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Author's reply

Sirs, Dr Brinker and Dr Avigan from the FDA commented on four aspects of our systematic review of ischaemic colitis (IC) in order to conclude that IC is not increased in patients with irritable bowel syndrome (IBS).[1] This topic has only recently begun to be explored and observational database studies have potential limitations, so we welcome their comments.

Impact of age on incidence. We agree with the authors that age is an extremely important risk factor for IC and we stressed this in our article.

Misclassification of intestinal ischaemia as ischaemic colitis. Brinker and Avigan suggest that because a single diagnostic code may be used for all forms of intestinal ischaemia, inclusion of other cases of vascular insufficiency resulted in an overestimate of the incidence of IC. However, this is an incorrect assessment of the studies we included because these studies did not rely solely upon a single non-specific diagnostic code. One study required confirmation with clearly defined endoscopic, radiological and histological findings of IC. For two other studies, records of patients with the vascular insufficiency diagnostic code (557) had been prospectively assessed to develop an algorithm that would identify IC with high specificity and this algorithm was validated and then used to identify IC cases;[2] this is the same data source the FDA authors used for their abstract.[3] The fourth study, from the UK, used codes specific for IC. This UK study may have given an underestimate of cases because most of the diagnoses were made at death, suggesting only the most severe cases were identified. Furthermore, IC accounts for most cases of mesenteric ischaemia.

Referral to specialists increases the ascertainment of IC. We agree that referral to a gastroenterologist may increase the chance of diagnosing IC or it may be that those with symptoms of IC are more likely to be referred. However, it seems that <10% of people with IBS see a specialist.[4, 5]

IC is misdiagnosed as IBS. The authors quote their recent abstract indicating a much higher IC incidence when IC is diagnosed within 3 weeks of the first IBS claim.[3] Nevertheless, their data still show a rate of 53 per 100 000 person-years when the diagnosis of IC is made more than 1 year after the first IBS claim – compared with a rate of 7.2 per 100 000 person-years in the general population of the database they studied.[2] When adjusted for confounding factors such as age, gender and calendar year, the relative risk of IC among patients with an IBS diagnosis for at least 1 year was 3.1 (95% CI 2.1–4.5).[2] Thus, although there may be initial misclassification of IC as IBS, data from Brinker *et al.*[3] clearly show a higher rate of IC in patients with established IBS than in the general population.

Finally, a very recent abstract, representing the largest study carried out on this topic, reported an age and gender-adjusted significant relative risk of 3.2 (95% CI 2.5–3.9) for the development of IC among IBS patients,[6] providing further support for the association.

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