

Arthritis Effects Hit Minorities Disproportionately

BY SHARON WORCESTER

Fewer minorities have arthritis but they feel its impact far more acutely in terms of pain severity and limitations on function, compared with whites, according to National Health Interview Survey data.

The greater impact of arthritis on minorities may result from their having more physically demanding jobs, limited access to health care, increased willingness to report pain and limitations, unwillingness to use medication, and higher rates of obesity, among other plausible explanations, according to Julie Bolen, Ph.D., of the Centers for Disease Control and Prevention and her associates in their report in the journal Preventing Chronic Disease.

The investigators examined combined data from the 2002, 2003, and 2006 National Health Interview Surveys for the study. Taken together, these annual, CDC-conducted surveys include nationally representative data based on interviews with nearly 86,000 individuals from across the United States.

The 2004 and 2005 surveys were excluded from this study because they did not assess arthritis-attributable work limitation and joint pain, the investigators

noted (Prev. Chronic Dis. 2010;7:1-5).

The annualized prevalence of arthritis based on the survey data was 24% for whites, 19% for blacks, 11% for Hispanics, 25% for American Indians/Alaska Natives, 8% for Asians and Pacific Islanders, and 21% for multiracial and “other” respondents.

Overall, 38% of those reporting doctor-diagnosed arthritis also reported activity limitations, 31% of those aged 18-64 years reported work limitations, and 26% reported severe joint pain in the prior month.

Blacks, Hispanics, and multiracial/other individuals were disproportionately affected in regard to limitations and pain: Compared with whites, and after adjusting for age, sex, and body mass index, blacks and Hispanics were about 1.3 times as likely to have activity limitations, 1.6-1.7 times as likely to have work limitations, and 1.8-1.9 times as likely to have severe joint pain.

Multiracial/other individuals were 1.7 times as likely to report activity limitations, 2.2 times as likely to report work limitations, and 1.9 times as likely to report severe joint pain, the investigators found.

No significant differences were noted between whites and American Indians/Alaska Natives, or between whites and Asians and Pacific Islanders on these measures, but the sample sizes for these groups were small and therefore statistical power for detecting differences was limited.

The findings show that although the prevalence of arthritis is lower in blacks

ences in arthritis impact by using what we know,” Jennifer M. Hootman, Ph.D., an epidemiologist for the CDC National Center for Chronic Disease Prevention and Health Promotion and a coauthor on the study, said in a press statement.

“We can educate those with arthritis about increasing physical activity and self-management and reducing obesity, especially those in groups bearing a disproportionate burden from arthritis,” she added.

The investigators noted that additional study would be useful for examining whether health care access, language barriers, differences in the prevalence of risk factors, and/or cultural differences in understanding the survey questions played a role in the disproportionate effects of arthritis seen in this study.

Efforts to increase the reach of evidence-based public health interventions for improving pain and functional limitations are also needed, they said.

“Future efforts to increase reach should use appropriately tailored interventions such as the Spanish-language health communication campaign Buenos Dias Arthritis,” they noted.

‘We can educate those with arthritis about increasing physical activity and self-management and reducing obesity, especially those in groups bearing a disproportionate burden from arthritis.’

and Hispanics, the impact of the disease is worse in these populations, compared with whites, the investigators said.

Although the reasons for the racial and ethnic differences demonstrated by the survey data remain unclear, the development of effective and culturally sensitive interventions tailored to the needs of specific populations are needed and could be aided by the findings, they concluded.

“We must address these stark differ-

ACTEMRA® (tocilizumab)

In the all-exposure population, the rate of malignancies remained consistent (1.10 events per 100 patient-years) with the rate observed in the 6-month controlled period [see Warnings and Precautions].
Other Adverse Reactions
Adverse reactions occurring in 2% or more of patients on 4 mg/kg or 8 mg/kg ACTEMRA plus DMARD, and at least 1% greater than that observed in patients on placebo plus DMARD, are summarized in **Table 2**.

6-Month Phase III Controlled Study Population					
	ACTEMRA 8 mg/kg Monotherapy N = 288 (%)	Methotrexate N = 284 (%)	ACTEMRA 4 mg/kg + DMARDs N = 774 (%)	ACTEMRA 8 mg/kg + DMARDs N = 1582 (%)	Placebo + DMARDs N = 1170 (%)
Preferred Term					
Upper Respiratory Tract Infection	7	5	6	8	6
Nasopharyngitis	7	6	4	6	4
Headache	7	2	6	5	3
Hypertension	6	2	4	4	3
ALT increased	6	4	3	3	1
Dizziness	3	1	2	3	2
Bronchitis	3	2	4	3	3
Rash	2	1	4	3	1
Mouth Ulceration	2	2	1	2	1
Abdominal Pain Upper	2	2	3	3	2
Gastritis	1	2	1	2	1
Transaminase increased	1	5	2	2	1

DRUG INTERACTIONS

Other Drugs for Treatment of Rheumatoid Arthritis

Population pharmacokinetic analyses did not detect any effect of methotrexate, nonsteroidal anti-inflammatory drugs or corticosteroids on tocilizumab clearance. Concomitant administration of a single dose of 10 mg/kg ACTEMRA with 10-25 mg MTX once weekly had no clinically significant effect on MTX exposure.

