



Perceived effectiveness and increased quality of life after Macrolog 4000 use in patients with constipation

Georgina Logusso, Nuno Correia, Alèxia Aran and Maria Militao

With a prevalence of 14–30% in Spain, constipation impacts quality of life (QoL) and general wellbeing in the affected population. A survey conducted through Spanish pharmacies among 100 consumers who purchased Macrolog 4000 to alleviate constipation symptoms, evaluated their perception on QoL improvement and effectiveness on constipation symptoms. After 14 days of treatment, a significant reduction in physical and psychosocial discomfort was reported with 95% patients being satisfied to very satisfied with the treatment.

Constipation, usually characterized by reduced number of bowel movements, high defecation effort (straining), and feeling of incomplete evacuation, has a negative impact on wellbeing and quality of life (QoL) [1]. Constipation is predominant in women and elderly, with an overall prevalence of 14–30% in Spain [2, 3].

Macrolog is an osmotic laxative. The osmotic gradient in the intestine caused by Macrolog draws water into the intestine causing hydration and increase in stool volume and thus resulting in peristaltic movements [1, 4, 5]. Macrolog is recommended for the relief of constipation symptoms, qualified as per Grading of Recommendations Assessment,

Physical discomfort

- You feel some physical discomfort
- You feel the need to evacuate, but you have difficulty doing so
- You have been embarrassed around other people
- You have been eating less and less due to not being able to have a bowel movement
- Before treatment
- Day 14

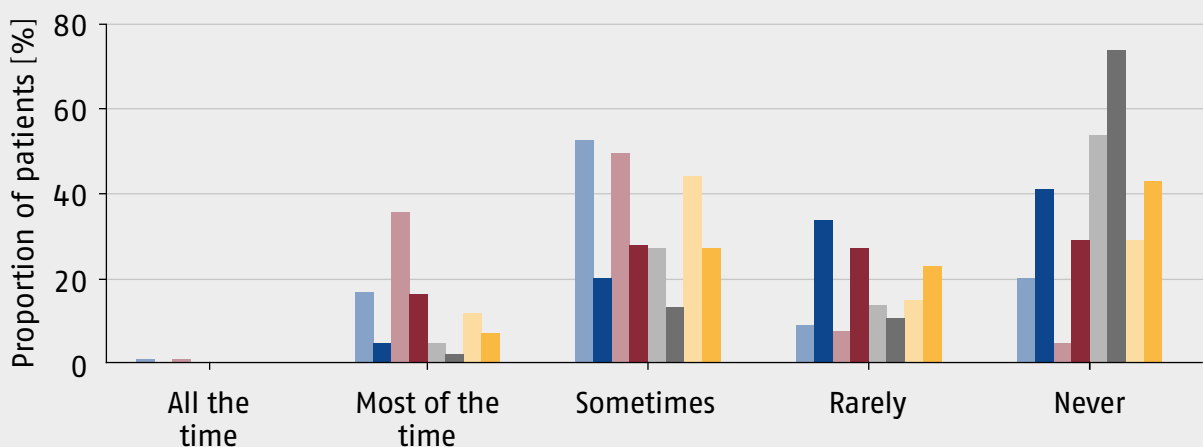


Fig. 1. Evolution of physical discomfort from before treatment to after treatment (at day 14) [7]

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Development and Evaluation Working Group (GRADE) [6].

A survey was conducted among individuals purchasing Macrogol 4000 (Dulcosoft®) at Spanish pharmacies [7]. Patients' perception on treatment effectiveness of Macrogol (mode of use, perceptions on constipation relief, physical discomfort and well-being) and QoL (physical and psychosocial discomfort) was recorded.

The survey included individuals with signs of constipation such as incomplete evacuation, infrequent stools, and straining. Participants included 73 women and 27 men with a mean age of 47.3 ± 17.7 years and 48% of men and 59% of women being below 50 years of age. Participants reported that they had constipation symptoms for a minimum of 3 months. Most common treatments used were oral laxatives (54%), enemas (35%) and suppositories (27%), and some subjects used more than one treatment.

Participants filled in pre-validated questionnaires at treatment initiation and after 4, 8 and 14 days where they recorded the date, time and dose of product intake followed by the presence or absence of an effect at 24 h.

