

News Release Embargoed until Monday, June 24, 2019, 12:01 a.m. ET

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Oral steroids put patients with inflammatory disease at high risk of infection

Oral steroid use in patients with the inflammatory diseases polymyalgia rheumatica and/or giant cell arteritis significantly increased the risk of infection, and the risk increased with higher doses, found a study in *CMAJ (Canadian Medical Association Journal)*.

In a large study of almost 40 000 adult patients with polymyalgia rheumatica or giant cell arteritis in England, researchers found higher absolute risks of infection when patients were taking oral steroids than when they were not taking them. The mean age of patients in the study was 73 years. Steroids included prednisolone, prednisone, hydrocortisone and cortisone. The risk of infection increased with higher doses and was elevated even with low daily doses of less than 5 mg of prednisolone.

“In periods with prescribed medication, patients’ risk was 50% higher than when it was not prescribed,” writes Dr. Mar Pujades-Rodriguez, Leeds Institute of Data Analytics, at the University of Leeds, United Kingdom, with coauthors. “Increases in risk ranged from 48% for fungal to 70% for bacterial infections.”

More than half of patients (22 234, 56%) had infections during 138 412 person-years of follow up, with the most common infections being lower respiratory tract infections (27%), conjunctivitis (9%) and shingles (7%). More than one-quarter (27%) of patients were admitted to hospital and 7% died within a week of diagnosis of infection.

“Patients and clinicians should be educated about the risk of infection, need for symptom identification, prompt treatment, timely vaccination and documentation of history of chronic infection (e.g. herpes zoster),” write the authors.

They suggest that estimates of dose–response (i.e., the magnitude of risk related to steroid dosing) can be useful for policy-makers in assessing new glucocorticoid-sparing drugs for patients with these inflammatory diseases.

“Incidence of infections associated with oral glucocorticoid dose in people diagnosed with polymyalgia rheumatica or giant cell arteritis: a cohort study in England” is published June 24, 2019.

MEDIA NOTE: Please use the following public links after the embargo lift:

Research: <http://www.cmaj.ca/lookup/doi/10.1503/cmaj.190178>

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