

The Impact of Pre-Operative Biologic Therapy on Post-Operative Surgical Outcomes in Ulcerative Colitis: A Systematic Review and Meta-Analysis

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Background

Biologic therapy has emerged as an effective modality amongst the medical treatment options available for ulcerative colitis (UC). However, its impact on post-operative care in patients with UC is still up for debate.

Aims

This review attempted to evaluate the risk of having post-operative complications following biologic therapy in patients with UC.

Methods

A systematic search of the relevant databases was conducted with the aim of identifying studies which compared the post-operative complication rates of UC patients, who were either exposed or not exposed to a biologic therapy, prior to their surgery. Outcomes of interest included both the infectious and the total complication rates. Pooled odds-ratios and 95% confidence intervals were calculated.

Results

19 studies, reviewing a total of 12,308 patients with UC, were included in the meta-analysis. 2199 of those had had an exposure to a biologic therapy prior to surgery. The pooled OR for the infectious complications and the total complications were 0.95 (95% CI 0.62-1.45) and 1.14 (95% CI 1.04-1.28) respectively, which suggests that there was no significant association between the pre-operative biologic therapy and post-operative infectious or total complications. Moreover, the duration between the last dose of biologic therapy and surgery did not influence the risk of having a post-operative infection.

Key Messages

This meta-analysis suggests that the pre-operative biologic therapy does not increase the overall risk of having a post-operative infection or any complication. Being on biologic therapy should not delay an abdominal surgery in patients with ulcerative colitis.

