IBD

MAdCAM-TARGETED THERAPY SUCCESS

Preliminary findings from the first human study of a monoclonal antibody to mucosal adressin cell adhesion molecule (MAdCAM), PF-00547,659, suggest that it might be useful for ulcerative colitis treatment.

The homing of leukocytes to the gut mucosa is a known therapeutic target in IBD as shown by the development of natalizumab; however, this drug is associated with an increased risk of progressive multifocal leukoencephalopathy. Targeting the MAdCAM pathway, which mediates leukocyte migration to the gut mucosa, is a promising new approach that may have improved safety because it is gut-specific and should not affect the body's ability to respond to infections, as occurs with natalizumab.

Vermeire and colleagues performed a randomized, double-blind, placebo-controlled study including 80 patients with active ulcerative colitis. Participants received single or multiple (three doses at monthly intervals) doses of the monoclonal antibody or placebo. The Mayo score and endoscopic findings were used to assess efficacy end points (treatment response and remission) and adverse events were recorded. Although no statistically significant differences between PF-00547,659 and placebo were reported for efficacy end points, higher treatment response and remission rates were achieved at both 4 and 12 weeks in patients who received MAdCAM-targeted therapy compared with placebo. The safety profile of PF-00547,659 was similar to that of placebo and most adverse events were mild or moderate in intensity.

Although this study specifically investigated the use of this drug in patients with ulcerative colitis, it would also be expected to be useful in Crohn's disease. Further, long-term investigations with larger numbers of patients are now required.

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Original article Vermeire, S. *et al.* The mucosal addressin cell adhesion molecule antibody PF-00547,959 in ulcerative colitis: a randomised study. *Gut* doi:10.1136/gut.2010.226548