Aspirin and Prednisolone Cotherapy: Few GI AEs

Aspirin and prednisolone are both associated with adverse gastrointestinal (GI) events, so cotherapy might be expected to intensify that potential. Studies have indicated a probable "moderate" interaction between aspirin and corticosteroids, based on the pharmacokinetic interaction of the 2 drugs, say researchers from the National University of Singapore and the National Cancer Centre Singapore. However, they say, the prevalence and clinical significance of interaction-induced GI adverse events (AEs) in cancer patients are relatively unknown. Their retrospective analysis of data from 142 cancer patients suggests that the clinical impact of any aspirin-prednisolone drug-drug interaction is minimal.

The researchers had in earlier studies identified prednisolone and aspirin as one of the most widely prescribed interacting drug combinations among patients with cancer in Singapore. In the current study, the prevalence of GI AEs was actually very low: 4%.

The aspirin-plus-prednisolone drug therapy was prescribed for a mean of 56 days (range, 2 to 1,328 days). All patients were treated with aspirin 100 mg daily, except for 1 patient who took 900 mg daily in 3 doses. The total daily dose of prednisolone varied from 1 mg to 100 mg, in 1 to 3 doses.

Nearly all the patients were prescribed at least 1 gastrotoxic medication during the study period (usually antibiotics, thrombocyte aggregation inhibitors, or NSAIDs), and 112 received at least 1 gastroprotectant (usually a proton pump inhibitor).

Of the 6 patients with GI AEs, 4 were within the 2 weeks after the drug-drug interaction period. Four patients had abdominal pain, diarrhea, dysphagia, and vomiting; 3 had signs of GI injury (duodenal ulcers, iron deficiency anemia, and Mallory-Weiss tear).

Most of the patients in the study had other risk factors that might have predisposed them to a GI event. Thus, although they found a weak association between the GI events and coadministration of aspirin and prednisolone, the researchers conclude that even among patients experiencing GI events, the probability that the event was due to the concurrent use of aspirin and prednisolone was relatively low. ●

Source: Koomanan N, Ko Y, Yong WP, et al. *Clin Ther.* 2012;34(12):2259-2267. doi: 10.1016/j.clinthera.2012.11.002.