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**How ameliorate the adherence in patients with inflammatory bowel disease?**

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Dear Sir,

the management of ulcerative colitis (UC) typically requires lifelong pharmacological therapy to induce and maintain remission; the first-line therapy for mild or moderate UC is represented by the drug 5-aminosalicylic acid (5-ASA) [1].

In an interesting study, evaluating the general rate of compliance with mesalazine in UC patients, 198 outpatients > 18 years old treated at the Gastroenterology and Hepatology departments of three medical centres across the Czech Republic were included. Adherence was assessed by subjecting patients to a questionnaire. The authors found non-compliance (usage of less than 80% of medications) with 5-ASA in 21.2% of these patients. Gender ( $p=.95$ ), duration of treatment ( $p=.58$ ), number of doses per day ( $p=.38$ ), pharmaceutical form (i.e., small tablets/large tablets/sachets plus rectal form/combinations) ( $p=.7$ ) were not found to influence the compliance. On the contrary, a significant difference ( $p=.01$ ) was found between the compliance of patients with secondary school diploma ( $84.1 \pm 16.73$ ) and those with university diploma ( $94.1 \pm 9.9$ ) [2].

Recently, we performed a blind prospective study in which the adherence to the treatment with mesalazine, in inflammatory bowel disease (IBD) patients. **The patients underwent to an anonymous questionnaire to be completed alone at the time of the visit, with questions regarding the patient (sex, age, education level, comorbidity, drugs taken for other illnesses), the disease (type of IBD, years after the diagnosis, the time elapsed from the onset of the symptoms to the definitive diagnosis) and the therapy (type of therapy taken, the number of missed doses in the last 2 weeks, the concern for side effects, the decision to skip doses when they feel better, alternative therapies). Three hundred seventy-six patients were included, of which 221 Crohn's disease (CD) patients. Among 147 UC patients, the adherence**

(the patients reported to have never missed a single dose of 5-ASA in the last 2 weeks) resulted 60.6%. The adherence to the therapy among all female patients was lower than among male patients in the whole IBD population ( $p=.015$ ) but, similarly to the above reported study [2], in the group of UC patients the difference was not statistically significant ( $p=.6$ ). Even in our study, neither the number of drugs for IBD ( $p=.1$ ) nor the number of medications for other illnesses influenced the adherence to the therapy ( $p>.47$ ). Instead, in our population the school diploma did not influence the adherence (t-test for trend  $p>.38$ ). A finding that deserves attention was that in our patients with UC, the adherence was significantly lower among those with a disease duration between 2 and 5 years compared to patients with a disease duration of <2 years ( $p=.04$ ) (while the adherence increases again in patients with a disease duration >5 years) [3]. In the article by Keil et al., the comparison was only between patients with disease duration < or >5 years [2]. Our finding probably reflects the fact that, even if in our study a statistically significant correlation between the disease' activity at the time of evaluation and the adherence was not found, in patients with UC the start of the therapy at the time of the diagnosis determines a rapid symptomatic amelioration (especially of the ematochezia, a symptom that greatly worries the patient), inducing in the patient the wrong thought to be 'cured' and therefore causing less attention to the therapeutic regimen. Subsequently, due to the likely recurrence of the symptomatology in case of poor adherence to the therapy, the compliance increases again and will not decrease significantly anymore. Hence, the initial period requires, from a gastroenterologist's point of view, more attention and probably more consultations to stimulate the rigorous application of the therapeutic plan. Furthermore, for the first time in the literature, we found a statistically significant difference ( $p=.001$ ), at least in patients with CD, in terms of

compliance, between those who underwent or not to surgical resection. Hence, after the experience of an invasive treatment, the compliance to medical therapy improved.

In conclusion, our findings agree with those of Keil et al., with the demonstration that the factors influencing the adherence to the therapy are only partly related to the prescribed therapy. A deepening on the adherence to therapy in the early years of UC diagnosis (in particular between 2 and 5 years from the diagnosis), and on the role of previous surgical resection in patients with CD is mandatory. This could give to the clinicians weapons to be exploited in the doctor-patient relationship to improve the adherence to the therapy and, in turn, to reduce both the risk of complications related to the disease and the health care costs.

### **Conflicts of Interest Statement**

None to declare.

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