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IBD

Regular, prolonged aspirin use and an increased risk of Crohn's disease

People who regularly take aspirin for a prolonged period of time are six times more likely to develop Crohn's disease. "In a middle-aged to elderly population, aspirin use may be relevant in nearly 1 in 5 cases of Crohn's disease," explains Simon Chan, corresponding author.

Experimental data support the role of NSAIDs as a causative risk factor for IBD. In addition, three epidemiological case–control studies found an association between NSAID use and an increased risk of IBD; however, recall bias could not be ruled out. These studies also included the use of any NSAID and considered IBD as a whole.

In their prospective cohort study, Chan and colleagues looked specifically at aspirin use and separated Crohn's disease from ulcerative colitis. In addition to eliminating recall bias, they prevented selection bias by matching every case with four controls from the same population.

More than 135,000 healthy men and women, aged 30–74 years, were recruited into the EPIC study at centers in the UK, Germany and Denmark. Data on aspirin use were collected from questionnaires completed at baseline. Participants were monitored for 7–11 years to identify any new cases of Crohn's disease or ulcerative colitis. To avoid reverse causality bias, people diagnosed with IBD in the first 18 months of the study were excluded.

The researchers found that there was no association between regular aspirin use and ulcerative colitis. However, after adjusting for smoking status, regular aspirin users had an odds ratio of 6.14 (95% CI 1.76–21.35) for developing Crohn's disease. Among those who developed Crohn's disease, 55% had disease in the terminal ileum and 58% in the large bowel. Surprisingly, the risk of developing Crohn's disease did not increase in smokers who took aspirin.

One study limitation was the question used to define the period of time aspirin was taken for, which differed according to the participating center; however, Chan *et al.* are confident that regular aspirin use for longer durations is relevant. They believe that future epidemiological studies of Crohn's disease should measure aspirin use. "Aspirin will now be included as part of our etiological model of Crohn's disease," concludes Chan.

Andy McLarnon

Original article Chan, S. *et al.* Aspirin in the aetiology of Crohn's disease and ulcerative colitis: a European prospective cohort study. *Aliment. Pharmacol. Ther.* doi:10.1111/j.1365-2036.2011.04784.x