Subjective perception on the effectiveness of Macrogol

Treatment dosage was either Macrogol powder for an oral solution (1–2 sachets a day dissolved in liquid) or Macrogol oral solution (20–40 mL of solution per day, both equivalent to 10–20 g of Macrogol), preferably taken as a single dose in

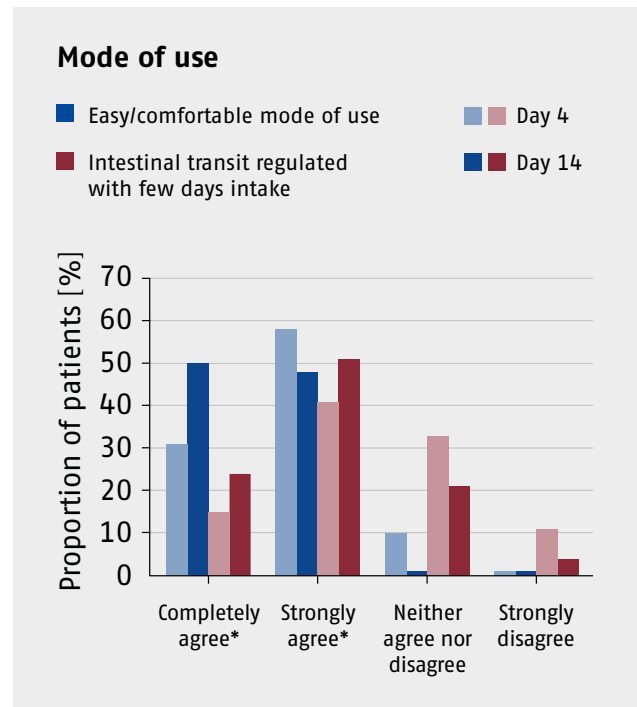


Fig. 2. Changes in patient-perceived effectiveness (mode of use) from before treatment to after treatment (at day 14) [7]

*Day 4 and day 14: $p < 0.05$ compared to baseline (baseline data not shown)

the morning. The measurement of health-related QoL was achieved by using both, generic and specific questionnaires that quantify 3 fundamental dimensions: physical, psychological-cognitive, and social functioning.

