

Research abstracts should be succinct and limited to one side of A4. Please outline the background, aims, methods, results and conclusions. Please avoid abbreviations without prior definition. Please discuss the results to the end of the abstract, not in the methods section itself. An example of how to structure an abstract is given below.

Example Research Report Abstract

The Risk of Acute Kidney Injury with the Use of Non-Selective NSAIDs and Cox-2 Inhibitors: a Primary Care Case-Control Study.

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Background

Acute Kidney Injury (AKI) carries a high morbidity and mortality. Non-steroidal anti-inflammatory drug (NSAID)-induced AKI is common but the risk of AKI with selective Cyclooxygenase 2 (Cox-2) inhibitors has not been clearly established. We aimed to assess the risk of AKI with both Cox-2 inhibitors and non-selective NSAIDs in a primary care population.

Methods

A case-control study was performed using general practice data acquired from “The Health Improvement Network” database. Cases were subjects admitted to hospital with a diagnosis of AKI. Controls were matched for age, gender and general practice. NSAID and Cox-2 exposure were defined as “current” (within 30 days of the diagnosis of AKI), “recent” (between 30 days and one year before AKI) and “ever” (more than one year before AKI). Conditional logistic regression analysis was performed to examine the association of these drugs with AKI, controlling for co-morbidity.

Results

6205 cases of AKI and matched controls (3387 males, mean age 74 years (SD 16.7) were studied. Diabetes (odds ratio 2.2, 95% confidence interval 2.02 – 2.41, $p < 0.001$), hypertension (odds ratio 1.72, 95% CI 1.6 – 1.85, $p < 0.001$) and chronic kidney disease (odds ratio 4.14, 95% CI 3.82 – 4.49, $p < 0.001$) were associated with AKI. Adjusted odds ratios were for current Cox-2 use 3.74 (2.07 – 6.76, $p < 0.001$); recent Cox-2 use 2.06 (1.63 – 2.6, $p < 0.001$); current NSAID use 8.45 (6.02 – 11.87, $p < 0.001$); recent NSAID use 2.16 (1.89 – 2.46, $p < 0.001$) and ever NSAID use 1.19 (1.11 – 1.28, $p < 0.001$).

Conclusion

Both Cox-2 inhibitors and non-selective NSAIDs are associated with AKI. Although the BNF advises caution when using these drugs in mild renal impairment, both risk precipitating AKI.