ACTEMRA has not been studied in combination with biological DMARDs such as TNF antagonists [see Dosage and Administration].

Interactions with CYP450 Substrates

In vivo studies with omeprazole, metabolized by CYP2C19 and CYP3A4, and simvastatin, metabolized by CYP3A4, showed up to a 28 % and 57% decrease in exposure one week following a single dose of ACTEMRA, respectively. The effect of tocilizumab on CYP enzymes may be clinically relevant for CYP450 substrates with narrow therapeutic index, where the dose is individually adjusted. Upon initiation or discontinuation of ACTEMRA, in patients being treated with these types of medicinal products, therapeutic monitoring of effect (eg, warfarin) or drug concentration (eg, cyclosporine or theophylline) should be performed and the individual dose of the medicinal product adjusted as needed. Prescribers should exercise caution when ACTEMRA is coadministered with CYP3A4 substrate drugs where decrease in effectiveness is undesirable, eg, oral contraceptives, lovastatin, atorvastatin, etc. The effect of tocilizumab on CYP450 enzyme activity may persist for several weeks after stopping therapy.

Live Vaccines

Live vaccines should not be given concurrently with ACTEMRA [see Warnings and Precautions].

USE IN SPECIFIC POPULATIONS

Pregnancy

Teratogenic Effects. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. ACTEMRA should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

An embryo-fetal developmental toxicity study was performed in which pregnant cynomolgus monkeys were treated intravenously with tocilizumab (daily doses of 2, 10, or 50 mg/kg from gestation day 20-50) during organogenesis. Although there was no evidence for a teratogenic/dysmorphic effect at any dose, tocilizumab produced an increase in the incidence of

ACTEMRA® (tocilizumab)

abortion/embryo-fetal death at 10 mg/kg and 50 mg/kg doses (1.25 and 6.25 times the human dose of 8 mg/kg every 4 weeks based on a mg/kg comparison).

Nonteratogenic Effects.

Testing of a murine analogue of tocilizumab in mice did not yield any evidence of harm to offspring during the pre- and postnatal development phase when dosed at 50 mg/kg intravenously with treatment every three days from implantation until day 21 after delivery (weaning). There was no evidence for any functional impairment of the development and behavior, learning ability, immune competence and fertility of the offspring.

Pregnancy Registry:

To monitor the outcomes of pregnant women exposed to ACTEMRA, a pregnancy registry has been established. Physicians are encouraged to register patients and pregnant women are encouraged to register themselves by calling 1-877-311-8972.

Nursing Mothers

It is not known whether tocilizumab is excreted in human milk or absorbed systemically after ingestion. Because many drugs are excreted in human milk, and because of the potential for serious adverse reactions in nursing infants from ACTEMRA, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use

Safety and effectiveness of ACTEMRA in pediatric patients have not been established.

Geriatric Use

Of the 2644 patients who received ACTEMRA in Studies I to V, a total of 435 rheumatoid arthritis patients were 65 years of age and older, including 50 patients 75 years and older. The frequency of serious infection among subjects treated with ACTEMRA 65 years of age and older was higher than those under the age of 65. As there is a higher incidence in infections in the elderly population in general, caution should be used when treating the elderly.

Hepatic Impairment

The safety and efficacy of ACTEMRA have not been studied in patients with hepatic impairment, including patients with positive HBV and HCV serology [see Warnings and Precautions].

Renal Impairment

No dose adjustment is required in patients with mild renal impairment. ACTEMRA has not been studied in patients with moderate to severe renal impairment.

OVERDOSAGE

There are limited data available on overdoses with ACTEMRA. One case of accidental overdose was reported in which a patient with multiple myeloma received a dose of 40 mg/kg. No adverse drug reactions were observed. No serious adverse drug reactions were observed in healthy volunteers who received single doses of up to 28 mg/kg, although all 5 patients at the highest dose of 28 mg/kg developed dose-limiting neutropenia.

In case of an overdose, it is recommended that the patient be monitored for signs and symptoms of adverse reactions. Patients who develop adverse reactions should receive appropriate symptomatic treatment.

PATIENT COUNSELING INFORMATION

Patient Counseling

Patients should be advised of the potential benefits and risks of ACTEMRA. Physicians should instruct their patients to read the Medication Guide before starting ACTEMRA therapy.

• Infections:

Inform patients that ACTEMRA may lower their resistance to infections. Instruct the patient of the importance of contacting their doctor immediately when symptoms suggesting infection appear in order to assure rapid evaluation and appropriate treatment.

• Gastrointestinal Perforation:

Inform patients that some patients who have been treated with ACTEMRA have had serious side effects in the stomach and intestines. Instruct the patient of the importance of contacting their doctor immediately when symptoms of severe, persistent abdominal pain appear to assure rapid evaluation and appropriate treatment.

Genentech USA, Inc., A Member of the Roche Group
South San Francisco, California 94080-4990
Copyright © 2010 Genentech USA, Inc. All rights reserved. 10081800

Genentech
A Member of the Roche Group