Authors' comment on: effectiveness and safety of oral vancomycin for the treatment of inflammatory bowel disease associated with primary sclerosing cholangitis: a systematic review and pooled analysis

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Dear Editor,

We have recently published a systematic review and pooled analysis of the effectiveness and safety of oral vancomycin therapy for treating inflammatory bowel disease (IBD) associated with primary sclerosing cholangitis (PSC).[1] One of the main objectives was to review the safety data associated with oral vancomycin therapy in IBD-PSC. This includes the risk of developing vancomycin-resistant enterococci (VRE) with oral vancomycin therapy. We identified five studies ($n = 69$) that reported on the status of VRE with oral vancomycin therapy for treating IBD-PSC.[2–6] Four of these studies reported no emergence of VRE in their respective cohorts.[2–5] The study by Quraishi et al.[6] was published only in its abstract form in our systematic review and reported the emergence of VRE in six patients. After publishing our systematic review, Quraishi et al.[7] published their full-length manuscript in which all patients were reported not to have the emergence of VRE. This discrepancy arises from differences in the techniques used to detect VRE. While selective culture initially suggested the presence of VRE in their patients, whole-genome shotgun sequencing later confirmed that these isolates were not VRE but rather intrinsically vancomycin-resistant gut commensals, such as *Pediococcus acidilactici* and various *Lactobacillus* species. These bacteria, often used as probiotics, are unlikely to have any adverse health effects.[8]

In non-IBD-PSC cohorts, oral vancomycin therapy has been linked to the emergence of VRE.[9,10] In IBD-PSC, we can conclude that in the current published literature, there have been no reports of VRE in patients with IBD-PSC treated with oral vancomycin therapy. However, the current literature investigating VRE in IBD-PSC on oral vancomycin therapy is limited by small-size cohorts and short follow-up time. Therefore, continued vigilance regarding the risk of VRE with oral vancomycin therapy for IBD-PSC is necessary until larger studies with longer follow-up periods provide more definitive evidence. Given these uncertainties, a thorough discussion with the patient about the known and unknown risks versus potential benefits of oral vancomycin should be undertaken before considering it as a treatment option for IBD-PSC.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Author contributions

Badr Al-Bawardy: Conceptualization; Project administration; Supervision; Writing – original draft; Writing – review & editing.

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