

IBD

Risk of ulcerative colitis is increased for 20 years in women who stop smoking

Women who stop smoking attenuate their risk of Crohn's disease but stopping smoking is also associated with increased risk of ulcerative colitis, and new research has shown that these associations persist for up to 20 years. "There are limited long-term data on the influence of cigarette smoking, particularly cessation, on the risk of IBD," says first author Leslie Higuchi of Harvard Medical School, USA.

The investigators conducted a prospective study of 229,111 women aged 25–55 years enrolled in Nurses' Health Study (NHS) I and II. Smoking habits were assessed by questionnaires every 2 years; diagnoses of ulcerative colitis and Crohn's disease were established from medical records. Information was collected over 32 years for NHS I and 18 years for NHS II. "With prospectively collected and updated cigarette smoking information, we were able to examine the associations between smoking and IBD, avoiding potential recall and selection

biases," explains Higuchi. During the follow-up period, 336 women developed Crohn's disease and 400 were diagnosed with ulcerative colitis.

Compared with never smokers, current smoking was associated with an increased risk of Crohn's disease (multivariate hazard ratio [HR] 1.90), but was not significantly associated with risk of ulcerative colitis (HR 0.86). The women who ceased smoking had reduced risk of Crohn's disease (HR 1.35 compared with never smokers), but their risk of ulcerative colitis was increased (HR 1.56).

The risk of ulcerative colitis was considerably higher in former smokers compared with current smokers. Those who had quit 2–5 years ago had the greatest risk (HR 3.06 compared with current smokers), but their risk was still increased up to 20 years later (HR 1.64).

It is not clear exactly why stopping smoking is associated with an increased risk of ulcerative colitis. "Further studies



are needed to explain the mechanisms by which smoking and cessation of smoking influence the risk of IBD," says Higuchi.

Andy McLarnon

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