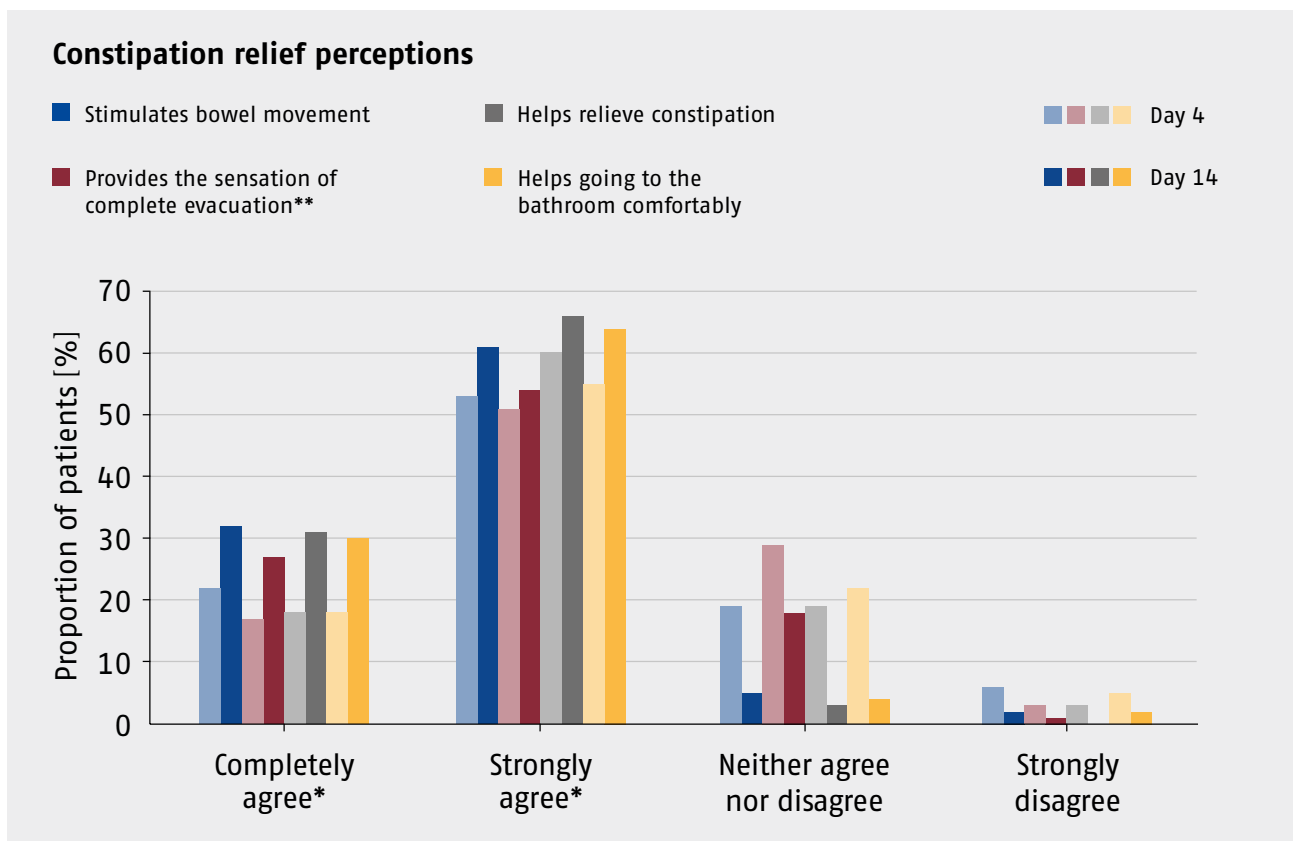


Fig. 3. Changes in patient-perceived effectiveness (constipation relief perceptions) from before treatment to after treatment (at day 14) [7]; *Day 14: $p < 0.05$ compared to baseline (baseline data not shown); ** empties the entire gastrointestinal system

