

Letter to the editor:

Does risk of intracranial haemorrhage following the combined use of antidepressants and NSAIDs vary between selective and non-selective NSAIDs?

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The study conducted by Shin JY et al. ¹, in which the authors report an increased risk of intracranial haemorrhage associated to the combined use (within 30 days) of antidepressants and non-steroidal anti-inflammatory drugs (NSAIDs) makes an important contribution to clinical practice. The authors carefully identified the different classes of antidepressants and found no statistically significant differences in risk of intracranial haemorrhage between the antidepressant drug classes. The authors, however, did not look at the interaction with the different types of NSAIDs, which include nonselective inhibitor of cyclooxygenase 1 and 2 (COX-1 and 2) and selective inhibitor of

cyclooxygenase 2 (COX-2).² In a large retrospective cohort study conducted in Australia, Caughey et al.³ found that the use of any NSAID almost doubled the risk of any stroke (adjusted sequence ratio (ASR) of 1.88 (95%CI, 1.70-2.08), increasing the risk of ischemic (ASR1.90; 95% CI, 1.65–2.18) and hemorrhagic stroke (ASR, 2.19, 95% CI, 1.74–2.77).³ All non-selective NSAIDs except ibuprofen were associated with an increased risk for hemorrhagic stroke, and the risk following the use of selective inhibitor COX-2 ranged from 1.81 times for celecoxib (95% CI, 1.34–2.45) to 2.40 times for rofecoxib (95% CI, 1.77–3.26).³ The COX-2 inhibitors were developed to reduce gastrointestinal adverse events, increasing tolerability. However, some COX-2 inhibitors, i.e. rofecoxib and valdecoxib, have not been commercialized worldwide due to increasing the risk of adverse cardiovascular events, but others such as celecoxib and etoricoxib are still available in several countries.^{4,5} We value the authors' contribution and suggest that future well-designed and high-quality cohort studies and clinical trials targeting the effects of different NSAIDS in respect of COX selectivity on the risk of intracranial haemorrhage in antidepressant users are warranted in order to better understand the mechanisms and the associated risk of the concomitant use of these two classes of drugs.

References:

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