# Use of certain therapies for inflammatory diseases does not appear to increase risk of shingles

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Although patients with rheumatoid arthritis (RA) have a disproportionately higher incidence of herpes zoster (shingles), an analysis that included nearly 60,000 patients with RA and other inflammatory diseases found that those who initiated anti-tumor necrosis factor therapies were not at higher risk of herpes zoster compared with patients who initiated nonbiologic treatment regimens, according to a study appearing in the March 6 issue of *JAMA*.

"For patients with rheumatoid arthritis, the risk of herpes zoster is elevated an additional 2- to 3-fold. The contribution of widely used biologic immunosuppressive therapy to this increased risk is not well understood. These therapies, including tumor necrosis factor (TNF) antagonists, are commonly used to treat RA and a variety of other immune-mediated inflammatory diseases and have clearly been associated with an increased risk of tuberculosis and other opportunistic infections," according to background information in the article. "It is unclear whether anti-tumor necrosis factor (anti-TNF) therapy elevates herpes zoster risk."

Kevin L. Winthrop, M.D., M.P.H., of Oregon Health and Science University, Portland, Ore., and colleagues conducted a study to determine whether initiation of anti-TNF therapy compared with non-biologic comparators is associated with increased herpes zoster risk. The researchers identified new users of anti-TNF therapy among groups of

patients with RA, inflammatory bowel disease, and psoriasis, psoriatic arthritis, or ankylosing spondylitis from 1998 through 2007 within a large U.S. multi-institutional collaboration. The authors compared herpes zoster incidence between new anti-TNF users (n = 33,324) and patients initiating nonbiologic disease-modifying antirheumatic drugs (DMARDs) (n = 25,742) within each inflammatory disease cohort (last participant follow-up December 31, 2007).

Across all disease indications, there were 310 herpes zoster cases among anti-TNF and 160 among nonbiologic DMARD users. For patients with RA, the researchers found that adjusted incidence rates were similar between anti-TNF and nonbiologic DMARD initiators and comparable between all 3 anti-TNF therapies studied. Baseline use of corticosteroids of 10 mg/d or greater among all disease indications was associated with elevated risk compared with no baseline use.

After adjustment for various factors, no significant difference in herpes zoster rates was observed within any disease indication between patients initiating anti-TNF therapy and those initiating new DMARD regimens.

Within the RA group, herpes zoster risk was associated with increasing age, female sex, overall health status, and higher-dose corticosteroid use.

"In summary, among patients with RA and other select inflammatory diseases, those who initiated anti-TNF therapies were not at higher risk of herpes zoster compared with patients who initiated nonbiologic treatment regimens," the authors write.

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