Men and Women Have Similar Gout Risk Factors

BY MITCHEL L. ZOLER

PHILADELPHIA — Women's risk factors for developing gout are similar to those in men, and baseline serum levels of uric acid may be the most powerful predictor, findings from the Framingham Heart Study show.

Women with no clinical indication of gout but a serum uric acid level of 8.0 mg/dL or greater at baseline had a subsequent 2.7% rate of gout during an average 28 years of follow-up—a 46-fold higher rate than women with a serum uric acid level of less than 5.0 mg/dL at baseline, Dr. Vidula Bhole said at the annual meeting of the American College of Rheumatology.

Serum uric acid likewise posed a powerful risk in men. Those with a level of 8.0 mg/dL or more at baseline had a 3.3% incidence rate during follow-up, 61-fold higher than men who entered the study with a serum level below 5.0 mg/dL, said Dr. Bhole, an epidemiologist at the University of British Columbia in Vancouver.

A baseline uric acid level of 5.0-5.9 mg/dL increased gout risk threefold in women and fourfold in men.

DR. BHOLE

Even a baseline uric acid level of 5.0-5.9 mg/dL conferred a greater than threefold higher risk for developing gout in women and a greater than fourfold higher risk in men, compared with those whose level was under 5.0 mg/dL. (See box.)

Dr. Bhole and her associates used prospectively collected data from 4,427 individuals who had no history of gout at entry into the Framingham Heart Study in 1948.

The group included 2,476 women, with an average age of 47 years and an average serum uric acid level of 4.0 mg/dL. The group also included 1,967 men who entered at an average age of 46 years and a mean serum uric acid level of 5.1 mg/dL.

The subjects developed 304 cases of gout during an average 28 years of follow-up, with an incidence rate of 1.4 cases/1,000 person-years of follow-up in the women and 4.0 cases/1,000 person-years of follow-up in the men.

An analysis of gout incidence rates relative to baseline serum uric acid showed that, for any baseline level, women developed less gout than men. For example, among people who entered the study with a serum level of 7.0-7.9 mg/dL, the subsequent incidence was 1.3% in women and 1.8% in men.

A multivariate analysis identified several baseline factors linked to a significantly higher rate of incident gout in both genders: age, obesity, heavy alcohol use, hypertension, and diuretic use. ■

Disclosures: *Dr. Bhole said she had no relevant financial relationships. Two of her study colleagues received grant support from and served as consultants to Takeda. One of Dr. Bhole's associates also serves on the advisory board for Savient, a company developing a uric acid–lowering drug.*

Risk for Incident Gout Linked to Baseline Uric Acid Levels

Baseline serum level of uric acid	Relative risk for incident gout in women	Relative risk for incident gout in men
Less than 5.0 mg/dL	1.0 (reference rate)	1.0 (reference rate)
5.0-5.9 mg/dL	3.3	4.5
6.0-6.9 mg/dL	5.5	12
7.0-7.9 mg/dL	22	31
At least 8.0 mg/dL	46	61

Note: Data from 4,427 men and women aged 29-62 years at baseline followed for an average of 28 years, with 304 total cases of incident gout.

Source: Dr. Bhole

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