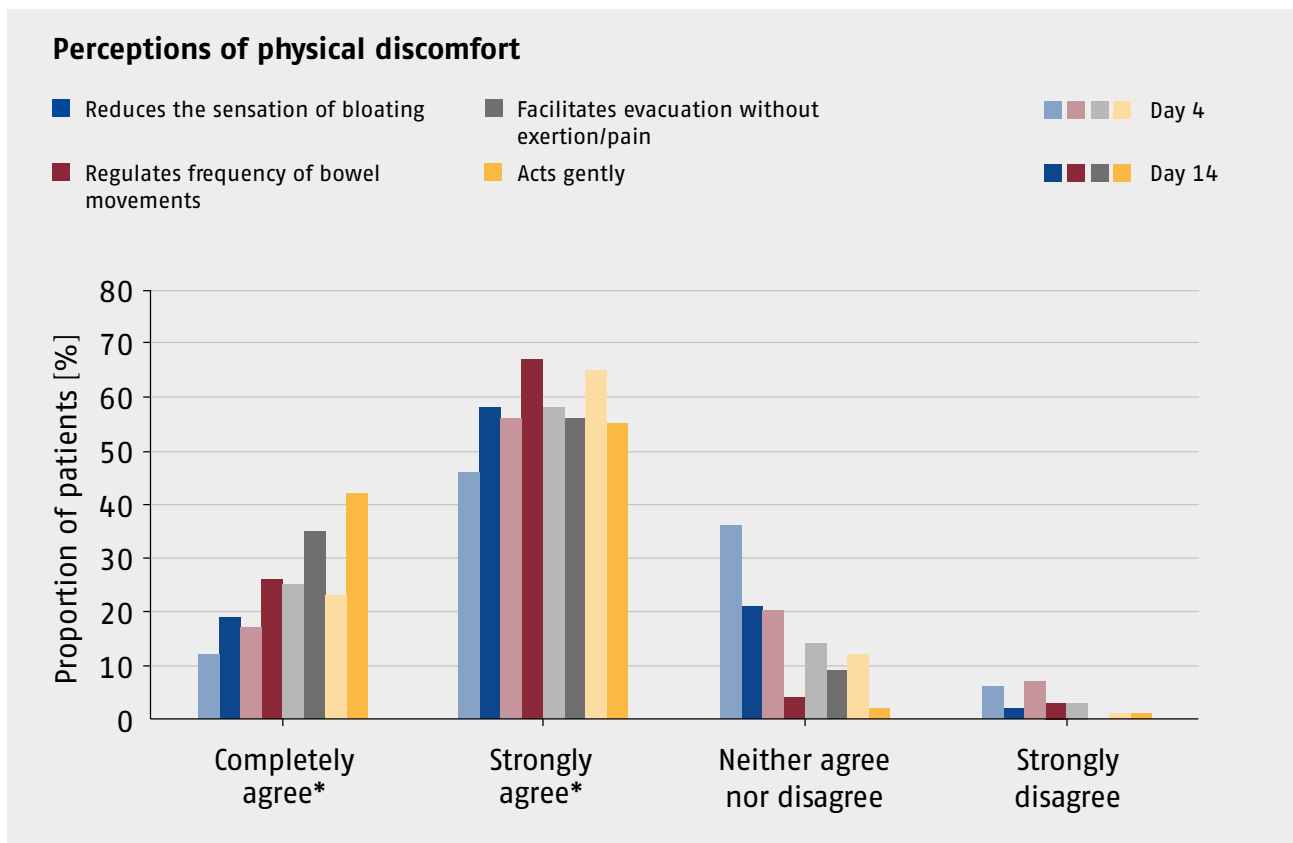


Fig. 4. Changes in patient-perceived effectiveness (perceptions of physical discomfort) from before treatment to after treatment (at day 14) [7]; *Day 4 and day 14: $p < 0.05$ compared to baseline (baseline data not shown)

At day 14, physical (Fig. 1) and psychosocial discomfort affecting the quality of life improved with Macrogol use compared to prior treatment.

Based on the 13 variable-questionnaire, the data were organised into 4 blocks – mode of use, perceptions on constipation relief, physical discomfort and well-being. A significant improvement in level of agreement (completely and strongly agree) for ease of intake ($p < 0.05$) and all variables of perceptions on constipation relief ($p < 0.05$), physical discomfort (except facilitates evacuation without exertion/pain; $p < 0.05$) and wellbeing were reported on day 14 (Fig. 2 to 5). The majority of the patients (90%) reported that Macrogol allowed them to lead a normal life.

On day 4, 88% of the patients were satisfied or very satisfied with Macrogol use which improved gradually to 95% on day 14 and 88% of them felt that Macrogol was better than their previous treatments.

Summary

Treatment with Macrogol 4000 for constipation symptoms decreased physical and psychological discomfort after 14 days, while improving the perceived effectiveness of the treatment, specifically, the perceptions on constipation relief, physical discomfort and well-being. When measures such as lifestyle changes are not effective, the need for treatments capable of improving the QoL in patients with constipation is of quintessence.

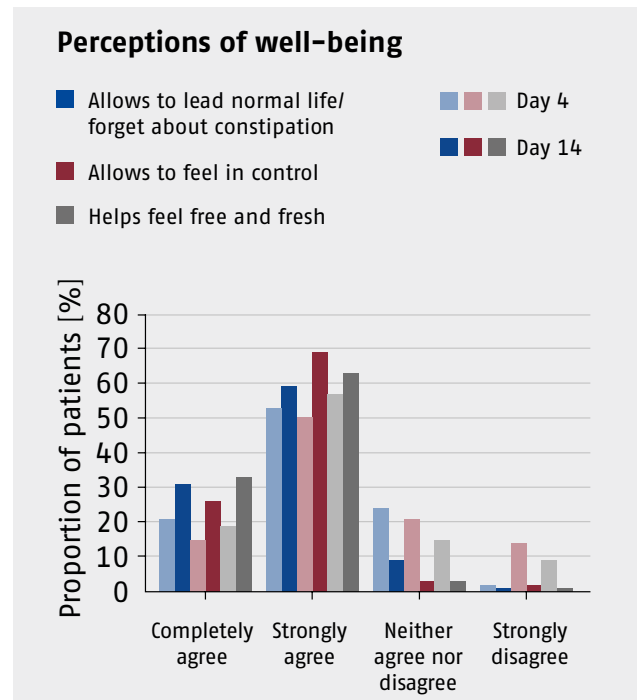


Fig. 5. Changes in patient-perceived effectiveness (perceptions of well-being) from before treatment to after treatment (at day 14) [7]

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