

Oral Nutritional Supplementation is Effective in the Maintenance of Remission in Crohn's Disease

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Enteral nutrition using an elemental formula is a recognised primary treatment for active Crohn's Disease (CD). Whether supplementation of a normal diet with an elemental formula has a role in the long-term management of CD is unknown and was examined in this study.

Thirty nine consecutive patients with inactive CD (CD activity index (CAI) < 150) were recruited. Group A (n=21) received nutritional supplementation with an elemental formula (Elemental 028 Extra, Nutricia) in addition to their normal food. The elemental formula provided at least 35 to 50% of their usual total energy intake. These patients were compared to 18 patients (Group B) maintained on a normal unrestricted diet. Patients were seen at 3 monthly intervals over a 12 month period with assessment of CDAI, nutritional status, body weight and inflammatory markers. Criteria for treatment failure included an increase in CDAI by 100 points to >200 from the baseline value, an increase in the level of inflammatory markers and/or steroid needs, or surgery. Patients intolerant to the formula were excluded.

Seventeen patients (81%) tolerated the enteral formula for 12 months, of these, 10 patients (60%) remained in remission for 12 months. Only 4 patients (22%) maintained on a normal diet were still in remission at 12 months ($p < 0.05$). Both the CDAI and C-reactive protein remained stable and BMI and weight improved significantly in patients receiving nutritional supplementation but not in patients on a normal diet. The response to nutrition supplementation was independent to disease duration or location, age or gender. Seven patients in Group A and 14 patients in Group B relapsed at a mean of 7.4 and 6.2 months, respectively.

Clinical remission was maintained in 53% of the patients for 24 months by supplementing normal food with elemental diet; in contrast most patients on a normal unsupplemented diet relapsed within 12 months. The majority of patients, whose most recent relapse has been controlled with steroids, had complete withdrawal of steroids.

Overall the results suggest that nutritional supplementation is safe, well tolerated and effective in maintaining remission.

Key Points

- 60% of patients on a normal diet supplemented with Elemental 028 Extra remained in remission for 12 months compared to 22% maintained on a normal unsupplemented diet.
- 53% of patients taking supplementary Elemental 028 Extra were in remission at 24 months.
- 81% of patients treated tolerated the elemental diet for over 12 months.
- Majority of patients were able to completely withdraw steroid usage.