

• LETTERS TO THE EDITOR •

## Manipulation of enteric flora in ulcerative colitis

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### TO THE EDITOR

Reviewing the available therapeutic options in the medical treatment of ulcerative colitis, Xu *et al*<sup>[1]</sup>, have omitted to mention an important aspect in the pharmacological management of the disease, namely the possibility to promote clinical and endoscopic improvement by manipulating the enteric flora.

Although no specific bacterium has been singled out as involved in the pathogenesis of inflammatory bowel disease (IBD), an imbalance between protective and harmful bacteria ("dysbiosis"), has been postulated as a pro-inflammatory mechanism both in ulcerative colitis and in Crohn's disease<sup>[2]</sup>. Indeed the pathogenetic role of bacteria in IBD is now widely recognized<sup>[3-5]</sup>, hence the possible therapeutic use of either antibiotics or probiotics.

Antibiotics such as metronidazole or ciprofloxacin, and, more recently, the nonabsorbable antibacterial agent rifaximin, have been successfully employed in IBD patients<sup>[5]</sup>. Although most studies are still uncontrolled, preliminary data are

extremely encouraging. The best results are achieved in the maintenance treatment of Crohn's disease, in the management of pouchitis and, in general, of perianal IBD complications, but a role of antibiotics as a supportive treatment also in active ulcerative colitis can be postulated<sup>[5]</sup>.

Similarly, probiotic agents such as *Saccharomyces boulardii*<sup>[6]</sup> and a nonpathogenetic strain of *E.coli*<sup>[7]</sup> have been found clinically effective respectively in the short- and long-term treatment of ulcerative colitis, whereas several clinical trials employing a probiotic cocktail (*VSL # 3*) have shown a substantial benefit in both acute and chronic pouchitis (for review see Ref. 4).

Studies are in progress to further establish the precise role of probiotics in IBD therapy and to identify the most effective products among the available brands.

At any rate manipulation of enteric flora by means of either antibacterial agents or probiotics represents a recognized therapeutic measure in ulcerative colitis and should be mentioned whenever reviewing this important topic.

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