organogenesis showed a decrease in live fetuses. In addition, rats treated with 600 mg/kg/day of olopatadine during organogenesis showed a decrease in fetal weight. Further, rats treated with 600 mg/kg/day of olopatadine during late gestation through the lactation period showed a decrease in neonatal survival and body weight. There are, however, no adequate and well-controlled studies in pregnant women. Because animal studies are not always predictive of human responses, this drug should be used in pregnant women only if the potential benefit to the mother justifies the potential risk to the embryo or fetus.

Nursing Mothers:

Olopatadine has been identified in the milk of nursing rats following oral administration. It is not known whether topical ocular administration could result in sufficient systemic absorption to produce detectable quantities in the human breast milk. Nevertheless, caution should be exercised when PATADAY™ (olopatadine hydrochloride ophthalmic solution) 0.2% is administered to a nursing mother.

Pediatric Use:

Safety and effectiveness in pediatric patients below the age of 3 years have not been established.

Geriatric Use:

No overall differences in safety and effectiveness have been observed between elderly and younger patients.

ADVERSE REACTIONS

Symptoms similar to cold syndrome and pharyngitis were reported at an incidence of approximately 10%.

The following adverse experiences have been reported in 5% or less of patients:

Ocular: blurred vision, burning or stinging, conjunctivitis, dry eye, foreign body sensation, hyperemia, hypersensitivity, keratitis, lid edema, pain and ocular pruritus.

Non-ocular: asthma, back pain, flu syndrome, headache, increased cough, infection, nausea, rhinitis, sinusitis and taste perversion. Some of these events were similar to the underlying disease being studied.

DOSAGE AND ADMINISTRATION

The recommended dose is one drop in each affected eye once a day.

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NDC 0065-0272-25

2.5 mL fill in 4 mL oval bottle

Storage:

Store at 2°C to 25°C (36°F to 77°F)
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