



# Ulcerative Colitis and Patient's Quality of Life, Especially in Early Stage

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See "Quality of Life in Newly Diagnosed Moderate-to-Severe Ulcerative Colitis: Changes in the MOSAIK Cohort Over 1 Year" by Ik Hyun Jo, et al. on page 384, Vol. 16, No. 3, 2022

Inflammatory bowel diseases (IBDs) cause chronic inflammation of the bowel through various pathophysiologic mechanisms.<sup>1,2</sup> IBD is known to be usually intractable, with increasing complications and physical and social limitations. Among the two distinct subtypes of IBD, ulcerative colitis (UC) is a unique disease usually accompanied by irregular bowel movements, bloody diarrhea, and fear of not having immediate access to a toilet. It is also known that these characteristics of UC can cause various psychiatric problems. On the other hand, uncontrolled UC can also impair this health-related quality of life (HRQL).<sup>3</sup> It has been proven by many studies that this disease, which mostly occurs in young patients, could severely impair daily performance and work ability. In fact, the need not only to improve disease activity in IBD patients, but also to improve overall patient quality of life has been a long-standing problem. The natural course of HRQL has been often underestimated in spite of its high incidence and the problems with impaired quality of life in patients with IBD by anxiety and depression. In particular, researchers often have disagreement in their opinions about the gradual deterioration or remission of HRQL, which is considered to be a problem at the time of evaluation or a limitation by a retrospective study design.

The MOSAIK cohort is a study on patients with moderate to severe UC. This study is first systematic prospective cohort study about UC initiated in Korea.<sup>4</sup> Moderate to severe UC patients are often accompanied by very severe endoscopic findings, rapid progression, severe complications, and poor prognosis due to poor treatment response. The MOSAIK cohort enrolls only newly diagnosed patients

aged 7 years or older, and only those diagnosed within 4 weeks of the first visit and 8 weeks of the second referral. As a result, the study successfully started with 368 patients and published 1-year follow-up data in 2021.<sup>5</sup> One-year follow-up of 276 patients was reported. Specifically, the MOSAIK study collected the Inflammatory Bowel Disease Questionnaire (IBDQ) and the 12-Item Short Form Health Survey (SF-12) at every follow-up from baseline. The MOSAIK cohort will follow up for up to 5 years. Meanwhile, in this study, IBDQ and SF-12 used as measurement tool for HRQL demonstrated significantly increasing trends.<sup>6</sup> The change in the total IBDQ score evaluated for 205 patients demonstrated statistically significant increase from  $133.9 \pm 38.0$  to  $172.9 \pm 33.3$  on average ( $p < 0.001$ ). These trends have also been confirmed in prospective studies in other countries.<sup>7</sup> Moreover, the correlation between the partial Mayo score ( $p < 0.001$ ) and disease activity index such as C-reactive protein and erythrocyte sedimentation rate and inflammatory markers ( $p < 0.005$ ) were additionally demonstrated.<sup>6</sup> In addition, disease extent, treatment at diagnosis, and highest treatment step were not correlated with HRQL, contrary to the authors' initial hypothesis. These results can support the authors' opinion that optimal disease control could improve HRQL, and several indicators including partial Mayo score and inflammatory markers demonstrated potential as possible indicators for HRQL. In this MOSAIK cohort, 276 people remained in the first-year analysis, and follow-up is planned for the next 5 years, so the future trend seems favorable.<sup>5</sup> Meanwhile, the results of the MOSAIK cohort were better than those of other cohort studies, and it is noteworthy whether



these differences will continue in future HRQL. On the other hand, due to the limitations of the method for assess HRQL used in this study, evaluation through innovative technology such as mobile applications were not used. These methodological limitations can be expected to be supplemented in future new cohort study designs. In particular, in countries where the incidence of UC is rapidly increasing, such as Korea,<sup>8</sup> it is expected that the change in HRQL due to the addition of new biologics will show a difference compared with the results of developed countries.

## CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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